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FACULTÉ DES SCIENCES DE L'ÉDUCATION

CENTRE DE RECHERCHE ET DE FORMATION DOCTORALE (CRFD) EN SCIENCES HUMAINES, SOCIALES ET ÉDUCATIVES

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DOCTORAL UNIT OF RESEARCH AND TRAINING SCHOOL IN EDUCATION AND EDUCATIONAL ENGINEERING

HEAD TEACHERS' INVOLVMENT IN CURRICULUM DESIGN AND ITS IMPACT ON PERFORMANCE IN PRIMARY SCHOOLS IN CAMEROON.

A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of a Doctor of Philosophy Degree (PhD) in Curriculum and Evaluation at the Post Graduate school of Social and Human Sciences.

SPECIALTY: Curriculum Development and Evaluation

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I Paul Ebone, Hereby Declare That This Thesis Is My Original Work And Has Never Been Submitted To Any University Or Institution Of Higher Learning For An Academic Award.

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CERTIFICATION

This is to certify that this work entitled: **HEAD TEACHERS' INVOLVEMENT**IN THE CURRICULUM DESIGN PROCESS AND ITS IMPACT ON

PERFORMANCE IN PRIMARY SCHOOLS IN CAMEROON was carried out by

PAUL EBONE (Registration N° 17U6447) and it meets the regulations governing the award of the Degree Ph.D. in Curriculum Measurement and Evaluation in the university of Yaounde 1, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

To

My parents: Mr Ebone Joseph Oru and Mrs Ojong Christina Oru.

My lovely wife, Mrs Ebone Akum Ebot Enaw,

My children, Ebot Ebone Tiku, Ebot Ekema Ndoh Jr.,

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ABBREVIATIONS AND ACRONYMS

CDC: Cameroon Development Corporation

CEMAC: Central African Economic and Monetary Community

CEPE: Certificate d'Études Elementaire

EA: Education for All

ETSSP: Education and Training Sector Strategy Paper

GESP: Growth and Employment Strategy Paper

GEO: German Education Ordinance

ICT: Information and Communication Technologies

ISLLC: Interstate School Leaders Licensure Consortium

MINDUB: Ministry of Basic Education

MINESEC: Ministry of Secondary Education

NEF: National Employment Fund

PTA: Parent Teachers Associations

RH: Research Hypothesis

RO: Research objectives

RQ: Research questions

SONARA: National Oil Refinery

SDG: Sustainable Development Goal

STEM: Science, Technology, Engineering and Mathematics

TVET: Technical and Vocational Education and Training

USA: United States of America

UNPF: United Nations Population Fund

UNDPG: United Nations Development Programme

UNICEF: United Nations International Children's Emergency Fund

UPE: Universal Primary Education

UNC: United Nations Charter

UNESCO: United Nations Education Scientific and Cultural organisations

ABSTRACT

It is rather unfortunately that, the teaching-learning environment is dominated by neglect and ignorance, managed by Headteacher and their collaborators, who paradoxically, do not take part in the preparation of a document which they mandated to work with without being part of the development process. The curriculum development process lack the head teacher's contribution in the most fundamental areas like the needs assessment and the design phases of the process.

This study articulated the objectives of involving the head teachers in the Curriculum Process in Cameroon primary schools. The researcher seek to find out the extend to which school heads are involved in the curriculum development process in Cameroon primary schools. To this effect 5 theories were adopted: the Curriculum Theory of Need Analysis in Curriculum Development, Curriculum Design Theory , Bottom-up Theories on Curriculum Implementation, and Stake's Responsive Theory of Curriculum Evaluation.

The descriptive survey design was used with a pragmatic philosophical underpinning on a mixed study approach with purposive and simple random sampling techniques adopted. The data was collected using a questionnaire and interview guide on a sample size of 376 participants.

Analytically, the descriptive and inferential statistics were deplored to arrive at the following conclusions. The findings on table 4.31 show that, out of the four hypotheses tested, two had null hypotheses retained and two had the alternative forms retained, an indication that during curriculum development process, school heads are not effectively implicated during the need assessment and design phases. Perversely, head teachers are highly involved in the implementation and evaluation phases instead of the need assessment and design phase.

Conclusively, the Ministry of Basic Education should always involve all the head teachers and some teachers in all the curriculum design and needs assessment phases as well as the development process of the curriculum in primary schools.

Key Words: Effective involvement, curriculum design process, primary schools

RÉSUMÉ

Il est plutôt regrettable que l'environnement d'enseignement-apprentissage soit dominé par la négligence et l'ignorance, gérés par les professeurs en chef et leurs collaborateurs, qui, paradoxalement, ne participent pas à l'élaboration d'un document avec lequel ils sont chargés de travailler sans faire partie du processus de développement. Le processus d'élaboration du programme d'études manque de la contribution de l'enseignant en chef dans les domaines les plus fondamentaux tels que l'évaluation des besoins et les phases de conception du processus.

Cette étude a exposé les objectifs de l'implication des enseignants en chef dans le processus des programmes d'études dans les écoles primaires camerounaises. Le chercheur cherche à déterminer dans quelle mesure les chefs d'école sont impliqués dans le processus d'élaboration des programmes scolaires dans les écoles primaires camerounaises. À cet effet, cinq théories ont été adoptées: la théorie du curriculum de l'analyse des besoins dans le développement du Curriculum, théorie de la conception des curricula, les théories inférieures sur la mise en œuvre des programmes d'enseignement, et la Théorie réactive de Stake d'évaluation de curriculum.

La conception des enquêtes descriptives a été utilisée avec un fondement philosophique pragmatique sur une approche d'étude mixte avec des techniques d'échantillonnage aléatoire précises et simples adoptées. Les données ont été recueillies en utilisant un questionnaire et un guide d'entretien sur un échantillon de 376 participants.

Analytiquement, les statistiques descriptives et inferentielles ont été déplorées pour arriver aux conclusions suivantes. Les résultats du tableau 4.31 montrent que, sur les quatre hypothèses testées, deux présentaient des hypothèques nulles et deux des formes alternatives, ce qui indique qu'au cours du processus d'élaboration des programmes scolaires, les chefs d'école ne sont pas effectivement impliqués dans les phases d'évaluation des besoins et de conception. Au contraire, les enseignants en chef sont très impliqués dans les phases de mise en œuvre et d'évaluation plutôt que dans la phase d'appréciation des besoins et de conception. En conclusion, le Ministère de l'enseignement de Base devrait toujours impliquer tous les enseignants directeurs et certains professeurs dans toutes les phases de la conception du programme et de l'évaluation des besoins, ainsi que dans le processus d'élaboration du programme dans les écoles primaires.

Mots clés: Engagement efficace, processus de conception des programmes, écoles primaires

GENERAL INTRODUCTION

Education is the most important instrument or weapon that can be used to change the world (Mandela, 1990). Globally, education is considered as the most important investment which resists depreciation in all spheres. Education transforms unskilled citizens to skilled human capital, and can be used to improve man's value system, thereby, help humanity solve common problems. In sum, education is a catalyst to change. According to Jelilov (2016), Educated citizens facilitate the growth and development of a nation. It is on this backdrop that all countries around the world prioritise education, especially at the primary level.

In the same light, the United Nations Organisation (UNO) in the declaration of human rights in 1948 declared that Education is a basic human right that works to raise men and women out of poverty, inequalities and ensure sustainable development. Also in the same vain, UNESCO declared Education for All (EA) in the year 2000, thereby putting the quest for education on the citadel of values as a top priority.

Considering the unequivocal importance of education to mankind, its services are provided at different levels and importance can not be overemphasised. From primary through secondary and to tertiary levels is taken as seriously. The different levels are placed under the leadership of head teachers, principals and rectors. Head teachers are at the helm of primary schools with the primary function to coordinate, control, evaluate and ensure the successful functioning of the primary schools and reports to hierarchy. According to Batool, Ahmed and Hussain (2018), teachers are facilitated in their teaching practices and solve their academic or teaching problems via the head teachers' leadership style.

Heads of the primary institutions encourages the teachers, supports educators and allows them to learn new knowledge to meet the academic and social needs of the pupils. As a head teacher and as instructional director he takes a compulsory interest in the teaching-learning processes in the school: inspect the teachers in classrooms and works them to upgrade teaching and learning, setting the school's objectives, conveying the objectives, by directing and assessing instructions, organising the educational programs, monitor the educational improvement and progress of the pupils, ensuring instructional time, keeping up high standard, giving impetus to instructors or teachers, advancing proficient improvement, creating and implementing scholarly standards, and providing motivating forces to learning. (Hallinger and Walker 2014).

The head teachers' role does not only limit to the administration of the institutions, the head teacher, the teaching staff, the community, the ministries are expected to be involved in the curriculum process. Curriculum process involves the different stages of constructing a curriculum and putting it into use. Curriculum is a plan or proposal designed to help societies meet some educational needs or goals through the agency of their schools. It therefore passes through the stages of construction (planning) where choices are made as to what to include; it is then developed, implemented and evaluated to determine the extent to which it has effectively met the needs it was set to satisfy (Leister, 2021). Moreover, the curriculum development process systematically organises what will be taught, who will be taught, and how it will be taught. Each component affects and interacts with other components. For example, what will be taught is affected by who is being taught like their stage of development in age, maturity, and education. Methods of how content is taught are affected by who is being taught, their characteristics, and the setting.

In Cameroon's primary educational system, the curriculum process concerns mostly high-ranking government officials at the ministries. They are probably not only centralised but it may also be based on top –bottom administration. In this case, the system is bound to have curricular issues, teaching-learning irregularities that place the learners at the crossroads of life. This somewhat biases the political cliché that the youths are the leaders of tomorrow. However, in this unfortunate situation, Cameroonian youths are generally considered the leaders of tomorrow and are expected to assume responsibilities for the future growth and development of their Fatherland (*Les Ministères du Secteur de L'éducation*, 2003). Such ambitions can be a dream come true only if they have access to a sound and proper education. We all agree that education needs huge investments and also the will to carry on such investments. Fortunately, the Government of Cameroon has made the education of the Cameroonian Youth a priority project amongst the many development programmes in her repertoire.

This demonstrates the importance the government attaches on education and training of its young citizens. The Cameroon government has always alluded to the fact that the youths of today are the citadel of the country's future intelligential and counts on their unflinching support to the government's development vision. This is why the Cameroon head of state highlighted in his speech (2021) that:

"As I have told you, you should never lose hope in your country. You should have faith in the future of a winning Cameroon where everyone is willing to work for the

general interest. You should remain at the forefront to fight the vital battle of our time..."

February (2021). Based on this speech, Cameroon Youths should normally have faith in their Country and hopefully start preparing to take over the baton of command in every sphere of national development. They should as the president says to be prepared to fight the vital battle of today and the future. The quality of education of these youths is very important. In recognition of this reality, the Cameroon government spends huge amounts of financial resources on education. During the 2008 through the 2013 financial years the Government of Cameroon attributed budgetary allocation of 19.79% of the nation budget over a period of 10 years to education.

This represented the highest allocation made to any sector within the same period in the Cameroon budgetary allocation at the same time. This of course is a visible demonstration of the Government's interest in the education and training of her youths in the current year, 2021 the Cameroon Government made a budgetary allocation of huge sums for the sub-sector under discussion. Another proof of the government's interest in the education of its school age population. There is therefore no gain to say that something good is happening in the Education Sub-sector. Another demonstration of the Government's interest in the education of its younger population is the visible increase in the number of schools that have been created and opened in the past years.

This growth in the creation and opening of schools has been increasing in lips and bounds. If one takes a flash back to the years 1982 to 2012, a period of thirty years, the number of schools at both the primary and secondary levels have more than tripled. This increase in the number of schools has also been matched by a rational distribution to regions, divisions and sub divisions in the country. Between 2011 and 2017 primary schools increased from 14712 to 18590, an increase of 26.7% within a period of six years. In the same period the teaching personnel hit a record increase. The number of teachers in the basic education sector rose from 78181 to 97333. (Business in Cameroon) Prior to this period, schools were found mainly in the towns and semi-rural areas. Today, almost all villages can boast of at least one or more primary and or secondary schools.

As mentioned early, these increases in the number of schools have also been matched by an increase in the number of teachers employed in this sub-sector. Cases in point have been the recent employment of qualified teachers in to the systems. The Basic education cycle has witnessed an increase of about 6000 more teacher, holders of grade one in to thre primary schools distributed according to need all over the Republic. The secondary

education Ministry still has her teacher being trained at the Higher Teacher's Training Colleges, (both Technical and General) of Bambili, Maroua, Kumba. and Douala. At the primary level Government Teacher Training colleges have been reopened in almost all the divisional headquarters in all the ten regions of Cameroon. These are visible proofs that tell the story about the government's efforts to make education a real industry for the production of qualified manpower to meet the needs for the ever-increasing manpower demands in our schools.

If the state is allocating that much, in terms of resources, be they human financial and material resources for the education of our children, the main justification is that it is the backbone of any country and is fundamental to the growth and development of a nation. Schools are therefore supposed to be the catalyst and master players in the field of the training of adequate and high-level youths who will be able to be equal to the challenges of nation building. Thus, the role of the school as an agent of change cannot be overemphasised. In the context of this study, we examine the involvement of head teachers in the curriculum process. The curriculum used in the Cameroon primary school is expected to depict the type of youths the country expects to see in the nearest future.

In order to examine the process of curriculum involvement in Cameroon primary schools, we employ concepts like: Needs assessment, curriculum design phase, curriculum evaluation phase, curriculum implementation phase. Needs assessment is an important stage of both curriculum development and school curriculum development. Needs assessment is an initial step in designing a course which motivates the subsequent course activities through its validity and relevance. The curriculum design phase can be a complex process that includes many different forms of data, information, and goals. On a practical level, curriculum designers often use forms of representations or diagrams to help manage the complexity and decision-making processes. Curriculum representations provide a method for communicating and collaborating with others during the curriculum design process. Curriculum Implementation phase which refers to the act of working out the plans and suggestions that have been made by curriculum specialists and subject experts in a classroom or school setting. Teachers are the main curriculum implementers, while at the same time students, parents, school administrators can be directly or indirectly involved in the implementation process and the curriculum assessment process which involves gathering and analysing information from multiple sources in order to improve student learning in sustainable ways.

CHAPTER ONE:

BACKGROUND TO THE STUDY

The first chapter of this study is entitled background to the study. it contains the historical, contextual, conceptual and theoretical backgrounds. The backgrounds are followed by the problem statement, research objectives, research questions, research hypothesis, justification, scope, significance and definition of key concepts.

Historical Background

Despite the fact that curriculum as a praxis or practical application on any branch of learning had a relatively prolonged history, curriculum as a praxeology only became possible as a consequence of a series of developments that occurred in the USA during the early periods of the 20th century (Watras, 2006). An analysis of the development process of curriculum as a field of academic study points out that the Herbertian tradition, developed in the USA since the late 19th century as well as progressive philosophy of education, and management theories developed in the field of business administration significantly contributed to this paradigm shift. "The Curriculum" written by John Franklin Bobbitt in 1918 can be considered as the first step of the development process of curriculum as a field of study (Jackson, 1992). During the period of approximately 15 years following the publication of the above study, curriculum studies went under a rapid development, leading to the subsequent publication of main works referred to as classics today as well as the introduction of postgraduate courses on curriculum and teaching in universities and ultimately paving the way for specialisation in the field of curriculum development.

Furthermore, conducting a large-scale research study as "The Eight-Year Study" during the period between 1930 and 1940 led to the introduction of the early comprehensive theoretical perspectives on curriculum development (Kriedel and Bullough, 2007). During the following years, curriculum developers were provided an occupational organisation by the foundation of ASCD (The Association for Supervision and Curriculum Development) in 1942. The concept of curriculum has developed comprehensively in the USA thanks to such rapid developments. Curriculum practices developed from various philosophical movements were applied and the foundations of scientific and technical paradigms were introduced in the same period. This broad perspective has led to a significant accumulation of knowledge during time and curriculum studies have been categorised into various fields of study, (Behar-Horenstein, 2000).

The school's interest in curriculum practice took centre stage in Africa soon after independence. Immediately after independence most African countries began to invest heavily in the education sector. This was necessary owing to the very low literacy levels that marked most of the newly independent countries which delayed the granting of independence to Africans. Soon after independence, therefore, African governments began to invest aggressively in the education sector. In *Political Values and the Educated Class in Africa*, (Univ. California Press: California 1978), Ali Mazrui asserts that at Independence in Ghana, only about 20% of the country's children were in school. In 5 years, this figure was raised to 85% (Mazrui 2003, 44). This desire to fund education attracted the attention of donors, such as the United Nations Education, Scientific and Cultural Organization (UNESCO) and some colonisers. Most African governments could not afford the enormous funding needed to make education accessible for the majority of their populace; UNESCO was very forthcoming with funding in this regard. As described by the then Director-general of UNESCO, the problem of education in Africa is "far and away the biggest single task facing UNESCO" (Mazrui 2003).

School Curriculum Evolution in Cameroon Between the period of 1960-1972, Cameroon educational system underwent vital transformations to meet up with the rapidly changing world, at a time when the country was still feeling the breeze of colonial release. Educational reforms focused on the concerned social development. The concern on ruralizing education became a necessity in which case in 1967, a rurally oriented primary teacher training institute abbreviated in French as —ENIR was created. Teaching programs were adapted to the realities of the rural areas. It was later referred to as rurally oriented education on curriculum development centre; opened in Yaounde and Buea in 1969 and 1974 respectively. Thus, as an ideology, integrated and participatory approaches were adopted in school as teaching methods using agricultural activities. There was therefore the need for harmonisation which is a strategy with a key purpose of blending the educational practices of francophone and Anglophone without actually creating a monolithic system. Aspects of primary and secondary education were noticed to have the same content but rather taught in conformity 4 in the method and procedures that define each of these systems. At university level, harmonisation has been a critical issue as each university is modelled on a specific system. The 1995 forum of education and the 1998 law of education in Cameroon were used with the intention to ensure a relevant meaningful co-existence. In this regard, harmonisation was limited to structural aspects relating to the duration of the courses. The Cameroon government equally thought of bilingualism and went further to include French language

into the English sub-system of education and vice versa. In addition to that, bilingual schools were created to increase the interaction between English and French speaking Cameroonians. As technology evolved, the president of the republic under the —Cyber Education Project saw the need in 2001 to officially institute ICT into the curriculum. The government targeted secondary and tertiary education at the time and later on, primary education has now come into play (Edwin, 2012).

Education was carried out in East (Francophone) Cameroon by France, and in West (Anglophone) Cameroon by Britain between 1922 and 1961 (when Cameroon was administered as a trust territory of the League of Nations and subsequently as a mandated territory of the United Nations Organisation). For nearly forty years, France and Britain each subjected its sphere to a separate civilization which left behind two contrasting and often conflicting sets of values bequeathing one lifestyle to one part of the country and another to the other part (Shu 1995). Upon attaining independence and reunification in 1961, the question of how to deal with the inherited educational systems of the British and French became a major preoccupation of the Federal government. In the face of this dilemma, the United Nations Educational Scientific and Cultural Organization (UNESCO) made some proposals from which the government after examination came up with a policy to harmonise the structure and contents of the curricula to give birth to a national curriculum in both Basic and Secondary education in Cameroon.

Consequently, Loi No. 1. 63/COR-5, du juillet 1963; portant organisation de l'enseignement Premaire elementaire from East Cameroon, and the West Cameroon Education Policy: Investment in Education (July 1963) came into being. The intention of these policy instruments was to bring the (eight-year) primary school system in Anglophone Cameroon into harmony with the six-year system in Francophone Cameroon. Following this, a common curriculum was to be adopted so that the same content was taught in the entire country in English in the Anglophone section and in French in the Francophone section by 1965. However, the reform remained unrealized leaving the situation of primary education especially in the Francophone Cameroon to continue to deteriorate. In an attempt to salvage the situation, the president created the "Institute de Pedagogic Applique a Vocation Rurale - IPAR" (Institute of Applied Research in Primary Education) in 1967, to research and prepare educational materials adapted to the needs of the country. By another presidential order No.1.277/CAB/PR of 10 october1974, a sister institute (IPAR – Buea) was created to carry out research and prepare a reform of primary education in Anglophone Cameroon. The syllabuses created by these institutions were unfortunately never implemented.

Before colonisation, Cameroon generally used the informal curriculum for training all in its communities both the young and the older but adults. The most interesting aspect of this education was that it did not require a properly structured curriculum and was not focused on earning a certification. With no assurance of being employed, the education enterprise was effective and goal oriented. It met the immediate needs of the individuals and society at large (MacOjong, 2008). Before colonisation, Cameroonians underwent training based on this informal curriculum that reflected the objectives based on the value of its community. In a sense, they were educated, albeit the western sense of being educated. There was training going on and if education is to inspire competence, develop skills, lead to knowledge acquisition, Training based on this traditional curriculum performed no lesser tasks in the pre independence communities. Fanfumwa (2011) listed the following as the goals of traditional African education which were acquired through a non-structural curriculum in Cameroon.

These were to develop the child's talent, physical skills, develop character, inculcate in the child respect for elders and those in position of authority, develop intellectual skills, acquire a specific vocational training, develop a healthy attitude towards honest labour, develop a sense of belonging and participate actively in family and community life and promote cultural heritage of the community at large.

Though this curriculum was not documented, Mac Ojong (2008) stated that there were clear aims, goals and objectives. Every member of the society went through the training. Learning experiences centred on the following aspects of life. Physical training that embarked on acrobatic display drumming, dancing, wrestling etc. Their psychomotor domains were well taken care of and open to the wider society. Intellectual training activities included, counting, story-telling etc. Vocational training, supported by functionalism theory, was the guiding principle. The curriculum was just tailored towards achieving and mastering specific tasks. These included: Agricultural training such as farming, hunting, fishing, animal rearing etc. Trades and crafts such as weaving, carving, carpentry, building, barbing hair, plaiting, palm wine tapping and selling, dancing and acrobatics. Character training such as respect for elders, table manners, toilet manners, greetings, community participation and promotion of cultural heritage.

It is to the credit of Christian missionaries that Western Education was introduced in Cameroon in 1840. The objectives of the education as introduced by missionaries influenced the type of curriculum that operated. They realised that proper evangelization will require basic knowledge of how to read and write. The urgent needs for proficiency in the reading

of the bible, and dire needs of Cameroonians who would serve as catechists, interpreters etc., were motivating and sustaining factors. This conception determined the structure of the curriculum at this time. Omolewa (2002) stated that there was no common curriculum amongst seemingly competing missions. Each mission and indeed each school within a mission followed its own devices which were solely teacher dependent. Nevertheless, basics of reading, writing and arithmetic and of course religion formed the core of the curriculum. Later, the established grammar schools were in response to local demands. Their curriculum was purely under the control of missionaries. Subjects offered included; English grammar and composition, History, Geography, Geometry, Science, Drawing, Rhetoric's etc. These subjects influenced the nature of the curriculum in this period. It is to the credit of the missionaries that various missions set up management boards to help the curriculum. The eventual colonisation of Cameroon by Germany in 1884 and France and Britain in 1919 did not change the nature of the curriculum much, since education was mainly in the hands of missionaries.

The period after independence from 1964 saw the educational system strongly rooted in both the English and French sub-systems functioning simultaneously in the same country as a result of the country being colonised by Britain and France after the defeat of Germany in World War I. This necessitated the development of courses for each of these sub-systems. The Federal Government of Cameroon at that time had little influence on educational matters at the primary and secondary school levels since constitutionally it was the responsibility of each state that is West and East Cameroon. This resulted in a multiplicity of educational programmes. In West Cameroon, its religious bodies significantly contributed to the education of citizens.

Each of these religious bodies (the Catholics, Presbyterians, and Baptists etc.) inherited a curriculum from their colonial masters. The few Government schools that operated also had their own curriculum. All these were regulated by the General Inspectorate of Educate for West Cameroon in Buea, (Ntungwa, 2013). A common identity that cut across the curriculum was that it was designed to include perennial subjects such as, English language, Arithmetic, History, geography, General Knowledge, Arts and Crafts, Hygiene, Agriculture. These were taught in both denomination and government schools. Schools controlled by religious agencies included programmes that guide their philosophies and doctrines such as religious studies.

However, what marked a turning point in curriculum development in Cameroon was the contribution of the United Nation General Assembly in 1929. The United Nation General Assembly proclaimed 1979 as the International Year of the Child. In support of this, the government had an aim to provide educational opportunities for all citizens at the primary, secondary and tertiary levels. In order to emphasise on the quality of practices, progress and development throughout the country, seminars were organised yearly for all teachers in the pedagogic chain, from the national level to the classroom on curriculum development based on a national curriculum designed by the state. In September 1998, bilingualism was instituted in all levels of education in Cameroon, with the opening of government bilingual schools across Cameroon. Special bilingual schools had been created after 1972 to preserve national unity. A good example is the creation of Bilingual Grammar School in Molyko Buea and Lycee Bilingue de Nkongsamba. This meant that the bilingual option was to be reinforced in the curriculum of primary, secondary and tertiary institutions. In 1995, a forum on National Education was organised, this led to law No 89/004 of 4th April 1998 to lay down guidelines for education in Cameroon. In this law, and as part of the formation and implementation of educational policy in Cameroon, the state shall:

State the objectives and general guidelines for national teaching and training syllabus in conjunction with all sectors of national life in order to make education more professional.

In view of the above objective and following other aspects of the law, in the year 2000, the National Syllabus for English Nursery and Primary School was designed. The content saw the introduction of new subjects on the curriculum such as citizenship, national culture and moral education. Home economics and arts and crafts were made compulsory for both boys and girls. The general purpose of this curriculum was to ensure the constant adaptation of the education of the child to national, economic and socio-cultural realities and the international environment.

This curriculum was used nationwide in all categories of schools be it the government, professional or lay private. To ensure their effectiveness, supervision was ensured by National, Regional, Divisional and Sub-Divisional Inspectors. In its quest to match with global trends in cultural, scientific technological development, a new curriculum for nursery and primary school in Cameroon was designed and went operational in 2018. This was geared towards making the first school leaver more holistic, bilingual, and involved in national life and in fostering Cameroon as a one and indivisible nation, with every citizen participating in achieving emergency by 2035.

Conceptual background

A conceptual framework is a structure of what has been learned to best explain the natural progression of a phenomenon that has been studied (Camp, 2001). According to Miles and Huberman (1994), conceptual framework is a vital or written product that explains either geographically or normatively the main things under study. They include key concepts, factors or variables and presumed relationships that exist among them. In this study, we shall focalize our interest in the curriculum process in primary schools in Cameroon. As stipulated by the UNESCO International Bureau of Education (IBE 2011), Curriculum is typically a phenomenon which includes many dimensions of learning, including rationale, aims, content, methods, resources, time, assessment, etc; which refers to various levels of planning and decision-making on learning (for example, at the supra-, macro-, meso-, micro- and nano-levels); or, international, national, local, classroom and individual levels; and which relates to multiple representations of learning for example, as already mentioned, intended, implemented, attained curriculum. Curriculum can be understood as the totality of what children learn while at school – including what they learn through classroom activities; in interdisciplinary tasks across the school, for example, in the playground, at lunch time when eating civic responsibilities, etc. This curricular totality also includes opportunities for wider achievement through sport, music, debating, and the like. For the purposes of this paper, curriculum is defined in a holistic, process-oriented way. This definition is based on the belief that, while curriculum might commonly be perceived as a set of documents, the quality of those documents is closely connected to the processes used to develop them and to the means through which they are put into practice Gara, (2019). In other words, judging the quality of the curriculum itself cannot be done in isolation from the broader processes of curriculum development, implementation and evaluation. The diagram below indicates 4 main criteria for judging the quality of a curriculum.

Curriculum process

Curriculum simply put is the programme of study Tanyi, (2016). Curriculum is a plan, a blueprint conceived for a specific nation which has to be put into use in different schools in order to ensure learners acquire skills, competences and knowledge that make them productive. Curriculum development is a process of moving from plan to implementation, which is from theory to practice. It is a process which involves the development of content, building social relationships and capacities, developing and

utilising learning materials, assessment of outcomes and provision of feedback for improvements.

Curriculum development is therefore viewed as the planning of learning opportuniti es intended to bring about certain changes in learners and assessment of the extent to which these changes have taken place, (Hlebowitsh, 2005). Like curriculum planning, curriculum development is also a cooperative venture which requires the input of all those involved. For instance, the classroom teacher is involved in curriculum development when he plans his lesson, formulate objectives, writes lesson plans, identifies relevant content to teach, assesses the lesson's outcomes; at the school level, the Head teacher is involved in curriculum development when he plays supervisory roles, engages in administering the school, creating conducive atmosphere for learning, (Israel and Palmira 2019).

Curriculum process is also an on-going process which takes place in 4 major steps: Selection of aims and objectives, Selection of appropriate learning experiences and content, Organisation of learning experiences and evaluation of the extent to which the objectives were attained. In primary schools, head teachers play a key role in the development and even the delivery of curriculum. Their responsibilities include ensuring educational strategies are in place that support effective learning for all pupils. They serve as a facilitator, guide and supporter of quality instructional practices. A head teacher is the most senior teacher and leader of a school, responsible for the education of all pupils, management of staff, and for school policy making. Head teachers lead, motivate and manage staff by delegating responsibility, setting expectations and targets and evaluating staff performance against them. Better teachers support better learning because they are most knowledgeable about the practice of teaching and are responsible for introducing the curriculum in the classroom.

In Cameroon primary schools, the centralised nature and hierarchical approach of decision making that mostly favour the few minorities condition the curriculum process to adopt top to bottom flow. The curriculum is mostly decided from high ministerial offices and dictated on the head teachers, teachers and learners. The place of the head teacher in the curriculum process is mostly absent. This probably creates a visible gap between the real implementers (staff) and consumers of the curriculum. Such unfortunate situations could culminate in lack of effective learning, poor teaching-learning outcomes and low quality outputs from primary schools.

Needs assessment

Needs assessment is an important stage of both curriculum development and school curriculum development. Needs assessment is an initial step in designing a course which motivates the subsequent course activities through its validity and relevance. Needs assessment is the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of particular educational level that influence the learning and teaching situation." (Brown, 1995). According to Richards (2002), the first step in conducting a needs assessment is to decide exactly what its purpose or purposes are. According to Niwat et al. (2013), needs assessment informs important information and decisions for school curriculum to develop the right material that deals directly with the needs of the community. According to Seehamad et al. (2014), the needs assessment is the method used in the study for the aims, vision, principles, goals, and learners' key competencies, desirable characteristics, learning standards and indicators and all the elements of the curriculum.

Information obtained during the needs assessment can be used to decide the important contents to students. This will enable the decisions about curriculum and instruction to be believable, ensuring for development of the curriculum, and built on the principle of reasonableness, explained without bias, no trial and error, and save for the time and resources. (Sarnrattana, 2012). In Cameroon, given that the secondary school curriculum is given to the actors by the ministries (top – bottom) conceived by minority office users, effective needs analysis is not done. The head teachers together with the teachers, students and the community are deprived of their role in the process. Such a curriculum may be without the practicalities or the real situation on ground leading to mismatch between what the teachers will teach learners and what actually exists in the community.

Curriculum Design phase

Curriculum design is the intentional planning, organisation, and design of learning strategies, processes, materials, and experiences towards defined learning and/or performance outcomes. Curriculum design is concerned with much more than learning materials. In one sense, curriculum design is creating a holistic plan for the environments where learning happens. This includes considering the physical, digital, social, and psychological factors that define the spaces and places where people learn (American Educational Research Association, n.d.). Curriculum design is like a team sport. The teams

who engage in curriculum design processes are composed of people with diverse areas of expertise. Typically, a curriculum design team will include subject matter experts like teachers, curriculum coordinator/director, curriculum oversight groups, instructional design and development specialists, and teaching/facilitation personnel and the whole community (Dodd, 2021). Depending on the nature of the curriculum, this can also include information technology specialists, organisational development specialists, data and research specialists, and senior leadership.

Curriculum design can be a complex process that includes many different forms of data, information, and goals. On a practical level, curriculum designers often use forms of representations or diagrams to help manage the complexity and decision-making processes. Curriculum representations provide a method for communicating and collaborating with others during the curriculum design process. This often includes representing plans for how the curriculum will be organised and made available to the learner. In Cameroon, the ministries send the curriculum to the different schools for the teachers to study and implement. This presents a difficulty for teachers to understand and teach, most often the curriculum comes without didactic materials, and this makes it difficult for the actors to process and transfer knowledge as required. Moreover, it could be bringing an impression that the curriculum is adopted from another country.

Curriculum Evaluation phase

Curriculum assessment is a process of gathering and analysing information from multiple sources in order to improve student learning in sustainable ways. During the process of curriculum evaluation, the data collected from the student, employer, focus groups and graduate survey take place over a period of at least three months (Baron, & Boschee, 1995). In primary schools, head teachers are expected to review all required resources and ensure their provision for application of new curricula, implementation of new curricula, monitoring implementation of new curricula. Take feedback from the pupils and staff members during and after implementation of new curricula. According to Ferrero, (2006), curriculum evaluation is an attempt to toss light on two questions: Do planned subjects, programs, activities, and learning opportunities as developed and organised actually produce desired results? How can the curriculum offerings best be improved?

Preparations for the evaluation include three major steps: setting the project parameters, selecting the project director and the evaluation task force, and preparing the evaluation documents. In setting the project parameters, district administrators in consultation with the school board should determine both the purpose and the limits of the project. They should, first of all, be clear about the central purpose of the review, because purpose will affect both issues to be examined and methods to be used (Stufflebeam, 1971). In identifying the limits of the project, they should develop answers to the following questions: - How much time will be allocated, and by what date should the evaluation be completed? What human, fiscal, and material resources will be provided? Which fields will be evaluated? What constituencies will be asked for input? Specifically, will parents, community representatives, and students be involved? With those parameters set, the project director and evaluation task force should be selected.

The project director should be a consultant or a member of the district staff who has considerable technical expertise in curriculum evaluation. The task force should function as an advisory and planning group, making recommendations to and monitoring the performance of the project director. It should probably include a total of 10 to 20 individuals, depending on the size of the district, and have adequate representation from these constituencies: school board, school head teacher and administrators, teachers and other teaching staff, and parents and community organisations. If administrators wish, and if it is felt that their input can be useful, the pupils can be included.

The project director and the task force can then begin to assemble the documents necessary for the program review. The following documents will typically be needed: A

statement of the curriculum goals for that field, A comprehensive description of the community and the student body, a list of all required courses in that field, with time allocations and brief descriptions of each course, a list of all elective courses in the field, including time allocations, course descriptions, and most recent enrollment figures, a random selection of student schedules, syllabi or course guides for all courses offered, faculty schedules, showing class enrollments Other materials, of course, will be required as the review gets under way, but the above-listed materials are important at the outset. However, the practice of curriculum assessment is seldom carried out in the Cameroonian primary schools. During the little theoretical work done in high offices, the head teachers were probably never invited. Meanwhile the head teachers are the main actors in the field. This makes the curriculum modification and correction difficult as only pedagogic inspectors are expected to organise seminars to brief the staff and administration on the new changes. However, these seminars are hardly effectives, and do not involve all the teachers, especially in the interior villages.

Curriculum Implementation phase

This term refers to the act of applying the plans and suggestions that have been made by curriculum specialists and subject experts in a classroom or school setting. Teachers are the main curriculum implementers, while at the same time students, parents, school administrators—can be directly or indirectly involved in the implementation process (Tamilselvan, 2018). The process of curriculum implementation involves guidance to the management of the institution to prepare other plans such as development and procurement of learning resources, training of teachers and resource persons, procurement of equipment like machines, instruments, computers, software, consumables and deployment—of—faculty and staff—members, construction, budget, collaboration—with industries and stakeholders, setting laboratories, and so on.

The effectiveness and efficiency of implementation of the learning process depends on numerous support services. These services should be designed on the basis of requirements of the learning process. The institution should ensure to make available all the physical resources. It should encourage innovations in implementing the learning process. It should have strong collaborative relations with industry for providing opportunity to students to learn in real life situation. The institution should establish linkages for other purposes such as receiving the services of the experts, teachers and students and extending the services of the institution for continuing

education programmes and problem solving through projects and research (Sunwani, Vijay Kumar, 2005).

The process of curriculum implementation especially in primary schools could be more delicate than other academic levels. In this level, the teachers are fully implicated but not without the head teacher. The head teacher's roles cannot be undermined. He/she is in charge of providing the conducive environment, the didactic material, the teaching—learning conditions among others. Probably, in Cameroon primary schools, the ministry solely conceives the curriculum and sends it to the teachers for direct implementation leaving the head teacher away. This creates a possible gap between what is taught and what is needed for effective teaching since the head teacher is not aware of the content and the teaching strategies stipulated in the curriculum. Fig. 1 presents the supposed relationship between the head teacher's involvement in the curriculum process in primary schools.

Theoretical background

The theoretical background of this study is the explanation of the phenomenon that is being studied. This explanation is grounded in the theories developed by several researchers and prominent theorists. According to Kerlinger (cited in Amin, 2005, p. 10), a theory is "a predisposition that presents a systematic view of specifying the relationship amongst variables with the purpose of explaining and predicting the phenomena. Moreover, a theory could be seen as a set of interrelated concepts which structure a systematic view of a phenomenon for the purpose of explaining and predicting. According to Zaden (2000) and Wujungbuen (2007), a theory is a set of interrelated statements that provide an explanation for a class of events. In general, the purpose of a theory is explanation and prediction (Walls et al.1992)

To better enhance the explanation of the occurrences of concepts in this research work, 2 theories and 3 models are employed. The main theories in this work are the curriculum theory by Glatthorn, Boschee and Whitehead (2006), Theory of Need Analysis in Curriculum Development by Jack (2002), Curriculum Design Theory by Johnson (1967), Bottom-up Theories on Curriculum Implementation by Barrett and Fudge (1981), and Stake's Responsive Theory of Curriculum Evaluation (1975).

Curriculum theory by Glatthorn, Boschee and Whitehead (2006)

A curriculum theory is a set of related educational concepts that affords a systematic and illuminating perspective on curricular phenomenal. Similarly, Beauchamp (1981:60) defined curriculum theory earlier as a set of related statements that give meaning to a school 's curriculum by pointing up the relationships among its elements and by directing its development, its use, and its evaluation. Curriculum theories are classified in terms of what they deal with. Ornstein and Hunkins (1993) identify two major categories of curriculum theories: design theories and engineering theories. Design theories are concerned with basic organisation of the curriculum plan, that is, with the establishment of curriculum frameworks. The pillars of design theories are philosophy as well as social and psychology theories. Philosophical and humanistic theories are normative. Based on values, their main function is to guide decisions about: - What should be included in the curriculum. What to do or not to do in creating the curriculum, addressing coherence and methodology of acquiring the knowledge, integration of the emotional and physical with the intellectual. Engineering theories are designed to aid a search for strategies to guide curriculum development activities, explaining, describing and predicting them. This theory is in line with this work because the curriculum plan, design and implementation and accompany the philosophical underpinned is nor respected because the real actors in the field are neglected in the formatting, updating and implementation of the curriculum in basic education.

The system theory (Ludwig Von Bertalanffy 1968)

The system theory was founded by Bertalanffy, born on the 19th of 1901 in Atzgersdorf. He was a biophysicist and created the system theory in his effort to appreciate nature's development and system behaviour in biology in the 1920s (Gatherer2010). The appreciation that an outcome is not explained simply by parts but that the relationships between and among those parts and their environment (context) are important eventually led to the formulation of system theory (Frye & Hemma, 2013). The system theory states that a system is a series of interrelated and interdependent parts interwoven such that any movement or action on one part affects the whole system. This holds on to Aristotle's dictum that a whole is greater than the sum of its parts. This theory is the central theory of this work. The theory helps in this work to explain how our independent variable (internal quality assurance) functions in higher education as an open system. It holds that no single aspect or part of the system planned to enhance the system's objective is more important than the other. They all function fully to enable each other to achieve the stated objectives.

Theory of Need Analysis in Curriculum Development by Jack (2002)

This theory states that curriculum development should be viewed as a process by which meeting learners' needs leading to improvement of learners' learning. Therefore, curriculum developers should gather as much information as possible towards the learners' needs. This procedure used to collect information about the learners' need by Richards (2002) called this needs analysis (NA).

Curriculum Design Theory by Johnson (1967)

Johnson's Theory of Curriculum design is centred on three notions which he states as an arrangement of selected or ordered learning outcomes intended to be achieved through instructions. An arrangement of selected and ordered learning experiences to be provided in an instructional situation, with a scheme for planning for providing learning experiences in the classroom.

Bottom-up Theories on Curriculum Implementation by Barrett and Fudge (1981)

Bottom-up approaches see implementation as a process of interaction and negotiation, taking place over time, between those seeking to put policy into effect and those upon whom action depends" (Barrett and Fudge, 1981). The main contribution of bottom-up approaches to public policy implementation is their normative stand: what matters is not how policy makers at the top get their will executed but the reactions of those on the ground at the end of the line whose reactions shape the implementation process, and the policy itself.

Stake's Responsive Theory of Curriculum Evaluation (1975)

Stake (1975) made a major contribution to curriculum evaluation in his development of the responsive evaluation theory. The responsive theory is based explicitly on the assumption that the concerns of the stakeholders – those for whom the evaluation is done-should be paramount in determining the evaluation issues. To emphasis evaluation issues that are important for each particular curriculum, most researchers recommend the responsive evaluation approach, which has to do with the formative, sumative and criteria evaluations.

Contextual Background

Cameroon primary schools are under the control of the Ministry of Basic Education (MINEDUC). The precondition for children to be enrolled in the primary is that they must be about six years of age. This is the basis of elementary education though the system includes and encourages pre-school (nursery school) where children are supposedly enrolled for at the age four to prepare them for elementary education. Primary Education is the foundation of sustainable learning. It is on this basis that Cameroon has ratified several conventions related to compulsory education. The new Cameroon Nursery School and Primary curricula of 2018 replaced the ones of 1987 for the Nursery and that of 2000 for the Primary. It is hoped that the entire education community will explore the document and make maximum use of it in order to enable the nursery and primary school learners to attain knowledge-based, skill-based and attitude-based proficiency upon graduation. In this way, they will be able to cope with the different educational and/or professional options available to them at the end of the primary school cycle and embrace lifelong learning, no matter the post-primary path they choose.

The age-old mergence between the two systems of education still stands the taste of time today. Just like the country's bilingual nature, Cameroon Primary Education under the Ministry of Basic Education (MINEDUC) operates in a dual system (British and French). Primary education is offered by the state, the private individuals and the mission to every citizen at different costs. Since UNESCO's operation education for all (2000), the Cameroon government declared primary education free, compulsory and opened more schools around the country to increase access and affordability by all. Although declared free, families pay for uniforms, book fees, and sometimes even anti-malaria prophylaxis for pupils. Primary education is one of the most populated levels of the Cameroon educational chain. It is the basic and happens to be one of the most delicate as it faces numerous challenges from personnel, to infrastructure, funding and even leadership.

According to Nguimbous (2018), between 2011 and 2017, the number of elementary schools identified in Cameroon improved from 14,712 to 18,596, an increase by 26.7%. In the same light, the number of teachers grew by 23% from 79,181 to 97,333 over the same period. However, indicated in the document, the number is unevenly dispatched across the country. For 1.2 million pupils registered in the central and coastal region, there are only about 40,000 teachers, 31,000 classrooms and 6,000 schools. According to the latest Human Development Index report published by the United Nations Development Program (UNDP),

the average schooling time among young men is 7.6 years while the required time is 13 years.

The primary school is offered in two systems as earlier mentioned. The Anglo-Saxon takes six years (from class 1-6) where the learners write the first school leaving certificate and the common entrance that grants access into college. Meanwhile the francophone learners take 6 years and complete the sixth year with BEPC. Primary education is spurred by different yearly plans. The primary objective of the current plan, "Document de Stratégie du Secteur de l'Education et de la Formation 2013-2020" is the achievement of quality universal primary education. This objective aligns with the national strategy for growth and employment goal of providing the production system with human capital capable of supporting economic growth. The country has made notable progress in recent years on some indicators, including increasing the textbook/learner ratio, recruiting and deploying new teachers and assessing learning outcomes.

In the Cameroon primary system and over the years, some legal frameworks guiding the curriculum and pedagogic practices have been enacted. During the period from independence in 1960 to the 1990s, the Cameroonian higher education system was heavily burdened by its inability to adequately meet or adapt to fast-changing needs of individuals and the society (Samfogah, 2012). This situation became more critical especially with the already existing and developing mishaps like economic crises, increase enrolments, reduction in funding, and a host of others distorting the functioning of higher education institutions all over the world. As a result, the state formulated and applied diverse internal and external policies on the educational system of Cameroon in order to tackle the problems by implementing high impact innovations in the system. Among the numerous reforms enacted, basic education saw a great deal of them enacted directly. Among them we have, Law Number 98/004 of 14th April 1998 on the Orientation of Education in Cameroon, Law NO 005 of 16 April 2001 to guide education, the poverty reduction strategy paper (PRSP) in 2003-2007, the Sector Wide Approach (SWA) in 2005, Growth and employment strategic pepper, 2010 – 2020, DecreeNO 2011/119 of 18 May 2011, the Sustainable Development Goals (SDG) in 2015, the law of 16 April 2016; the emphasis of primary education in Cameroon and the National Development Strategy 2020-2030 (SND 30), the competency based approach among others

These reforms have masterminded the progress of primary education in Cameroon till date but the expected results are yet to be fully experienced. In the sphere of primary educational learning, all these policies are meant to be implemented and objectives attained

within the shortest possible time. Although it may become problematic when there are several policies given to the education system within a short period which are bureaucratically slow in decision making and lack effective quality assurance mechanisms. Although these policies are aimed at renovating the educational system and making teaching-learning more skill-oriented, the stated objectives are yet to be fully attained, given that the same problems still affect our educational system and graduates till date.

Law Number 98/004 of 14th April 1998 on the Orientation of Education in Cameroon. Section 4 of Law no° 98/004 of 14 April 1998 laying down guidelines for education in Cameroon states that the general purpose of education shall be to train children for their intellectual, physical, civic and moral development and their smooth integration into society bearing in mind prevailing economic, social-cultural, political and moral factors. This law also prohibits all forms of corporal punishment in the school setting and this is in accordance with law N° 06 of 18th January 1996. By virtue of this law, the restructuring of the training cycles are supposed to be enhanced by respective counselling services through orientation of pupils and students in schools in order to curb the high rates of failure and dropout. The purpose of this law was to ensure educational quality in ensuring that learners gain professional skills which would enable them to become creative and self-employed (Fonkeng, 2006, p. 231). But a critical look at the school system shows that it is not professionally oriented. The teaching –learning process is still highly theoretical. This may explain why school failure and dropout at both primary and secondary level continues to be high, because students would not develop interest in theoretical ventures only.

On the 17th and 18th of October 2007 in a workshop held in Yaoundé in order to reinforce the capacity of head teachers and principals, they were trained on how to carry out pedagogic supervision, classroom visitation and the management of libraries and multimedia centres. Here, the main objective was to revamp the pedagogic in the country so as to render the system performant competitive, but unfortunately only 200 principals of schools were present. This reduces the possibility of ensuring educational quality at the national level in this sector.

According to circular N° 036/B1/1464 of 14 October 2002 defining the pedagogic role of the school head, it is stipulated that: "the school head is in charge of pedagogic control, he has the obligation of organising pedagogic seminars in the schools system". Circular N° 1418/08 of 1st August 2008 lays emphasis on the amelioration of quality of pedagogic activities by school administration. It is rather funny that most principals seem not to be committed to their task. Most of them seem to be more concentrated on

administrative duties at the detriment of pedagogic activities and school discipline both for teachers and students. In most schools, principals have mismanaged school funds so much that the running of academic activities throughout the school year will be impossible. This implies that most principals do not seriously and wholeheartedly apply policy on education and many seem to let their personal interest prevail over public interest. However, when the principal and/or head teacher, who is the eyes of the government, fails to do his work appropriately, other processes in the school system would not function properly, and this will hamper quality in education.

The Education for All by UNESCO (2000) is one of the most influential policies that the Cameroon primary schools adopted and implemented in its education system was the operation education for all. The Education for All movement was a global commitment to provide quality basic education for all children, youth and adults. The movement was launched at the World Conference on Education for All in 1990 by UNESCO, UNDP, UNFPA, UNICEF and the World Bank. Participants endorsed an 'expanded vision of learning' and pledged to universalize primary education and massively reduce illiteracy by the end of the decade 2005-2015. Ten years later, with many countries far from having reached this goal, the international community met again in Dakar, Senegal and affirmed their commitment to achieving Education for All. In this view, they identified six key education goals which aim to meet the learning needs of all children, youth and adults by 2015:

- Goal 1: Expand early childhood care and education
- Goal 2: Provide free and compulsory primary education for all
- Goal 3: Promote learning and life skills for young people and adults
- Goal 4: Increase adult literacy by 50 per cent
- Goal 5: Achieve gender parity by 2005, gender equality by 2015
- Goal 6: Improve the quality of education

TVET particularly contributes to EFA goals 3 and 6 as they relate to life skills. As the lead agency, UNESCO has been mandated to coordinate the international efforts to reach Education for All. Governments, development agencies, civil society, non-government organisations and the media are but some of the partners working toward reaching these goals. However, with a lot of efforts put in by the Cameroon government especially with operation "free and compulsory primary schools", schools were created everywhere in towns and villages. Yet they never attend the objectives. According to the Cameron tribune, published in October 2014, the 11th edition of the World Report on the follow-up of

Education for All 2013-2014 was officially launched in Yaoundé on October 28, 2014. It was officially revealed that Cameroon could not attain the goals of Education for All by 2015. The revelation was made on Tuesday, October 28, 2014 in Yaoundé during a double ceremony to launch the 11th edition of the World Report on the follow-up of Education for All (EFA) 2013-2014 and the Report on the National Review on Education for All (EFA) 2015 on the theme "Teach and learn: Attain Quality for All". However, the influence of EFA in the population of primary schools cannot be undermined. The creation of several primary schools led to a drastic increase in the population of young people enrolled in primary education.

Looking at the Five -Year Development Plan and Education (FYDPE), at the time of independence and reunification, the educational system in Cameroon was not well developed. Most of the primary schools lacked adequate infrastructures and teachers especially in the rural areas. The number of schools was also too small to satisfy the everincreasing demand for basic education and the increasing search for literacy. It was therefore necessary for a strategized system of planning in order to meet set objectives. The five years development plan was guided by major principles underlying Cameroon's development policy which was planned liberalism, self-reliant development, social justice and balanced development.

The Second Five-year Plan (1966-1971)

During this period, the primary school attendance rate was to be increased from 569000 pupils in 1964/65 to 752000 pupils in 1970/71 for children between 6 and 13. Still in primary education, the state had to provide 454 new classrooms while private education authorities both religious and non-denominational were to build 800 new classes. The population also had to provide some 326 classrooms, (Ministry of Economic and planning (1966:41). Thirteen primary schools were also added in the northern region. The number of primary school teachers to be added was not mentioned. Concerning general and technical secondary education, more classrooms and other infrastructures were added including administrative structures. Many Agricultural secondary schools were also set up including many professions. Nevertheless, the second plan was lagging in statistical specifications which posed a problem of realisation. From all indications education at this stage was still highly handled by missionary bodies. This can be seen with their active participation in

education projects in the second plan. Inadequately especially in infrastructure and teacher quality hamper school efficiency.

The Third Five-year Development Plan (1972-1975)

The third plan was geared towards orientating the teacher to link the teaching – learning process to local realities. Concerning enrolments in primary schools, there was an increase from 935548 to 1,074135. For secondary education, student's enrolment rose from 56028 and 17400 for general and technical schools to 93.786 and 27920 respectively. With all these changes, the number of teachers for primary education rose from 19150 to 20803 while for general and technical education, the number of teachers rose from 2200 and 950 to 3322 and 1023 to meet the needs of the high demand for secondary education.

Concerning the provision of classrooms for primary schools, the number of rooms rose from 19576 to 21337 while for general and technical education, the number of classrooms increased from 1732 and 539 to 2106 and 856 respectively. Five teacher training colleges were also created during this period. These efforts made by stakeholders to increase the quality of education, we see that many aspects were left behind. Aspects of pedagogy were not evaluated; issues of teacher professionalism, assiduity and commitment were not taken into consideration. Also, the facilities provided were lacking in quantity and quality. This prevented the educational objectives from being met.

Fourth Five-year Plan (1976-1981)

The evaluation report of educational development in basic education shows that an annual increase enrolment rate of 5.2% was registered thus increasing enrolments from 1 074 021 in 1974/75 to 1 254 065 in 1978/79. The number of trained teachers moved from 20 803 to 24 843 with an increase rate of 4.5%. Here the pupil –teacher ratio ranged between 1:47-52 in all the provinces. During this period, the number of unqualified teaching staff also increased by 2.9 % (from 10.572 to 11.349 to 4.721 recording an annual increase of 2.1%. During this period many private primary schools were transformed into public schools. This made the number of private schools to have an annual average drop of 4.6% (Ministry of Economic and planning (1981). The number of classrooms equally increased from 21 337 to 25 017.

Pedagogic Approaches in primary schools

The Cameroon education system has experienced pedagogic evolutions from the Objective-based Approach (OBA) through the Inferential Thinking Approach that was referred to as "New Pedagogic Approach" to the Competence-based Approach (CBA) or the Behavioural Objective-based Approach which is in use today.

The New Pedagogic Approach

In 1995, a National Forum on Education was held in Cameroon with the goal of giving a new vision to the entire system of education. This was promulgated into the law of 14th April, 1998 as the law of educational orientation. In order to concretise this law, new teaching programmes were introduced in the Cameroonian teacher training colleges and also in the primary schools (through pedagogic seminars). These programmes aimed at training primary school teachers who will in turn train children to be fully integrated in the society. This initiative to improve on the educational system gave birth to the NPA of learning in Cameroon (MINEDUB, NAP, 2002 p.4). Fonkeng (2006, p.6) views the New Pedagogic Approach as a process which places the child at the centre of the teaching-learning process by appealing to his reasoning within the framework of classroom problem-solving situations. It is a method based on the development of inferential thinking.

It recommends the use of teaching techniques that require exercises and thus, the development of thinking at all levels. These techniques can enable the child to pass from simple identification exercise of memorisation, recalling and/or application to higher level of intellectual activity. In this manner, he will require the ability to criticise, propose opinions, imagine, create, and discover solutions to more or less complex problems. Such problems will normally require him to use his thinking, memory, understanding, application, analysis and evaluation. From this point of view, we can conclude that the NPA to learning favours the development of competences in learners, the competences that may not only be needed in a classroom problem-solving situation but equally in daily life problem-solving situations and most especially, to be able to build an economically, socially, culturally, politically and morally strong nation.

Collective Promotion

The expression Collective Promotion is used in the context of the educational system of Cameroon, notably in basic education as a policy that favours the movement of all the pupils of the same class or level to a higher class or level. In some context, Collective

Promotion is replaced by the expression Automatic Promotion or Social Promotion. According to Hauser (2004) as cited in Augus et al., (1988) employs these expressions to define quality education:

Much as age-grading changed the definition of a quality school system from one with high rates of failure to one with high rates of promotion, so in the 1940s, educators began to adopt the idea that automatic promotion, or as it would later be called 'social promotion,' of virtually all students was the sign of true educational quality.

From the text above, we notice that collective or better still automatic promotion is not a new phenomenon in the educational system. Many educators have always seen this policy as a strategy for quality education. Cameroon seemed to have thought of collective promotion to be an adequate solution to respond to these challenges since this policy permits all learners of a given class or level of the primary school to pass to a higher class or level, and since it is a means of integrating new pedagogic approaches to learning like the New Pedagogic Approach (NPA), the Competency Based Approach (CBA).

In order to concretise this idea on collective promotion, a ministerial decision was signed on February 21, 2006 by the Minister of Basic Education reorganising the primary school in Cameroon into three levels. Level 1 comprises pupils of class 1 and class 2, level two comprises pupils of class 3 and class 4, and level 3, comprises pupils of class 5 and 6. The same decision states a new modality of promoting pupils in the primary schools in Cameroon known as *collective promotion*. According to the dispositions of this ministerial decision, this policy had to take effect in the Cameroonian primary school system from the 2007/2008 academic year

The New Vision of Evaluation

In the document that elaborates the practice of collective promotion, the following information clearly states the link between the system of evaluation and collective promotion. Le nouveau système d'évaluation renforce et concrétise la promotion collective. Il est conçu pour réduire le taux d'échec scolaire sans baisser le niveau des élèves. Ainsi:

- Il vise à identifier les difficultés des élèves pour mieux les encadrer.
- Il vise à évaluer les élèves de chaque niveau sur les mêmes bases dans l'ensemble du pays.
- Il évalue les élèves par rapport à l'atteinte des objectifs du programme et pas par rapport aux autres élèves.
 - L'évaluation ne sert plus à résoudre les problèmes de discipline.

- L'évaluation vise à remédier et à aider les enfants à mieux apprendre : Ainsi, l'enfant n'apprend pas parce qu'il sera évalué.
 - Ce système fait voir à l'enfant les retombées de son travail.
 - Le système bannit la crainte et donne le goût d'apprendre à l'élève.

Pour que cette évaluation réussisse, les enfants doivent acquérir les compétences nécessaires. Il faut donc que les enseignants mettent l'accent sur la nouvelle approche pédagogique et l'approche par les compétences (Yong, 2008).

An earlier study, (Ndifor 2014), on teachers' point of view on collective promotion revealed that, teachers' practices in the classroom are insufficient and their attitudes towards the policy are not positive enough to be able to develop the competences required in their learners, hence academic failure continue to be a problem. Equally, Endeley (2016) reveals that teachers' perception and practice of Automatic Promotion in English Speaking primary schools in Cameroon is negative and there is a discrepancy between its conception and implementation. She explains that where automatic promotion is practised, evaluation aimed at constant improvement of learning is either totally neglected or paid inadequate attention. As a result, learners remain weak in basic skills of reading and writing.

STATEMENT OF THE PROBLEM

Education is the bedrock of national development and growth (Samuel, 2014). It is an organised mechanism, through which society develops its human resources by equipping them with desirable knowledge, skills, attitudes and values which will enable them to operate effectively in the social institutions of a given country or nation, (Amadioha 2009). This education depends on the curriculum drawn for that nation. A curriculum plays a vital role in setting the direction for successful teaching and learning in schools in particular and the society at large. In order for the curriculum process to be effective and schools to be successful, head teachers must be involved in the development process (Alsubaie, 2016). An effective curriculum is expected to reflect the philosophy, goals, objectives, learning experiences, instructional resources, and assessments that comprise a specific educational program. In the curriculum process, the involvement of all stakeholders, especially individuals who are directly involved in student instruction are a vital piece in a successful curriculum (Johnson, 2001). Researchers have shown that a curriculum which involves the actors at the micro-level from the time of its conception to implementation is very relevant to a country as a whole. This is because it will become more holistic, taking into consideration the learners' needs, content will be enriched, and implementation will be easier, with evaluation becoming more effective. Alsubaie, (2016) opines that in order for the curriculum process to be effective and teaching and learning to be successful, head teachers and teachers must be involved in the development process.

Unfortunately, it has been observed and experienced (for over 20 years) by this researcher that the curriculum process in Cameroon primary school does not involve the different stakeholders, the head teachers and classroom teachers are seldom involved. Rather, it is conceived at the ministerial level and the final document is forced on the head teachers, teachers and the pupils to study. The head teachers and teachers are rather denied their role in the need sorting, design phase, and assessment phase of the curriculum process. This gap makes it very difficult for them to understand and implement the curriculum correctly. Most often the curriculum mismatches the need and required skills in the community because the processors got inspired by curriculum of other countries and crafted it in the confines of their offices. According to Alemnge (2020) the new primary school curriculum in Cameroon shows that salient issues (multicultural, peace, gender equality, moral, and sustainability education) relevant and fundamentally important to the Cameroonian society have not been effectively addressed. Arguably this researcher holds that there is still time and room to address such weaknesses in our primary school curriculum, moreso with the complete involvement of Head teachers and teachers the system can be improved.

Moreover, the curriculum development process in Cameroon's primary schools, generally employ a top-bottom curriculum development or/ and design approach, i.e. from the needs assessment, implementation phases to that of evaluation. Head Teachers who are an important entity of primary education and who are supposed to act as curriculum partners if not leaders in their schools are virtually left out of the process. As a result, they have little or no knowledge of the "the why, what, how" of the document they are called upon to use in teaching-learning and/or educating pupils in these schools. The translation of the curriculum into lessons becomes problematic, ineffective and checked with a consequent effect of a poor system whose results do not reflect the expected national aims or goals of education and also can't justify the huge financial and sacrifices of government in the sub sector. When the curriculum is not rightly processed, no matter what good intention the new curriculum was designed for, its objectives would not be met significantly. When the head teachers and their classroom teachers are unable to interpret and conveniently transfer the curriculum to specific lessons, the teaching-learning process is jeopardised. They simply craft something according to their understanding and force it on the pupil. Get the pupils

promoted without any ability to solve common problems around them. They move to college with an empty base and face a nightmare in their educational ladder. In most cases, the learners fail, repeat, drop out and even get dismissed because of the strangeness of the curriculum. Such a category of young people fast become a nuisance to the community, increasing dependency ratio and increasing crime wave in the society. It is against this backdrop that this researcher seeks to find out how head teachers and teachers contributions to the curriculum process can improve performance in basic education in Cameroon.

OBJECTIVES OF THE STUDY

This study employs the general and specific objectives.

General Objective

To examine Head teachers' involvement in the Curriculum Development Process and its impact in Cameroon primary schools

Specific Objectives

- To evaluate Head teachers' involvement in the needs assessment phase of the curriculum process and its impact in Cameroon primary schools.
- To analyse head teachers' involvement in the design phase of the curriculum development process and its effect in Cameroon primary schools.
- To examine head teachers' participation in the implementation phase of the curriculum process and its consequences in Cameroon primary schools.
- To examine the role of school heads in the curriculum evaluation phase in and its effect Cameroon primary schools.

RESEARCH QUESTIONS

General Research Question

How does Head teachers involved in the curriculum process and its impact in Cameroon primary schools?

Specific Research Questions

1) Can head teachers involvement in the need assessment phase in the curriculum process effect performance in Cameroon primary schools?

- 2) How does Head teachers involvement in the design phase of the curriculum process have an impact in Cameroon primary schools?
- 3) How will Head teachers involvement in the implementation phase of the curriculum process have an effect in Cameroon primary schools?
- 4) Can Head teachers involvement in the evaluation phase of the curriculum process have an impact in Cameroon primary schools?

RESEARCH HYPOTHESES

General Research Hypothesis

Ha: There is a relationship between head teachers involvement in the curriculum process and performance in Cameroon primary schools.

H0: There is no relationship between head teachers involvement in the curriculum process and performance effect in Cameroon primary schools.

Specific Research Hypotheses

Ha1: There is a relationship between head teachers involvement in the needs assessment stage of the curriculum process and performance in Cameroon primary schools.

H01: There is no relationship between head teachers involvement in the needs assessment stage of the curriculum process and performance in Cameroon primary schools.

Ha2: There is a relationship between head teachers are involving in the designing stage of the curriculum process and performance in Cameroon primary schools.

H02: There is no relationship between head teachers not involving in the design stage of the curriculum process and performance in Cameroon primary schools.

Ha3: There is a relationship between head teachers involvement in the implementation stage of the curriculum process and performance in Cameroon primary schools.

H03: There is no relationship between head teachers involving in the implementation stage of the curriculum process and performance in Cameroon primary schools.

Ha4: There is a relationship between head teachers involvement in the evaluation stage of the curriculum process and performance in Cameroon primary schools.

H04: There is no relationship between head teachers involvement in the evaluation stage of the curriculum process and performance in Cameroon primary schools.

Justification of the study

Globalisation of educational establishments has challenged schools and educational systems to rethink their strategies, structures and the competencies necessary for a viable curriculum process. Flourishing development programmes are increasingly prevalent because schools and educational systems in both developed and developing countries are facing a multitude of outcome-based pressures and challenges on the quality of their graduates or product upon graduation. The demands of a globalised world have placed high quality education at the forefront of the international and national policy agendas. This has led to ever more precise and challenging national and global accreditation standards, Harber and Davies, (1997). In view of this, the Cameroon primary education sub-sector has come to understand that the curriculum is the pivot and citadel of all credible learning in schools. It is arguably true that the curriculum has many definitions, these definitions have created the conception that the curriculum is fragmentary, elusive, and sometimes confused by some actors and producers and other who matter in the curriculum development process and design landscape.

However, these interpretations only give credence to the dynamic nature of the curriculum environment and play ground. These definitions however are influenced by the many related theories, thoughts, models and methods that interrelate curriculum knowledge. With increasing political, social and cultural influences, some thoughts sometimes give credence, including the view that the curriculum domain is a reserve for top level actors in the domain especially in our Ministries of Education. This confusion has negated the role of those who were and are supposed to play a key role in the curriculum process. Such knowledgeable stakeholders such as teachers and head teachers have been relegated to the backyard of the curriculum development process. Good examples are head teachers and their cohorts, the teachers who have been reduced to play an implementation role in our class room on a process they do not master nor understand. This is rather unfortunate and destructive for any school system. Those appointed to positions of trust and responsibilities in systems are still the key actors in the curriculum process of which some of them do not master the nature of a curriculum not to mention how it is developed. This situation is demotivating and causes more harm to the system than the expected good. This is one of the reasons why a study of this magnitude and nature is a well thought initiative. It is believed that this research work could be an eye opener and food for thought in an era when the curriculum has not only gained ground but is here to stay.

In this century, the trend to recognize the central role of school curriculum in driving forward the national agenda into tangible educational results encourages the growth in leadership development programmes such as training of Head teachers and teachers in the curriculum process(Bush, Lundry et al., 2008). The issues surrounding the curriculum of Cameroon primary education, calls for continuous debate on what content is suitable and who should teach our pupils and students, makes this study even more indispensable.

This study will therefore examine the concept and procedure of the top -bottom as well as the bottom- top approaches to the curriculum process. Such a study is a right fit for all stakeholders of the curriculum development process and may go a long way to ameliorate the process per se.

In the recent past, the primary school curriculum has not been rigorously assessed though a new curriculum has been put in play in our primary schools. It is however observed that there have been several changes on some curriculum documents in place without any underlying reason for such a change. Sometimes such changes are based on political reasons rather than the sake of proper education of the learner.

If such curriculum changes are elaborated by some knowledgeable educationists, the head teachers and teachers who are called to implement these curriculum should be given an opportunity to to understand and consummate this document, to help him/her better implement this curriculum when need arises.with little or They often do so without prior knowledge or have just a basic knowledge of what is supposed to be done or what exactly should be done. The Cameroon educational system is organised in a way that ensures continuity from nursery to primary, to secondary, to university. This academic ladder is designed in a way that the learners will be progressing in concomitance with the knowledge at different levels which commensurate with their ages. These are all communicated on the curriculum at every level. It is rather regrettable to notice that at the primary schools' level, the curriculum process has failed to acknowledge the role of the person who should play one of its important roles in the curriculum process. This constitutes a real issue as learners continue to move to higher classes on the model of No Pupil left behind. In many situations we have seen students who are unable to read and write. This is very detrimental to both the student and the school system

This approach sometimes causes unforetold damages to the teaching-learning process and to the learner in particular. This has perpetually culminated into poor results, poor outcomes and poor education standards and output in a system which could be described as "let my people go." This is a call for concern and requires a scientific

examination of the situation to decipher who is not doing what, what is not rightly done and to finally propose the right approaches.. This study is therefore unavoidable based on the temerity of the issues related plaguing the education community and its stakeholders. This constitutes a real issue as learners continue to move to higher classes on the model of No Pupil left behind. In many situations we have seen students who are unable to read and write. This is very detrimental to both the student and the school system and our national goals of education. This makes this research work the right fit and indispensable as it strikes on the right problem that has held the system in chains for a long time.

This study is contextually relevant as Cameroon's primary education sub-system of education and particularly the schools in the English-speaking regions of the country are experiencing unprecedented and severe socio-political upheavals and make it difficult for top officials in the area of pedagogy to visit our schools. Against this background there is a need for the government to reflect once more on the role of head teachers and teachers and how to increase their involvement in the curriculum process. It should be noted that the Head teacher is the strongest part of the chain in this important sub sector of life, the education sector.. This particular situation has a serious effect on teachers, the school environment and community as a whole and seriously affects the curriculum implementation stage in our school. In order for the curriculum development to be effective and schools to be successful, teachers and especially head teachers must be involved in the curriculum process.

An effective curriculum should reflect the philosophy, goals, objectives, learning experiences, instructional materials and resources a reliable assessment and evaluation in the school system that comprise of the educational program. A curriculum should be a usable tool to assist teachers in the development of individualised strategies and methods and materials necessary for them to be successful. Curriculum development can be challenging, therefore the involvement of the community and especially the teachers is important and necessary so they can be directly involved in pupils and student's instruction which is a vital piece in curriculum development and revision.

SIGNIFICANCE OF THE STUDY.

This study will benefit the following;

Minedub

The findings of this study are an important element in solving an age old yet continuous problem and/or irregularity amongst curriculum players and actors. The head teachers and most teachers are not involved in the curriculum design process, thereby creating an enlarging the gap between what they are expected to teach and what exists in the

curriculum document. This practice unfortunately creates a problem at the curriculum implementation stage, a problem that affects the motivation of the teacher and the learners' ability to effectively learn. Moreso, the findings of this study will reduce the increasing gap between actors in the school and the curriculum document. The solutions proposed are directed ie the implementer of the document and its designer. They are there called upon to join forces to make the school a true centre of learning. If and when MINEDUB puts these proposals into practice the Cameroon basic education landscape will have an all involving and holistic curriculum document that will energise both Head teachers and teachers and the education community to produce better results and also better prepare learners for the next stage of their educational endeavours. Against this background policymakers are therefore called upon to engage head teachers as much as possible at every stage in the curriculum process. This will help make the document more real,acceptable and a road map for the school and its education environment. Furthermore such a document will not only be richer in all ramifications but useful to the learner, teacher, the education environment it is meant to serve but also the goal village of teaching and learning. When the need assessment, design, implementation phases are well master and understood, then there may symbiosis in the curriculum process. Also, this will culminate into a curriculum document which will be properly understood, including by the principal, headteachers, curriculum workers and experts and others. As earlier mentioned the whole process will become fluid and more productive for both teacher and the pupil and as such produce better results and better graduates for the good of the nation as a whole.,

To the head teachers

The findings of this study will demonstrate to what extent school heads are effectively involved in the curriculum process.and more to that this study will specify and reiterate the roles of the head teachers in this important activity of the teaching-learning. This also will further strengthens the learner, teachers, the school and the education community who will then become really actors in what they know how to do best and not mere observers.

To other stakeholders

The entire education community, who are per se,the stakeholders will have an intimate relationship with the school and its environment while contributing to the growth and development of their communities. The community as a whole will have access to the curriculum and understand it better because they identify with the curriculum document and its process. Those who took part in the curriculum process, for example school heads will be always at their disposal for explanations. Results of this study will present the curriculum as a working document, a road map, a tool to be exploited by the learners, parents, and the teacher for better performance. The myth surrounding the use of a curriculum will be demystified. Teachers will effectively use the curriculum with ease and contribute their own quota to national development.

SCOPE OF THE STUDY

Thematic scope

This topic is limited to Head Teachers' Involvement in Curriculum Design Process in Cameroon Primary Schools based on the following variables - need assessment, curriculum design, curriculum implementation and curriculum evaluation. It is beyond the scope of pre nursery and nursery curriculum because primary schools place more emphasis on the competences based skills, thus the curriculum design reflects these skills in relation to their application. From a philosophical point of view, this study is based on pragmatic philosophy unlike the teaching-learning process which is more on knowing your environment, learning some basic motor skills, initiation counting and language orientation.

Theoretical scope

Many theories have been enacted in relation to this study but the most appropriate adopted for this study were the curriculum theory by Glatthorn, Boschee and Whitehead (2006), Theory of Need Analysis in Curriculum Development by Jack (2002), Curriculum

Design Theory by Johnson (1967), Bottom-up Theories on Curriculum Implementation by Barrett and Fudge (1981), and Stake's Responsive Theory of Curriculum Evaluation (1975).

Periodic scope

This study started from the academic year 2017/2018 to 2022/2023. A period long enough to enable the researcher to explore all parts of the literature, covering the large geographical landscape for the right information for this study. Moreover, during this period, the researcher had class and field work which needed much time.

DEFINITION OF KEY CONCEPTS

Head teacher

Conceptually, Blasé and Blasé (2011), define a school head as heads in curriculum and instruction and/or department chair who functions as a leader, focusing on improving key aspects of their school or district's progress, including its mission, vision, engagement and adaptability in achieving these goals.

Curriculum Leader

Patterson and Patterson (2012) conceptualised a curriculum leader as a significant driver in improving academic achievement. Allan A. Glatthan, Floyd Boschee and Bruce M. Whitehead (2006) perceive the curriculum leader as a change agent and leader who shares his vision of the curriculum with his education community, formulating a need assessment, formulates plans, evaluates these plans and makes needed changes. In this study, a curriculum leader was used synonymously as a head teacher, principal of secondary or high school..school administrator

Curriculum Evaluation

Fink and Stoll (2008) understand curriculum evaluation as a broad and continuous effort to trace the effects of the feasibility of the content of a curriculum towards the achievement of defined goals.

Curriculum Implementation

Ivowi (2014) defines curriculum implementation as involving the dissemination of the structured set of learning experiences, the provision of resources to effectively execute the plan and the actual execution of the plan in the classroom setting where teacher-learner interactions take place.

Curriculum Design

Karen (2019) situates curriculum design as a term used to describe the purposeful, deliberate and systematic organisation of instructional blocks within a course. Mckimm.et al, (2014). By design they meant, choosing the way the programme is structured and how teaching learning and assessment encounters will be sequenced. Several models have been developed during the past decade and huge efforts have been put into their improvement and development.

Need Assessment

Sarnrattana (2012) says needs assessment is a method used to study the aims, vision, principles, goals, learners' key competencies, desirable characteristics, learning standards and indicators that showed all of the components of a curriculum from the needs assessment. Information obtained during the needs assessment can be used to decide the important content that may be to students.

Conclusion

The first chapter of this study examines the different background related to the study, the statement problem, the objectives, questions, hypothesis, justification, significance, scope and operational definitions. It opens the research questions and creates a platform on which the study takes its rightful place in the world of the sciences of education.

Summary of the Work

Chapter 1 begins by providing an introductory background to the research and the main issues addressed will be to explore the concept of curriculum design and implementation in primary schools in Cameroon. This chapter also discusses the problem statement based on the analysis in the areas of head teachers involvement in the process of curriculum design, and its impact on performance, along with a brief introduction to the research objectives, questions and hypotheses as well as the significance, scope and operational definitions.

Chapter 2 provides a detailed analysis of the literature on existing theories related to curriculum design, implementation and head teachers involvement in the production process in primary schools in Cameroon.

The literature analyzed and presented in this chapter associates current research with past research studies and as a result, identifies major gaps: First, the studies on the relationship

between head teachers involvement and performance are limited within the proposed context.

The introductory part of this chapter provides the conceptual framework of the study based upon the most criticised elements of the primary school curriculum, theories and their effects on performance. The conceptual model describes how the variables of the study can affect the expected outcomes of the level of school performance based on the goal attainment approach. The theoretical review went further to relate the different concepts to what others have experienced and written about curriculum design process, head teachers non-involvement, their successes and failures in the socio-political and economic life of an the country..

Chapter 3 dwells on the methodology by describing an overall picture of the qualitative and quantitative research. The research philosophy and approach are also discussed in this chapter, followed by a justification of why the researcher used the triangulation method. Moreover, this section offers an analysis of the empirical methodology discussed in terms of research design, data collection and data analysis. The research design is segmented into three stages. The first phase discusses the pilot guide test on the questionnaires and interview guides, and their validation. The sampling techniques are also discussed. The second phase discusses the data collection stage, data analysis, triangulation approach, individual case findings, verification, and validation. Finally, the third stage discusses on the final conceptual framework as a novel contribution of the present research.

Chapter 4 deals with the presentation, analysis and testing of hypothesis which is illustrated by figures and tables. It has three main segments namely an introduction into the different tests, data cleansing process to be sure of a particular test for normality, the descriptive statistics that entails tables and graphs to test the different tendencies depending on the type of data. Finally, the inferential statistics deals with the test of hypothesis to clean the data ready for analysis to meet the test condition, to use either parametric or non-parametric test. The calculated value is verified in the table or critical value for confirmation or rejection.

Chapter 5, encompasses discussions on the findings based on the cases of existing research studies, interprets and offers possible explanations and implications of the empirical evidence. Furthermore, this chapter confirms and amends the conceptual framework to identify the key alterations and modifications that emerged from the empirical investigation.

Finally, it summarizes the contributions and implications, novelty, limitations and potential future research directions that may further advance research in this domain. From the findings of this research, suggestions were recommended to school managers, policy-makers, head teachers, consultants and other researchers to adopt new methods and systems in a post-bureaucratic environment.

CHAPTER TWO:

REVIEW OF RELATED LITERATURE

INTRODUCTION

This chapter focuses on the works and views expressed by some authors and researchers in related areas of the study. It presents the primary education landscape in Cameroon. Under the conceptual review, it examine head teachers' involvement in need assessment, in designing, implementation and evaluation of the curriculum of primary schools. Some theories were reviewed and a couple of empirical studies conducted were equally perused to bring out their relationship and relevance to this study. It investigated in order to fil,1 the knowledge gaps and controversies in previous researches.

CONCEPTUAL FRAMEWORK

The concept of Cameroon Primary Education Landscape

Cameroon primary schools are under the control of the Ministry of Basic Education (MINEDUC). The precondition for children to be enrolled in the primary level is that they should be aged six years. This is the age base of primary/elementary education, though the system includes and encourages pre-school (nursery school) where children are supposedly enrolled at the age four to prepare them for elementary schooling. Primary Education is the foundation of sustainable learning. It is on this basis that Cameroon has ratified several conventions related to compulsory education. The new curricula for Cameroon Primary and nursery schools came into effect in 2018 which replaced that of 1987 for the Nursery and 2000 was introduced with zest and hope.. It was hoped that the entire education community would explore the document and make maximum use of it in order to enable the nursery and primary school learners to attain basic knowledge, skills and attitude-based proficiency upon graduation. Further it was expected that learner and teacher at the primary levels will be able to cope with the different educational and/or professional options available to them at the end of the primary school cycle and embrace lifelong learning, no matter their future professional and academic interest

The age-old independence of the two systems of education still stands the taste of time today and has proven to be a source of pride of the nation. Just like the country's bilingual option, Cameroon Primary Education under the Ministry of Basic Education (MINEDUB) operates in a dual system (English speaking and French speaking sub systems.).

The primary education sub-system is under the responsibility of the state, and with the support and collaboration of the lay-private education and the confessional authorities. They too contribute their own quota to this all important national human development enterprise. UNESCO's education project"Education for all in the year two thousand",(2000) came as a motivating factor to both the education community and the Cameroon government in particular. The Government did not hesitate to cease the opportunity to declare primary education free, compulsory and also to create and open more primary schools in the country. This gesture opened up and increased access to affordable primary education for all. This new policy of free primary education was not as free as such because parents and guidants continued to pay for some basic necessities such as:uniforms, book fees, and other needs to support authorities for a better and sustainable way to help the government achieve its specific objectives and for their children and relatives to maximise the benefits of going to school.At present the Primary education sub sector is one of the most populated of the Cameroon school map. It is worth to note that, though it is called the basic education sub-system, it happens to be the most important and delicate phase of the education of the child and where they face numerous challenges in the area of personnel, infrastructure, funding and even leadership.

According to Nguimbous (2018), between 2011 and 2017, the number of elementary schools identified in Cameroon improved from 14,712 to 18,596, an increase by 26.7%. In the same light, the number of teachers grew by 23% from 79,181 to 97,333 over the same period. However, as indicated in the same document, the number of schools and teachers were unevenly divided across the country. For the one million and two hundred pupils registered in the Central and Littoral regions, there are only about 40,000 teachers, 31,000 classrooms and 6,000 schools. According to the latest Human Development Index report published by the United Nations Development Program (UNDP), the average schooling time among learners is 7.6 years while the required time is 13 years.

The primary school is offered in two systems as earlier mentioned with the English speaking and French sub- systems having the same six years duration that begins in class 1-6 respectively. The graduates from the both systems earned the First School Leaving Certificate, while learners of the French speaking sub-system earned the Certificat D'Etude Primaire et Élémentaire. The both systems also went in for the college selection test, called the Common entrance for the **English** and French speaking subsystems respectivelyMeanwhile the French speaking learners take 4 years to obtain the BEPC while the English speaking learners spent 5 years to obtain the GCE "O" levels.

Primary education is spurred by different yearly plans. The current primary objective of the year 2013-2020 called "Document de Stratégie du Secteur de l'Education et de la Formation 2013-2020" was focused on achieving quality universal primary education by the year 2020. This objective aligns with the national strategy for growth and employment goal of providing the production system with human capital capable of supporting economic growth. The country has made notable progress in recent years as some indicators show, including increasing the textbook/learner ratio, recruiting and deploying new teachers and assessing learning outcomes.

Assessment and Grading in Cameroon Primary Schools System.

Assessment of learning is recommended to be done six times a year, implying twice a term. This is in line with the sequential assessment policy previously in use in schools in Cameroon. The CBA assessment practices range from performance assessment, comprehensive assessment, self-assessment to diagnostic assessment, and formative as well as summative assessment with emphasis on diagnostic and formative assessments. A grading system was introduced in the academic year 2019/2020 wherein upon assessment; the students' performances are graded in four principal categories in context of CBA thus;

- 0-10 is labelled CNA (competence not acquired)
- 11 − 14 is labelled CBA (Competence being acquired)
- 15- 17 is labelled CA (Competences acquired)
- 18 20 is labelled A⁺ indicating the learner's expertise in the said competence(s) evaluated.

Formative assessment is one of the key factors of CBA. This assessment takes the form of testing strategies put in place to get feedback during a lesson in order to ensure that learners are actually learning. Besides, remedial lessons play a primordial role in the CBA assessment policy geared at taking slow learners to the same level as those that are smarter. This grading system seems to be violated by the assessment practices as most assessment tools and processes may be invalid and without objectivity in most cases.

Legal Frameworks Guiding the Cameroon Primary Education

During the period from independence in 1960 to the 1990s, the Cameroonian higher education system was heavily burdened by its inability to adequately meet or adapt to fast-changing needs of individuals and the society (Samfogah, 2012). This situation became more critical especially with the already existing and developing mishaps like economic crises, increase enrolments, reduction in funding, and a host of others distorting the functioning of

higher education institutions all over the world. As a result, the state formulated and applied diverse internal and external policies on the educational system of Cameroon in order to tackle the problems by implementing high impact innovations in the system. Among the numerous reforms enacted, higher education saw a great deal of them enacted directly. Among them we have, Law Number 98/004 of 14th April 1998 on the Orientation of Education in Cameroon, Law N^o 005 of 16 April 2001 to guide higher education, the poverty reduction strategy paper (PRSP) in 2003-2007, the Sector Wide Approach (SWA) in 2005, the Licence-Masters-Doctoral (LMD) of 2007, Higher Education Act no 110/2009. Coll, Growth and employment strategic pepper, 2010 – 2020, DecreeN^o 2011/119 of 18 May 2011, the Sustainable Development Goals (SDG) in 2015, the law of 16 April 2016; the emphasis of higher education in Cameroon and the National Development Strategy 2020-2030 (NDS 30).

These reforms have masterminded the progress of higher education in Cameroon till date but the expected results are yet to be fully experienced. In the sphere of higher educational learning, all these policies are meant to be implemented and objectives attained within the shortest possible time. Although it may become problematic when there are several policies given to the education system within a short period which are bureaucratically slow in decision making and lack effective quality assurance mechanisms. Although these policies are aimed at renovating the educational system and making teaching-learning more skill-oriented, the stated objectives are yet to be fully attained, given that the same problems still affect our educational system and graduates till date.

Law Number 98/004 of 14th April 1998 on the Orientation of Education in Cameroon

Section 4 of Law no° 98/004 of 14 April 1998 laying down guidelines for education in Cameroon states that the general purpose of education shall be to train children for their intellectual, physical, civic and moral development and their smooth integration into society bearing in mind prevailing economic, social-cultural, political and moral factors. This law also prohibits all forms of corporal punishment in the school setting and this is in accordance with law N° 06 of 18th January 1996. By virtue of this law, the restructuring of the training cycles are supposed to be enhanced by respective counselling services through orientation of pupils and students in schools in order to curb the high rates of failure and dropout. The purpose of this law was to ensure educational quality in ensuring that learners gain professional skills which would enable them to become creative and self-employed (Fonkeng, 2006, p. 231). But a critical look at the school system shows that it is not

professionally oriented as expected by the national education community. The teaching – learning process is still highly theoretical. This may explain why primary school graduates can not meet up with the expectation of our local job market. The question that begs for answers is how can a 6 years primary education system where learners graduate at an average age of 12 years be prepared for any job market.at such young age rifled with immaturity vis-a-vis the job market? Nevertheless,the government is still carrying out the necessary proactive reforms to prepare our pupils for professional education both in the primary school system and the post primary right to the university level. An educational system that is essentially theory based will render the school system externally inefficient and less competitive in the job market.

On the 17th and 18th of October 2007 in a workshop held in Yaoundé in order to reinforce the administrative and pedagogic capacity of head teachers and principals, delved into the theme of how Head teachers coil play the role of a catalyst in the teaching - learning process of their schools. They were thrilled in and trained in pedagogic supervision, classroom visitation and the management of libraries and multimedia centres. Here, the main objective was to revamp the pedagogic activity in schools and colleges so as to render the system more effective and competitive. Unfortunately 14 years later, much has not changed but there is hope, all is not lost. This hope will be more real if only the major actors are given their right place in the curriculum process, a place they wish to contribute their quota in this important educational document. These neglected but major actors are prepared to support and improve the quality by their participation in the curriculum which of course is a road map of this sector.

According to circular N° 036/B1/1464 of 14 October 2002 defining the pedagogic role of the school head, it is stipulated that: "the school heads is in charge of pedagogic control, he has the obligation of organising pedagogic seminars in the schools system". Circular N° 1418/08 of 1st August 2008 lays emphasis on the amelioration of quality of pedagogic activities by school administration. It is rather disturbing that most Head teachers seem not to be committed to their task due to professional ignorance. Most of them seem to be more concentrated on administrative duties at the detriment of pedagogic activities. In most schools, head teachers have become managers in their schools rather than pedagogic leaders. This implies that most Head teachers have deviated from their principal functions and things are falling apart. Our Head teachers do not take their task seriously and perhaps they have taken their non engagement in pedagogic activities as a new- normal. They are not given the possibility to play their natural roles as teachers as such they have

become demotivated and have accepted a place in the backyard. They seem to have let down flags while letting their personal interest prevail above public interest. However, there is a good reason to feel that things will not remain static as more and more education actors become interested in the curriculum document. We hope that this research work will go a long way to create an awareness for the need to involve Head teachers and the whole education community to be part of the curriculum process, so the final document will be accepted, and to be properly implemented by those trained for this purpose. There is no gainsay that the Head teachers and teachers are the main actors at the implementation level thus the process needs them to be more successful.

The Education for All by UNESCO (2000)

One of the most important actions taken by the Cameroon government is the adoption of free primary education schools, education for all. The Education for All policy was a global commitment to provide quality basic education for all children, youth and adults. The slogan was launched at the World Conference on Education for All in 1990 by UNESCO, UNDP, UNFPA, UNICEF and the World Bank. Participants endorsed an 'expanded vision of learning' and pledged to universalize primary education and massively reduce illiteracy by the end of the decade 2005-2015. Ten years later, with many countries far from having attaining this goal, the international community met again in Dakar, Senegal and affirmed their commitment to achieving Education for All. In this in view, they identified six key education goals which is aimed to meet the learning needs of all children, youth and adults by 2015:

- Goal 1: Expand early childhood care and education
- Goal 2: Provide free and compulsory primary education for all
- Goal 3: Promote learning and life skills for young people and adults
- Goal 4: Increase adult literacy by 50 per cent
- Goal 5: Achieve gender parity by 2005, gender equality by 2015
- Goal 6: Improve the quality of education

TVET particularly contributes to EFA goals 3 and 6 as they relate to life skills. As the lead agency, UNESCO has been mandated to coordinate the international efforts to reach Education for All. Governments, development agencies, civil society, non-government organisations and the media are but some of the partners working toward reaching these goals. However, with a lot of efforts put in by the Cameroon government especially with operation "free and compulsory primary schools", schools were created everywhere in towns

and villages yet the goals set from the beginning are yet to be attained. According to the Cameron tribune, published in October 2014, the 11th edition of the World Report on the follow-up onEducation for All 2013-2014 which was officially launched in Yaoundé on October 28, 2014, it was officially revealed that Cameroon could not attain the goals of Education For All by 2015. This sad truth was revealed on Tuesday, October 28, 2014 in Yaoundé during which it was said that Cameroon may not attain its goal for Education for all by 2015. This was during a double ceremony marking the 11th edition of the World Report on the follow-up of Education for All (EFA) 2013-2014 and the Report on the National Review on Education For All (EFA) 2015 on the theme "Teach and learn: Attain Quality for All". However, the influence of EFA in the creation of the primary schools in Cameroon can not be undermined. The creation of several primary schools led to a serious increase in the population of young people enrolled in primary education.

The New Pedagogic Approach

In 1995, a National Forum on Education was held in Cameroon with the goal of giving a new vision to the entire system of education. This was promulgated into the law of 14th April, 1998 as the law of educational orientation. In order to concretise this law, new teaching programmes were introduced in the Cameroonian teacher training colleges and also in the primary schools (through pedagogic seminars). These programmes aimed at training primary school teachers who will in turn train children to be fully integrated in the society. This initiative to improve on the educational system gave birth to the NPA of learning in Cameroon (MINEDUB, NAP, 2002 p.4). Fonkeng (2006, p.6) views the New Pedagogic Approach as a process which places the child at the centre of the teaching-learning process by appealing to his reasoning within the framework of classroom problem-solving situations. It is a method based on the development of inferential thinking.

It recommends the use of teaching techniques that require exercises and thus, the development of thinking at all levels. These techniques can enable the child to pass from simple identification exercise of memorisation, recalling and/or application to higher level of intellectual activity. In this manner, he will require the ability to criticise, propose opinions, imagine, create, and discover solutions to more or less complex problems. Such problems will normally require him to use his thinking, memory, understanding, application, analysis and evaluation. From this point of view, we can conclude that the NPA to learning favours the development of competences in learners, the competences that may not only be needed in a classroom problem-solving situation but equally in daily life problem-solving

situations and most especially, to be able to build an economically, socially, culturally, politically and morally strong nation.

Collective Promotion

The expression Collective Promotion is used in the context of the educational system of Cameroon, notably in basic education as a policy that favours the movement of all the pupils of the same class or level to a higher class or level. In the same context, Collective Promotion is replaced by the expression Automatic Promotion or Social Promotion. According to Hauser (2004) as cited in Augus et al., (1988) employs these expressions to define quality education:

Much as age-grading changed the definition of a quality school system from one with high rates of failure to one with high rates of promotion, so in the 1940s, educators began to adopt the idea that automatic promotion, or as it would later be called 'social promotion,' of virtually all students was the sign of true educational quality.

From the text above, we notice that collective or better still automatic promotion is not a new phenomenon in the educational system. Many educators have always seen this policy as a strategy for quality education. Cameroon seemed to have thought of collective promotion to be an adequate solution to respond to these challenges since this policy permits all learners of a given class or level of the primary school to pass to a higher class or level, and since it is a means of integrating new pedagogic approaches to learning like the New Pedagogic Approach (NPA), the Competency Based Approach (CBA).

In order to concretise this idea on collective promotion, a ministerial decision was signed on February 21, 2006 by the Minister of Basic Education reorganising the primary school in Cameroon into three levels. Level 1 comprises pupils of class 1 and class 2, level two comprises pupils of class 3 and class 4, and level 3, comprises pupils of class 5 and 6. The same decision states a new modality of promoting pupils in the primary schools in Cameroon known as *collective promotion*. According to the dispositions of this ministerial decision, this policy had to take effect in the Cameroonian primary school system from the 2007/2008 academic year.

The New Vision of Evaluation

In the document that elaborates the practice of collective promotion, the following information clearly states the link between the system of evaluation and collective

promotion. Le nouveau système d'évaluation renforce et concrétise la promotion collective. Il est conçu pour réduire le taux d'échec scolaire sans baisser le niveau des élèves. Ainsi:

- Il vise à identifier les difficultés des élèves pour mieux les encadrer.
- Il vise à évaluer les élèves de chaque niveau sur les mêmes bases dans l'ensemble du pays.
- Il évalue les élèves par rapport à l'atteinte des objectifs du programme et pas par rapport aux autres élèves.
 - L'évaluation ne sert plus à résoudre les problèmes de discipline.
- L'évaluation vise à remédier et à aider les enfants à mieux apprendre : Ainsi, l'enfant n'apprend pas parce qu'il sera évalue.
 - Ce système fait voir à l'enfant les retombées de son travail.
 - Le système bannit la crainte et donne le goût d'apprendre à l'élève.

Pour que cette évaluation réussisse, les enfants doivent acquérir les compétences nécessaires. Il faut donc que les enseignants mettent l'accent sur la nouvelle approche pédagogique et l'approche par les compétences (Yong, 2008).

An earlier study, (Ndifor 2014), on teachers' point of view on collective promotion revealed that, teachers' practices in the classroom are insufficient and their attitudes towards the policy are not positive enough to be able to develop the competences required in their learners, hence academic failure as seen in first school and common entrance examinations, continue to be a problem. Equally, Endeley (2016) reveals that teachers' perception and practice of Automatic Promotion in English Speaking primary schools in Cameroon is negative and there is a discrepancy between its conception and implementation. She explains that where automatic promotion is practised, evaluation aimed at constant improvement of learning is either totally neglected or paid inadequate attention. As a result, learners remain weak in basic skills of reading and writing.

The Five -Year Development Plan and Education (FYDPE)

At the time of independence and reunification, the educational system in Cameroon was not well developed. Most of the primary schools lacked adequate infrastructures and teachers especially in the rural areas. The number of schools was also too small to satisfy the ever-increasing demand for basic education and the increasing search for literacy. It was therefore necessary for a strategized system of planning in order to meet set objectives. The five years development plan was guided by major principles underlying Cameroon's

development policy which was planned liberalism, self-reliant development, social justice and balanced development.

The Second Five-year Plan (1966-1971)

During this period, the primary school attendance rate was to be increased from 569000 pupils in 1964/65 to 752000 pupils in 1970/71 for children between 6 and 13. Still in primary education, the state had to provide 454 new classrooms while private education authorities both religious and non-denominational were to build 800 new classes. The population also had to provide some 326 classrooms, (Ministry of Economic and planning (1966:41). Thirteen primary schools were also added in the northern region. The number of primary school teachers and pupils have increased over time. Concerning general and technical secondary education, more classrooms and other infrastructures were added including administrative structures. Many Agricultural secondary schools were also set up including many professions. Meanwhile, an examination of the second plan was lagging in its practical implementation and realisation of this plan. From all indications the education of the nation' youths especially in the anglophone subsystem was mainly in the hands of the denominationals ie, the catholics, basel mission and others.

This second plan did not fare as was demonstrated little or no infrastructural growth, lack of trained teachers and the implication of the education community in the planning and realisation of the national education project..

The Third Five-year Development Plan (1972-1975)

The third plan was geared towards orientating the teacher to link the teaching – learning process to local realities. Concerning enrolments in primary schools, there was an increase from 935548 to 1,074135. For secondary education, student's enrolment rose from 56028 and 17400 for general and technical schools to 93.786 and 27920 respectively. With all these changes, the number of teachers for primary education rose from 19150 to 20803 while for general and technical education, the number of teachers rose from 2200 and 950 to 3322 and 1023 to meet the needs of the high demand for secondary education.

Concerning the provision of classrooms for primary schools, the number of rooms rose from 19576 to 21337 while for general and technical education, the number of classrooms increased from 1732 and 539 to 2106 and 856 respectively. Five teacher training colleges were also created during this period. These efforts made by stakeholders to increase the quality of education, we see that many aspects were left behind. Aspects of pedagogy were not evaluated; issues of teacher professionalism, assiduity and commitment were not

taken into consideration. Also, the facilities provided were lacking in quantity and quality. This prevented the educational objectives from being met.

Fourth Five-year Plan (1976-1981)

The evaluation report of educational development in basic education shows that an annual increase enrolment rate of 5.2% was registered thus increasing enrolments from 1 074 021 in 1974/75 to 1 254 065 in 1978/79. The number of trained teachers moved from 20 803 to 24 843 with an increase rate of 4.5%. Here the pupil –teacher ratio ranged between 1:47-52 in all the provinces. During this period, the number of unqualified teaching staff also increased by 2.9 % (from 10.572 to 11.349 to 4.721 recording an annual increase of 2.1%. During this period many private primary schools were transformed into public schools. This made the number of private schools to have an annual average drop of 4.6% (Ministry of Economic and planning (1981). The number of classrooms equally increased from 21 337 to 25 017.

Conceptual Review of Curriculum

As stipulated by the UNESCO International Bureau of Education (2011), Curriculum is typically a phenomenon which includes many dimensions of learning, including rationale, aims, content, methods, resources, time, assessment, etc; which refers to various levels of planning and decision-making on learning (for example, at the supra-, macro-, meso-, microand nano-levels); or, international, national, local, classroom and individual levels; and which relates to multiple representations of learning for example, as already mentioned, intended, implemented, attained curriculum. Curriculum can be understood as the totality of what children learn while at school – including what they learn through classroom activities; in interdisciplinary tasks across the school, for example, on the playground, during lunch time participating in civic responsibilities with others. This curricular totality also includes opportunities for wider achievement through sport, music, debating, and the like. For the purposes of this paper, curriculum is defined in a holistic, process-oriented way. This understanding is based on the belief that, while curriculum might commonly be perceived as a set of documents, the quality of those documents is closely connected to the processes used to develop them and to the means through which they are put into practice. In other words, judging the quality of the curriculum itself cannot be done in isolation from the broader processes of curriculum development, implementation and evaluation.

There are 4 main criteria for judging the quality of a curriculum: Categories of criteria for judging curriculum quality Source: The very first category is how the curriculum is developed. The instructional methods used and the models put in place. A quality curriculum can be achieved only when all stakeholders are involved in its development. The second criteria to judge the curriculum quality is the curriculum itself. Here, the content and how the curriculum is to be executed is emphasised. This point is very technical in the sense whatever is inbuilt into learners will determine the outcome and so, the curriculum itself should be of great interest. The third criteria is how the curriculum is implemented? Teaching methods are the focus on and emphasised at this point because a good content without a good method to teach it makes it void of an appropriate and appreciative outcome. A curriculum can only be good as its implementation and in a situation where it is implemented with the participation well trained and qualified teachers, supervised and coordinated by experienced and devoted Headteachers. The evaluation of a curriculum implementation process deserves to be carefully examined because of the pivotal role it plays in the teaching - learning venture within and without the learning environment. When any of the curriculum process is reviewed including the curriculum content and teaching methods, if gaps are found then it should be properly filled with finding and results from analysing data and related literature. Concrete action thereafter can make for better learner output and beget teacher excellence. Curriculum quality and pupil expected output in the context of this study is one of the many indicators of Head Teachers, teacher and pupil mastery of the curriculum process as well as their involvement in the curriculum design process. Other curriculum activities such as the curriculum design, selection, course syllabus,, text books, timetabling, teaching methods, including training of quality, teachers, provide resources for curriculum activities, improve teaching experience, thinking mode as well as others. The fourth criteria is that a good curriculum should have elements that encourage skill development for the job market. The curriculum development process should beg for questions such as; How can the curriculum impact the job market, open doors to jobs in the education community and beyond, bring possible answers to the questions related to unemployment, is the curriculum used in school a reflection of the employer's needs and are the teaching methods relevant to the job market skills creation?

In the field of education and specifically in the teaching-learning process the main focus for curriculum implementers is to have an understanding of the curriculum in place to better help them achieve stated National goals by translating them into teaching lessons in the classrooms However it should be noted that the curriculum process is more than an

attempt to attain stated national goals but to translate them into practical and feasible classroom activities, so as to transform learner into productive human resources. It is at this end the product of such a curriculum is not worth its place in a pragmatic environment such as ours. Studies carried out earlier by the Journal of Lexicography and Terminology, Volume 2, Issue 3, Issue No.1(06/30/2018) explains that the curriculum is supposed to be an end on its own but a working document to accompany the education of its citizens. This is an academically dangerous position to find oneself in and can create confusion in the mind and spirit of stakeholders, curriculum specialists and other actors in the curriculum field. Such assumptions may result in total confusion of what the curriculum is to learners, teachers, educationists and the education community in general. Some of those who have accepted this concept of the curriculum have unfortunately found themselves at the decision making level of our education systems and even in our universities. This is a very common phenomenon in most developing countries especially in Africa and this can be seen by the kinds of products of the school systems. Such graduates who receive an education which does not conform to an specific norms can hardly attain their personal objectives and more to that national goals will be hard to attain. This is the unfortunate confusion that is common in some of our educational subsystem that clouds the curriculum design and /or development process. This confusion also affects the primary, secondary schools in Africa, Cameroon not excluded. Bishop (1985) clearly explained that the challenges of curriculum development in Africa was and is the lack of specialists in the art and science of curriculum development itself.

Carl (2012) actually pin points the source of this misunderstanding as emanating from institutions of higher learning where curriculum decisions are sometimes championed by curriculum novices and administrative staff who have very little ideas in the field of curriculum studies. This situation also is made worse by the fact that most teachers including those of the primary schools have little or no knowledge of curriculum development issues. If common definitions of simple concepts in the curriculum process are understood, then where are we in the positive evolution of our school systems? Knowledge is vital in understanding the teaching-learning process and Headteachers and teachers involvement in the curriculum development is imperative for these education actors in understanding the curriculum process for a better school system. This wisdom was long recognised by Bloom in his cognitive domain of learning objectives. In Bloom's cognitive domain, understanding or comprehension comes before application and thus for one to apply a concept or idea they will need to first and foremost understand it. The point being made in this study relates to

an understanding of a curriculum and having an authentic understanding of the concept of curriculum is important as explained earlier, reading through related literature, we find concepts in curriculum that ask questions like "what is taught in school." In other words, a curriculum is a set of subjects.

It is for this reason that some talk of a curriculum as a 'school curriculum' generally defined as the group of subjects taught and the amount of teaching time attributed to each in terms of hours and /or minutes. Such an approach to education seems to limit learning to the school and then limiting a curriculum to academic subjects. Marsh (2009) also pointed out that there is an assumption in this definition that what is learnt is what is studied in schools. A curriculum as explained in the preceding sections is much more than just subjects or what is confined to a school. Another very common conceptualization of a curriculum is that of viewing it as content. Curriculum defined as content is another interesting emphasis and brings into question another term, namely the 'syllabus' and a 'course outline' as referred to especially in institutions of higher learning. A 'syllabus' is usually a summary statement of the content to be taught in a subject, course or unit. It is typically a list of content areas or topics of the subject matter. A syllabus or course outline is clearly a subsection of a curriculum and as such is subsumed within the broader concept. This emphasis on what content to be taught is a critical element of a syllabus but a curriculum includes more than this.

Characterising curriculum as subject matter is the most traditional image of a curriculum which depicts it as the combining of subject matter to form a body of content to be taught. Such content is the product of accumulated wisdom, particularly acquired through the traditional academic disciplines. Most teachers when asked to describe their school's curriculum they provide a litany of subjects or subject matter taught to students. It is also common to find a curriculum being defined as a set of performance objectives or student learning being a very practical orientation of curriculum. This approach focuses upon specific competencies that should be attained by learners. Proponents of this approach argue that if a teacher knows the targets which learners should achieve, it is much easier to organise elements to achieve this end. The strength of this approach is that it focuses upon the learners who are after all the ultimate beneficiaries of the teaching and learning processes. Yet it must also be remembered that this approach can lead to an overemphasis upon behavioural outcomes and objectives reducing a curriculum to simply a listing of objectives to be achieved. This definition would usually lead to a narrow technical-functionalist approach to curriculum which would simply require large numbers of outcomes and high levels of

specificity to be identified. Curriculum scholars such as Walker (1994) and Cairns (1992) were extremely critical of the uniformity and focus on such standards of the definition put forward. It is common knowledge as Kennedy (2005) concluded that a curriculum that focuses solely on key competencies of the world of paid employment is deficient.

A good curriculum should include a full range of skills and competencies that are relevant throughout the lifespan of every human person. A wide view of competencies which we may term as 'capacities' such as good communication skills, civic participation, living in harmony, respecting and caring for other people, taking care of one's health and wellbeing are some of the content areas that a curriculum should also include (Reid, 2007). An analysis of definitions such as the three that have been presented in the previous sections may make one argue that some writers and curriculum thinkers advocate for their own preferred definition of curriculum, that may emphasise other connotations and meanings. It is perhaps for that reason that Portelli (1987) explained that other curriculum scholars may only be concerned about delimiting what the term means or establishing new meanings that they associate with it. However, curriculum scholars such as Hlebowitsh (1993), Oliva (1997), Toombs and Tierney (1993) have all criticised commentators in the field of curriculum who focus only on certain facets of the curriculum while ignoring others. Partisan and biassed definitions that only capture a few of the various characteristics and dimensions of curriculum should not be entertained since they also have a higher degree of misleading the way education is viewed and conducted. Over the years, different philosophies of education have existed and these have had a huge impact on the way curriculum was and is viewed. In the following sections we have tried to draw attention to some of these philosophies in relation to curriculum and education.

Curriculum perspectives by Philippe Jonnaert

Curriculum is seen under 3 broad perspectives as postulated by Philippe Jonnaert, the Québec curriculum developer. In his perception of curriculum development, he focused on the levels of curriculum, where it is concerned, who is concerned, what is involved and the expected results. He describes the curriculum in three different parts thus, intended curriculum, achieved curriculum and implemented curriculum.

Intended curriculum

This is where the goals are set following what the state wishes to achieve. It is at the level of the cabinet ministers and ministries of education. Those involved are the technical

advisers, the minister of education and educators specialised in designing the program, inspectors of education and specialists in the domain of teaching and learning. Here, great curricular orientations are defined, and define the end product and the main orientations of the curriculum. This group examines the modalities in place, the operating system of education, how teaching-learning programs are or were conceived, how well present syllabuses are functioning. Against this background major policy decision related and relevant to curricular changes are proposed and examined. Finally a comprehensive curriculum document is put in place after the weighting approval of Government. It is worth to note that before this stage, the minister incharge of education for the subsystem and his experts must have ensured, the national goal in relation to the curriculum document the precise end products that has to attained, the codified learning in the official and prescriptive programs diffused in the educative system, make sure political interest are protected and the modalities of evaluation of learning are clearly spelled out, circular making the document official and produced before the new curriculum document can be considered done.

Achieved curriculum

At this level, he focused on the curriculum, the subject content and method of teaching. This level concerns the school establishment, office of staff and classrooms, publishing houses, and analyses conception of didactic materials. Here, the teachers, editors, authors of school manuals and the producers of didactic materials are directly concerned. The purpose at this level is to analyse, interpret and teach learners with respect to their levels of adhesion to orientations of curriculum and their understanding of these orientations and the content of the programs. The school manuals are equally analysed, interpreted and translated for easy understanding. The pedagogic strategies, didactic materials, curricular orientations and content of the program are equally emphasised at this level. The expectation at this level is how the content of this program has been interpreted and transposed by teachers to the classroom. The school manuals, pedagogic guides, diverse referential didactic materials etc are also involved here.

Implemented curriculum

At this level, he is concerned with learners and their outcome. Classes and other spaces of activities for learners are taken into consideration. The main task here is the construction of knowledge and development of competences in function of certain orientations of the curriculum and certain elements of the programs interpreted by teachers.

Knowledge and competences are constructed from the elements of certain considerations of programs interpreted and selected by the teachers, book authors and didactic materials. Philippe Jonnaert in his model focused directly on the curriculum stages and its execution while the Cameroon model looks at the various stages before getting to the content.

In the Cameroonian context, teachers who are directly involved in the execution of the curriculum in most cases do not take part at the macro level so they could better explain the challenges that they may face or bring in their experiences by not being part of the curriculum design process. Philippe Jonnaert in his document holds that taking into account the opinions of others will give credence to any curriculum document the researcher strongly believes that a holistic approach by accepting stakeholder participation in the curriculum process is a positive and welcomed initiative. gives more credit to his model comparatively to what happens at present Cameroonian context. Philippe Jonnaert takes into consideration the implemented and taught curriculum which is a gateway for evaluating the curriculum quality and propose better ways to fill the gaps identified. The Cameroonian model is solely concerned with the designing and implementation. Little emphasis is based on what was taught so as to identify shortcomings for the amelioration and production for future programs. The Cameroonian model owes a lot of focus on implementation since the resources seem to be limited and so, adaptation with other resources becomes the order of the day. Taking this into consideration is a giant step in building competences in learners and their subsequent insertion into the job market.

The Curriculum Review

A Curriculum Framework is an important overarching curriculum document, usually developed by a high-level group of curriculum and education policy experts, and reflecting a social and political consensus around a society 's educational vision. A Curriculum Framework would normally include statements about underlying values, conceptions of learning, the major aims, purposes and tasks of education, about the development of school culture, and the like. It is a core policy document that describes a range of requirements, regulations and advice which should be respected by all stakeholders in the education system, and which should guide the work of schools, teachers and the developers of other curriculum documents such as textbooks and teacher guides. A Curriculum Framework can be viewed as a kind of Constitution for the education system. In the same way as a national Constitution defines the scope of, places parameters around, and legitimises a country 's laws, a Curriculum Framework defines, constraints and legitimises decisions within

classrooms, schools and, in many cases, the education system as a whole. It is so important that open discussion and consultation are essential in its construction. A Curriculum Framework can perform a range of specific functions, such as:

Putting national statements of vision, socio-economic context and development, educational values and education policy in a curriculum context, setting out the vision, aims and objectives of the curriculum at the various stages of schooling, the transitions between each and links to further education, higher education, work and lifelong learning, explaining the educational philosophy underlying the curriculum and the approaches to teaching, learning and assessment that are intrinsic to that philosophy, prescribing requirements for curriculum implementation, monitoring and evaluation, including the provision of clear advice to teachers about appropriate pedagogy and assessment methodologies; and to policy makers across the education system about the requirements of the curriculum and how they can contribute to the realisation of the curriculum vision, providing guidelines to teacher educators and, if appropriate, textbook writers, outlining the curriculum structure, its subjects or learning areas and the rationale for the inclusion of each in the curriculum and allocating time to various subjects and learning areas in each grade or stage. Depending on how well developed, teaching and teachers are in any particular country, a curriculum framework and guidance need to have more or less prescription and countries need to know when they can move to less prescription to free up teachers to make local decisions.

Model Curriculum Framework

The Model Curriculum review provides guidance for schools and the education community in implementing educational best practices in a way that creates curricular coherence to positively impact student success. Curricular coherence involves local alignment of standards, curriculum, instructional resources and practices, assessment, and professional learning within and across grade-levels in a district or school to help students meet grade-level expectations. According to research, schools that demonstrate increased curricular coherence also show marked improvements in student outcomes (Newmann, Smith, Allensworth, & Bryk, 2001).

There are five key components of curricular coherence addressed within this document:

Section 1:

- Curriculum Development Process - Outlines a system wide process for articulating an instructional vision, developing a local curriculum aligned to the Kentucky

Academic Standards (KAS) and selecting a primary high-quality instructional resource (HQIR) to support implementation.

Section 2:

- Professional Learning Communities – Emphasises a systems-based approach to developing a shared understanding of the PLC process as an aspect of continuous improvement, the role of leadership in creating a supportive culture and the role of teachers as effective collaborators within a PLC.

Section 3:

Balanced System of Assessment - Provides guidance on how teachers and leaders can implement a comprehensive, balanced system of assessments to ensure high-quality and reliable assessment practices with a focus on the formative assessment process and providing stakeholders with effective strategies for noticing, recognizing and responding to evidence of student learning. Section 4:

Evidence-Based Instructional Practices - Supports leaders and teachers in understanding what constitutes an evidence-based practice, in coordinating a system of effective instruction aligned to disciplinary practices and outcomes of the KAS and in evaluating the quality of instructional resources.

The organisation of this document mirrors the use of backward design, beginning with what educators must know and be able to do, proceeding to how learning will be assessed and concluding with how that translates into daily teaching and learning. The five components of curricular coherence are essential to providing equitable access to learning for all students. Within U.S. schools, large racial and socioeconomic gaps still exist among graduation rates, test scores and advanced proficiency. Historically marginalised populations, such as students of colour, English language learners and exceptional students, are less likely to be given access to high-quality curriculum and resources. A 2018 study, from districts around the country, found students of colour and those from low-income backgrounds are less likely than white and higher-income students to have access to quality curriculum, instruction and grade-appropriate assignments (TNTP, 2018). For educators to meet the challenge of helping all students reach grade-level expectations, they must have a clear vision of best practices in teaching and learning and a clear roadmap to follow throughout the year (Ainsworth, 2010). High-quality curriculum and instructional resources have the power to provide that roadmap by connecting standards, curriculum, effective instruction, assessment and professional learning (Achieve the Core, 2017). To create curricular coherence, educators must understand the relationship between standards, curriculum and instructional resources.

For schools and districts, translating standards into a guaranteed, viable curriculum is vital to pupil's success and the first step in creating curricular coherence:

- Guaranteed Curriculum Guaranteed ensures specific content is taught in specific courses and at specific grade levels, regardless of the teacher assigned to a student. When schools and districts are unable to guarantee the curriculum being taught, the result is redundancy and inconsistency from one classroom to the next across grade levels and little alignment between the standards, assessment and instruction (Dufour & Marzano, 2011).
- Viable Curriculum Viability means the articulated grade-level standards, instructional calendar (pacing guide), and daily instruction are all manageable and can be realistically taught to mastery levels in the instructional year (Marzano, 2003). This means schools and districts must ensure enough instructional time is available to develop essential knowledge, skills and concepts of the guaranteed curriculum. Development of a district curriculum aligned to the KAS and adoption of a primary HQIR does not guarantee students have access to the same knowledge and skills. A distinction must be made between the intended curriculum and the implemented curriculum. In many places, gaps exist between the district- or school-established curriculum and what is implemented by teachers in classrooms. For districts to truly achieve a guaranteed and viable curriculum, the leaders and teachers accountable for delivering it must possess a common understanding of the curriculum and of the HQIR.

To support effective implementation, teachers and leaders need ongoing professional learning experiences that deepen their knowledge of how the curriculum and HQIR work together to set a strong instructional foundation (Instruction Partners, 2019). The professional learning can occur through the PLC process, workshops, coaching, classroom observations, feedback and other job-embedded contexts. When districts across in different countries create coherence by implementing high-quality, standards-aligned curriculum and instructional resources, support implementation and continuous improvement through high-quality professional learning and collaboration, measure student growth through a balanced system of assessment and provide teachers and students access to evidence-based instructional practices, a more equitable environment is established. Leaders and educators working together to implement the local curriculum help ensure every student has access to the same content, knowledge and skills regardless of teacher or school they attend.

Curriculum concept

According to Smith (2000, p.1), the idea of curriculum is hardly new - but the way we understand and theorise it has altered over the years — and there remains considerable dispute as to meaning. Marsh & Willis, (2003, p.7), it consists of disjunction or fragmentary parts, he also notes that —curriculum as a field of study is elusive and fragmentary, and what it is supposed to entail is open to a good deal of debate and even misunderstanding. Lovat and Smith (200, p.:6) confirm that: The word (curriculum) itself is used in many different contexts, by principals in schools, by teachers, by curriculum writers in education systems, and increasingly by politicians. It can mean different things in each of these contexts. In fact, definitions of curriculum abound in the literature, in various autonomous discourses using key terms in complex and even in contradictory ways. The core meaning of curriculum is embodied in its Latin derivation from a coursel or track to be followed.

Marsh and Stafford (1988) confirm that the word curriculum comes from the Latin root meaning ,racecourse and, for many, the school curriculum is just that, a race to be run, a series of obstacles or hurdles (subjects) to be passed. Marsh and Stafford (1988) highlight three dimensions of curriculum concept. First, they express that the curriculum includes not only syllabi or listing of contents, but also a detailed analysis of other elements such as aims and objectives, learning experiences and evaluation as well as recommendations for interrelating them for optimal effect. Second, curriculum comprises planned or intended learning, calling attention to unexpected situations which necessarily may occur in the classroom practices. Third, curriculum and instruction are inextricable. Lovat and Smith (2003, p.16) rightly contend that —curriculum is part of teaching, not separate from it. Therefore, the most agreed basic notion of the curriculum is that it refers to a plan for learning (Lovat & Smith, 2003). This concept of curriculum limits itself to the core of all definitions, permitting all sorts of elaborations for specific educational levels, contexts, and representations. Discussing this curriculum concept, Marsh and Stafford (1988, p. 4) argue that curriculum is —an interrelated set of plans and experiences which a student completes under the guidance of the school. Furthermore, Marsh and Stafford (1988:4-5) clarify the comprehensiveness of this definition as follows:

- The phrase "interrelated set of plans and unplan experiences" refers to curricula which are implemented in schools, and are typically planned in advance, and will almost inevitably experience unplanned activities.
- The phrase which a student completes under the guidance of the school is included to emphasise the time element of every curriculum.

- Under the guidance of the school refers to all persons associated with the school who might have had some input into planning a curriculum and might normally include teachers, school councils and external specialists such as advisory teachers.

Strikingly, in line with this curriculum concept, an encapsulated definition was given earlier by Richmond (1971, p.87), who stated that, curriculum is a slippery 'word', meaning in the broadest sense the educative process as a whole and, in the narrowest sense, synonymous with the syllabus, a scheme of work, or simple subjects.

However, as Lovat and Smith (2003) point out, the main concern is not to arrive at a specific definition of curriculum; rather it is to be aware that:

- Curriculum means different things to different people; it is therefore important to consider the context in which the term is used.
- The meaning attributed to the word curriculum is associated with a particular ideology or set of beliefs about education and the world.
- A number of issues and concerns that are central to the nature of curriculum work itself are suggested by different usages and meanings of the term curriculum.

Incidentally, Middlewood and Burton (2000) make the relevant point that, the debate about the meaning of curriculum' is destined to continue, but deciding upon a precise meaning is unimportant compared with ensuring that the learning experiences of children, young people and adults in individual schools and colleges are of the highest reason and most appropriate reason for a curriculum. Thus, curriculum may be looked at from different perspectives and approaches, which should be clarified if the process of curriculum change is to be understood. According to Van den Akker (2003), a basic analysis concerning the curriculum improvement comprises three distinct levels, perspectives or representations, namely: intended, implemented and attained, curriculum. In fact, the three salient characteristics of the curriculum as stated tend to be modulated by perspective. Nevertheless, they are intrinsically connected to the extent that curriculum implementation cannot be considered without account of the intended as well as the attained curriculum. As you would realise, the three aspects of curriculum constitute a chain with strong links that cannot be ignored in a critical appraisal of curriculum change; hence it becomes necessary to revisit them to clarify the purpose and direction of the research in hand.

The intended or planned curriculum comprises the ideal or abstractly conceptual curriculum and the formal or written curriculum (Hameyer 2003). The ideal curriculum is the vision, including information that presents an overview (bird 's-eye view) of —why —when, —how and —what is supposed to be taught and learned. It is the rationale, the basic

philosophy or the epistemological base underpinning the curriculum. The formal, written curriculum covers the practicalities of —why, —when, —how and what as expressed, for example, in curriculum documents, syllabi, or in school resources such as textbooks and other materials.

Posner (2004) refers to it as the official curriculum. How curriculum is implemented depends on users 'perceptions and, therefore, how they are influenced by the implementation, which is the actual process of teaching and learning (the enacted curriculum) is very fundamental when considering the nature of the curriculum process.

Marsh & Willis 1999; Hameyer (2003), Saylor, Alexander and Lewis 1981) observed that It is the real curriculum, the curriculum-in-action, for example, how the official curriculum is translated into classroom practices that should be given real attention. The users whose perceptions/interpretations of curriculum implementation depend on their various viewpoints are the students or parents of the perceived or experienced curriculum. (Marsh & Willis 1999) the teacher should and must take the pride of place in the scenario presented above.

Users 'views greatly determine how implementation is affected. In other words, it is a reciprocal process where users' views are influenced by the curriculum, and their vision of the children's future exerts a new dynamic on the implementation stage of the curriculum process.. The attained curriculum has a twofold meaning: it comprises an experiential and learned curriculum. The experiential curriculum includes knowledge or skills gained by the learners as a result of learning experiences, which depend in turn on how the curriculum is implemented and therefore also on factors such as overall learning organisation and school climate. Hence, one intrinsic effect of the experiential curriculum is the so-called hidden curriculum, which according to Glatthorn, Boschee and Whitehead (2006, p.23) is also referred to as the unstudied or implicit curriculum, which —might be seen as those aspects of the learned curriculum that lie outside the boundaries of the school's intentional efforts.

The learned curriculum is what learners have really learnt. It refers to knowledge, skills and competencies gained by learners as a direct result of the teaching and learning process. As Malcolm (1999:80) observes, —what teachers teach is not necessarily what students learn. This fact should lead us to bear in mind the remark by Broussard (2002, p.71) that —each student is different, and ... each situation is unique and must be handled with lots of thought. Referring to Africa, in particular sub-Saharan Africa, Sedel et al. (2005, p.31) points out that less than one-third of the school going learners acquire the knowledge and skills specified in their national primary education curriculum. The learned curriculum

is, in the last analysis, the learning outcomes of learners in comparison with the intended curriculum as well as the implemented curriculum. Summing up the above discussion of the curriculum concept, I agree with Lovat and Smith (2003), who assert with Van den Akker (2003) that curriculum is essentially practical activity, which is creative and artistically informed by theory.

Curriculum is concerned with decision-making, with choosing the most appropriate or justifiable alternatives. Given that the learners, the teachers, the resources and the learning context (i.e. curriculum work is context-specific), are both integrated in the perspectives, intention, and integrity of the process as well as product in classroom practices. Lovat and Smith (2003), referring to interrelatedness of the different curriculum levels, observe that the curriculum at a national, state, system, or the school, can be intended or predetermined. It is only at the classroom level, at the level of experience of teachers and learners that curriculum is not only intentional, but also real or actual. Curriculum as concept as Doll Jr. (2002, p.46) explains that a curriculum is not a linear course to be run but a complex and dynamic web of interactions evolving naturally into more varied interconnected and formidable tasks that require vision and perseverance.

The curriculum concept implies different curriculum approaches as will be reiterated and detailed in the following section. A clear vision of the curriculum in action based on good documentation and is the first step worth considering be it in the school setting or the national education community. It is therefore imperative to invest in teacher professional seminars, workshops, teacher professional development and the proper school and education management. and these professional teacher's professional activities are just as important as the conceptualization and development of the curriculum document. The Mozambique Education Sector Strategic Plan (ESSP, 1999-2003) under the motto —Reviving Schools and Expanding Opportunities emphasised the need to review the existing curriculum for basic education to ensure a clear vision of the curriculum in action towards successful change effectively emphasis this view. Indeed, there is a widespread agreement that the curriculum in force in primary schools was increasingly inappropriate to the rapid transformation of Mozambican society, reasons why the Mozambique Government had to rethink a new path for a better primary education system. The same holds true for our system too.

For instance, according to ESSP (1999- 2003), only six of every hundred students who begin school graduate from EP2 (upper primary level). It was also assumed that the Ministry of Education should not develop a new curriculum on its own, nor impose a single model on all schools in the country. Therefore, the Ministry of Education initiated a

democratic and participatory curriculum process under the leadership of INDE, involving teachers and other stakeholders in the development of a new curriculum framework as indicated in chapter one and described in chapter three. Simultaneously, preparation of the school textbooks and teachers 'guides in accordance with the syllabi of the new curriculum, providing training for teachers (preservice and inservice), as well as enhancing the qualifications and training of Head teachers, where strategies could be adopted to enable a better teaching-learning environment by starting to effectively involve head teachers and teachers in the curriculum design and development stages, especially in our primary schools.

Curriculum Approaches

The curriculum approaches are discussed in this section with a view to providing an insight into the nature of a better and acceptable Basic Education Curriculum in Cameroon, one that will give the head teacher and teachers their natural place in the process. According to Marsh and Willis (1999, p. 18) curriculum approaches are, different ways of thinking about curriculum and of connecting thought with practice, whether the many beliefs and ideas that constitute any particular curriculum approach are made explicit or remain implicit. According to Ornstein and Hunkins (1993) the main curriculum approaches are the following:

- Behavioural
- Managerial
- Systems
- Academic
- Humanist
- Reconceptualist

The behavioural approach

The behavioural approach is the oldest and still the reference approach to curriculum. Behaviourism is primarily concerned with observable and measurable aspects of human behaviour. According to Power (1982, p.168), the basic principle of behaviourism is: Whatever can be known about human beings must come from an observation of behaviour, mand should be conducted according to the strict methods of scientific procedure which is used in the physical sciences So, the behavioural approach is logical and prescriptive and grounded on technical and scientific principles. It comprises paradigms or models as well as gradual and detailed strategies for formulating curriculum.

This approach is generally underpinned by a plan specifying goals and objectives, contents and sequenced, structured activities, methodologies, and learning outcomes with corresponding criteria and evaluation forms, taking into account the established curriculum goals and objectives. Thus, the behavioural approach covers the curriculum development in its wider sense. It is not restricted to curriculum evaluation only: Behaviourists have a solid conviction that environmental forces responsible for making us what we are must be organised with extreme care and be reactivated in the school 's curriculum with the same scientific precision that engineers employ when they design a complicated machine. In fact, the behavioural approach is orientated to the behavioural objectives, which according to Zais (1976, p. 312) are simply objectives in terms of the observable behaviour expected of students after instruction. This means that the behavioural approach focuses on what learners should be able to do as a result of the teaching and learning process (Posner, 2004).

Indeed, if curriculum workers are to agree on the meaning of the objectives that students are supposed to fulfil, they also need to agree on the operational criteria that express those objectives. In other words, everyone concerned with behavioural objectives, on the one hand, should know exactly what a given behavioural objective means; and on the other hand should be able to determine to what extent it has been achieved after instruction (i.e. teaching and learning process). Furthermore, as Standridge (2002) points out, behaviourists argue that human behaviour is learned although all behaviours can either be unlearned or relearned. This qualification should be taken into account in the process of curriculum development, especially in the curriculum design. At this point it is apposite to recall the observation by Lovat and Smith (2003:17) that product and process cannot be separated, the process is the product, the way we learn is what we learn, we learn what we do. Hence, the behavioural curriculum approach implies a plan specifying goals and objectives, contents and sequenced, structured activities, methodologies, learning outcomes with corresponding criteria and forms of evaluations, as noted above.

The managerial approach

The managerial approach entails consideration of the school as a social system, based on organisational theory, in which the constituent members (e.g. students, teachers, curriculum specialists, and administrators) interact in harmony with certain norms and behaviours. In this context the managerial approach focuses on programmes, schedules, space, resources and equipment, as well as personnel, requiring cooperation among teachers,

students and those who are responsible for curriculum supervision outside of school. Ornstein & Hunkins (1993, p.3) noted that —consideration is given to committee and group processes, human relations, leadership styles and methods, and decision making. That is to say, the managerial approach gives more emphasis on the supervisory and administrative aspects of the curriculum, focusing mainly on the organisational and implementation aspects of the process. The managerial approach has to do with change and innovation, exploring —how curriculum specialists, supervisors, and administrators can facilitate these processes! (Ornstein & Hunkins, 1993, p.3). Under this viewpoint, the curriculum specialist or supervisor is regarded as a facilitator, a resource person (person who is available to help teachers or colleagues to achieve curriculum goals), an agent of change.

As noted earlier, the implementation strategies employed to introduce the Mozambican new basic education curriculum as defined in PCEB reflect the managerial approach. Indeed, the PCEB asserts that the success of any curriculum change initiative unquestionably depends on the appropriate use of implementation strategies, for which read a suitably adapted managerial approach translated into effective implementation strategies. Above all, the following observation by Hall and Hord (2001) served as a guiding principle from the outset: Administrators also have to secure the necessary infrastructure changes and long-term resource support if use of an innovation is to continue indefinitely. And finally, yes, policy-makers need to design policies that legitimise the infrastructure changes and innovate practices and encourage the continued use of the innovation.

The systems approach

Among other names, the systems approach to designing curriculum is also called instructional systems design (ISD). In accordance with Clark (1989:3), the system approach or instructional design may be understood as: —a systematic model used to plan, design, develop, and evaluation training, which includes the following components:

- Needs analysis;
- A task analysis;
- A definition of learning objectives;
- The development of an assessment plan;
- The development of learning material;
- A plan to try out with revision (pilot) and
- The implementation of the final product.

Clark (1989) views the System approach as a version of the behavioural approach since it is designed to achieve clear and measurable goals and/or objectives. Ornstein & Hunkins (1993) states that the main feature of the systems approach is the interconnectedness of different programs and content areas included in curriculum, while serving as an index of how the school is restructuring and reculturing, for example by introducing a monitoring and assessment system. That is to say, the systems approach involves curriculum integration, relevancy to participants, monitoring mechanisms, evaluating procedures, practices, and implementation, e.g. systematic evaluation. In this regard, Bradley (2004) considers that by the systems approach the school involves its clients (students, parents, institutions of continuing education and students' future employers) and stakeholders (people or organisations whose operation is directly or indirectly dependent on the quality of school) as part of the system.

The academic approach

The academic approach —attempts to analyse and synthesise major positions, trends, and concepts of curriculum. (Ornstein & Hunkins1993, p.6). It tends to be grounded on historical and philosophical curriculum developments and to a lesser extent on social conditions. This approach is concerned with comprehensive domains of schooling, including the study of education. It is usually scholastic and theoretical, hence, also referred to as —traditional, encyclopaedic, synoptic, intellectual, or knowledge-oriented approach (Ornstein & Hunkins 1993, p.6). Hewitt (2006, p.162) suggests that the academic approach is linked to the purposes of the country's educational system. In most African societies, the academy curriculum included the traditional study of English, reading and writing, with attention to grammatical construction, pronunciation, writing style, and correct speech. History was included as the vehicle for learning morality, and new subjects included geography, philosophy, oratory (forensics and debate), politics and human affairs.

What was innovative, even radical, was the inclusion of new, practical subjects for study. These curriculum additions proposed by Franklin in other places like Mozambique were agriculture, technology, science, and inventions. The Academic approach is reflected in the design of the Mozambican new curriculum as the pursuit of three main objectives, namely delivery of (1) basic literacy and numeracy; (2) basic technological skills in the domain of practical activities and arts; and (3) patriotic education expressed in the three comprehensive curricular areas defined in the PCEB as: -communication skills and social sciences; mathematics and natural sciences; and practical and technological arts.

The humanistic approach

According to Ornstein & Hunkins (1993), the humanistic approach is underpinned by child psychology with a view to coping with the needs and interests of children and by humanistic psychology with emphasis on valuing, ego identity, psychological health, freedom to learn, and personal fulfilment. The teacher therefore serves as facilitator and resource person for students. The curriculum mainly focuses on active interaction among students and teachers, on problem solving, and on inquiry. These procedures are included in the framework of the new curriculum (PCEB).

The conceptualists

The conceptualists represent an approach to curriculum design without a model to guide the design (or to deal with technical matters), tending rather to focus on larger ideological and moral issues relating to education (not only curriculum) and economic and political institutions of society (not only of schools) (Ornstein & Hunkins 1993). This approach is rooted in philosophy as well as social and political contexts. According to Jackson (1992:35), it is based on three main characteristics:

- dissatisfaction with the Tyler Rationale,
- the employment of eclectic traditions to explore curriculum, such as psychoanalytic theory, phenomenology, existentialism and
- Marxist and neo-Marxist trends. In the same vein, Pinar (1991, p.35) noted earlier that:

Reconceptualization is an umbrella term to referring to a diverse group whose common bond was opposition to the Tyler rationale, to behaviourism in curriculum conceptualization (including behavioural or performance objectives, quantitative evaluation, mastery learning, time on task), and to the ahistorical and theoretical character of the field. Again, Marsh and Stafford (1988:30) pointed out that the —reconceptualists represent a visible and concerted social movement in the 1980s. This was the period, in particular, when personal rights and other social concerns such as freedom, democracy, equality and how to live together were predominant in society

Curriculum process

The word Curriculum was derived from the Latin word "currere" which means "course or track" to be followed. Travers and Westbury (1989) put curriculum in three perspectives as the 'intended', 'implemented', and the 'attained'. The intended aspect is what an institution like the Ghana Education Service (GES) outlines in their various syllabi to be used by the schools jurisdiction.

Attained being the part of the syllabus the learner is able to retain,keep at heart, manipulate out of the implemented part of the curriculum. However,it is also worth of note that there is a hidden curriculum that is unwritten but has an inherent and an important influence on learning and can often subtly and clearly manifest in students' attitudes and behaviour, both during and after completing their studies Tanner and Tanner (1995). Eclectic viewpoints however, describe curriculum as that which combines academic and non-academic pursuits as a result bringing back into play the trio of intended, implemented and attained curriculum.

The above concept of the curriculum demonstrates the dynamic nature of the curriculum process that proves the organic nature of the curriculum in terms of its related activities such as speech days, excursions, field trips, sporting activities and moral training which are not considered a curricular activity but a co-curricular dimension of the process. Considering the above claims, curriculum can be seen as the sum total of all learning experiences and the intended learning outcomes that are offered to the learners under the auspices and control of a school. Curriculum is also the vehicle through which educational goals/objectives/aims are being achieved. In view of the above explanations, school curriculum must be creatively and carefully incorporated or integrated in the school system while also considering its contribution in fulfilling the needs of our industries in terms of human capital. Today's curriculum is perceived as the experiences in which pupils are expected to engage in at school and the general order of sequence in which these experiences are to come. In other words, the mathematics curriculum can be described as all the mathematical experiences of a learner under the guidance of the school underlined as the teaching-learning process

Curriculum Development process

Curriculum development is a process of improving the curriculum. Various approaches have been used in developing curricula. Commonly used approaches consist of analysis (need analysis, task analysis,) design (objective of design), selecting (choosing

appropriate learning/teaching methods and appropriate assessment methods) formation (formation of the curriculum implementation committee/curriculum evaluation committee) and review curriculum review committee, (Kaddu, et al. 2018). According to Engle, (2009), there is no single curriculum that is 'best' for all situations. Not only does geographic location depend on the type of curriculum taught, but the demographics of the population matters as well. Some curriculums are based heavily on science and technology while another is focused mainly on the arts. However, a comparison of different curricula shows certain approaches to be generally more effective than others. Comprehensive programmes addressing health, nutrition and development have proven to be the most effective in early childhood, especially in programmes directed at very young and vulnerable children. This requires a genuine commitment from agencies and individuals to work together, to plan projects collaboratively, and to involve parents and communities (Marope, and Kaga, 2015).

The first step in creating curricular coherence is to translate the standards into a local curriculum anchored in high-quality instructional resources (HQIRs). While the Kentucky Academic Standards (KAS) establish what students must know and be able to do, the district is responsible for developing a curriculum that addresses how learning experiences are to be designed and for selecting the instructional resources that will assist student learning. Current research recommends districts adopt and implement a primary HQIR as the print, nonpoint or electronic medium designed to assist student learning and support implementation of a high-quality curriculum. The research shows: Aligned to state standards, a HQIR can reduce variability in the quality of instruction across classrooms (SREB, 2017), and students in classrooms that used one HQIR for four consecutive years outpaced comparison students by a margin of 38 percentile points — equivalent to four additional years of learning (Steiner, 2018). Teachers creating their own lessons rarely results in a fully sequenced, coherent learning experience over time and across a system (Steiner, 2018), and 75 percent of teacher-created or selected resources are found to be below gradelevel (TNTP, 2018). Teachers without access to HQIRs spend 7-12 hours per week searching for resources online (Goldberg, 2016). Switching from a low to a high-quality instructional resource can boost student achievement more than other, more popular interventions (Steiner, 2018). Teachers and leaders also must receive high-quality professional learning focused on effective implementation of the local curriculum and the HQIR. Research demonstrates that simply providing teachers with a curriculum and a HQIR without also providing them professional learning focused on how to implement those resources effectively to meet the needs of all students will not impact student achievement (Blazar, D., et al., 2019). This section is designed to provide guidance to district leaders on implementing a systematic process for developing a local curriculum, selecting a HQIR aligned to the KAS and supporting effective implementation.

Phase 1: Prepare for the Process

Some key decisions should be made by district leaders to prepare for and support the work of the curriculum development process. Taking the time to complete the steps for Phase 1 helps create the conditions necessary for the work to be effective, efficient and meaningful. Every decision is crucial to ensuring the process flows smoothly and that time and resources are used effectively.

Step 1: Establish a Curriculum Review Cycle

To make the work more manageable, district leaders should consider establishing a curriculum review cycle that focuses on a limited number of content areas per year in a repeating cycle. This is critical in helping districts to manage the work and the budget in a way that is not overwhelming. In this case, leaders may want to consider establishing a cycle that aligns with the standards review process for the country. The current schedule calls for one or two content areas to be reviewed each year and every six years after that on a rotating basis. In determining the order of the content areas in the curriculum review cycle, district leaders should utilise data from their annual needs assessment. This might include data on student achievement, analysis of student work and sample assessments and tasks, and feedback gathered from surveys regarding classroom climate, school culture, engagement and learning experiences.

Step 2: *Develop a Timeline*

Educational leaders develop a curriculum review timeline for the content area of focus and expected outcomes to be completed at each point in the process. Several factors may play a role in the allotted time frame for completing the process, such as team member availability, allocation of resources, budgeting considerations, etc. Once the timeline is established, this process would be repeated with each content area as it comes up in the district's curriculum review cycle.

Step 3: *Determine the Budget*

Prior to beginning the process, district leaders should develop a budget for the scope of the work to be completed each year. To help prioritise, leadership should consider how curriculum development and implementation might be reflected in their Comprehensive School/District Improvement Plans. Consider how various funding sources (e.g., general,

federal, state, local, technology, etc.) may be utilised to support the launch and sustainability of the curriculum development and implementation process each year.

Step 4: Create a Curriculum Development Team

The last step in preparing for the Curriculum Development Process is for educational stakeholders or leaders of the country to create the content area curriculum team.

- District-level team: The district-level team may consist of teacher representatives from various schools and grade levels in the district, instructional coaches, as well as building and district administrators. It also may be beneficial to include teacher representatives from other areas, such as special education, gifted and talented, English Learners and library media specialists. For a large district, consider dividing into elementary and secondary teams. However, team members from transition grade levels should have opportunities to meet to ensure vertical alignment of the curriculum.
- School-level team: If the delegation of responsibility is transferred to the school level, the team may consist of teacher representatives from each grade level, school-based instructional coaches/specialists, as well as building administrators. Like the district team, consideration should be given to teacher representatives from other areas (Alsubaie, 2021). The school may want to consider including district administrators with curricular and/or specific content expertise. Once team members have been selected, the district should predetermine meeting dates and associated logistics. For each phase of the process, leaders should decide when and where the team will meet and the purpose of each meeting. In terms of the purpose, the intended outcomes of each meeting (i.e., expected learning outcomes, work to be accomplished) should be considered. By determining and communicating meeting logistics at the beginning of the process, team members may plan accordingly to ensure they can commit to each step of the work.

Phase 2: Articulate Instructional Vision

An in-depth understanding of a country's Academic Standards and of what makes them unique is vital when crafting a vision for teaching and learning in a content area, as is familiarity with relevant research. Districts must also have an accurate sense, derived from local data and input, of their particular educational context. Together these provide curriculum teams an ongoing point of reference for fashioning an instructional vision that can guide them throughout the development and implementation process.

Step 1: Analyse the Content-Area Research and Local Needs.

Establishing a shared understanding of the subject area content, skills and pedagogy prior to development/revision of the curriculum provides a common foundation for the work. To build this shared understanding, the team should start with analysing the conceived document itself, both its overall architecture and its critical components. The architecture comprises the organisational structure of the document, the different ways to view the standards and the design considerations of the specific components within the standards document.

Step 2: Articulate primary school Instructional Vision

Once the curriculum team has a shared understanding of the depth and rigour of the standards, a common view of content pedagogy grounded in current research, and an understanding of the needs of the local community, they develop an instructional vision of teaching and learning for that content area. The vision is more than what the school or district thinks should be happening in individual classrooms. The instructional vision describes the school or district's "instructional aspirations and articulates what teaching and learning look like in the content area" (EdReports, 2021). In establishing the instructional vision, the curriculum team identifies the core beliefs that will be the foundation for their work. These core beliefs should include content-specific beliefs as well as beliefs about students (i.e., all students are capable of high-quality work and deeper learning) and the student experience. These belief statements should drive the rest of the curriculum development and be a touchstone the team can return to throughout the process.

Each member of the curriculum team must support the agreed-upon core beliefs, understand the rationale for each and be committed to implementing the core beliefs into classroom practice. Once the core beliefs have been identified, the team should articulate their instructional vision in writing in a way that is clear and easily understood by all stakeholders. As the sample vision statements provided are examined, it is clear each can find a form appropriate to its contents. School/district leaders should seek stakeholder feedback and determine how they will incorporate the feedback into the instructional vision. Once revisions are made based on the feedback received, the vision is then used to guide the rest of the curriculum development/revision process. Characteristics of an Effective Instructional Vision: Focuses on the student experience and what student learning looks like in action (i.e., portrait of a learner), Embeds specific context related to the content, Aligns with state standards, but is not limited to a review of the standards documents, is evidence-based and cited, Prepares all students for postsecondary readiness, includes instructional

implications which lead to critical thinking, problem-solving and transferable knowledge (EdReports, 2021).

Phase 3: Develop the Curriculum

Once drafted, the articulated instructional vision for the specific content area is used to drive the work of developing the curriculum anchored in a high-quality instructional resource (HQIR) to support implementation. As the team works through this phase, the focus is on what teachers across the school/district would need to see reflected in curriculum documents and instructional resources to work toward the articulated vision.

Step 1: Identify, Evaluate and Select High-Quality Instructional Resources: High-quality instructional resources (HQIRs) are a means by which local curriculum aligned to the country's academic Standards becomes an actionable foundation for improving the way students experience learning in the country and selecting a primary curriculum that enables districts and schools to make a marked shift toward equitable, vibrant learning experiences for all students. A local curriculum anchored supports the learning goals, outcomes and core competencies that students must demonstrate to reach the grade-level expectations within the academic standards. It also provides teachers with an array of pedagogical support to help meet the needs of all learners.

The Kentucky Department of Education (KDE) defines High-Quality Instructional Resources (HQIRs) as materials that are: Aligned with the Kentucky Academic Standards (KAS), Research-based and/or externally validated, Comprehensive to include engaging texts (books, multimedia, etc.), problems and assessments, Culturally relevant, free from bias; and Accessible for all students. The process of identifying, evaluating and selecting a primary high quality instructional resource involves multiple steps to ensure decision-makers select resources that will serve local priorities and meet the needs of all learners as articulated in the instructional vision. This work may be completed by the district curriculum team or delegated to a sub-committee formed to undertake this task. If a sub-committee is charged with the evaluation and selection of the high quality instructional resources, members of that team must understand the instructional vision to ensure the selected resource aligns to that vision. In addition, the sub-committee should receive ongoing support and collaboration with the curriculum team throughout the selection process.

Determine Selection Criteria

To help determine selection criteria, the team should use their instructional vision developed in Phase 2 of the Curriculum Development Process as their guide. The curriculum team should engage educators and stakeholders upfront in meaningful ways to reflect the diverse voices of the district (including families, students, teachers, support staff and community members). Taking time to gather this input will help build support for and investment in the work and ensure the perspectives of those affected by the selection decision inform the process. A comprehensive selection process also should include time and capacity for schools and districts to establish local priorities using an equity-focused lens that will guide the identification and selection of the high quality curriculum. The practice of including local priorities can help ensure schools and districts select resources that better serve students who have been previously marginalised. Possible equity lenses to consider include selecting resources that meet the high-quality instructional markers laid out in that specific country's definition of high-quality instructional resources.

Step 2: Create Curriculum Document Template.

The goal of this step is for the team to create a curriculum document template that plans a coherent instructional experience within and across grade levels that systematically builds student understanding of the KAS and reflects the beliefs of the instructional vision. "In addition to the central objective of supporting teachers and administrators, ensuring equity of access, and preparing students for college and careers, a strong curriculum must clarify what instructional decisions it holds tightly and loosely and what learning is essential and why" (Council of the Great City Schools, 2017, p.51). The curriculum document template serves as the central guidance for all instructional staff who support and supervise teaching and student learning. The document should be designed to: Establish the curricular elements (the country's alignment, instructional, assessment, scaffolds/supports, etc.) aligned to the instructional vision that must be present in every classroom, Highlight within the HQIR where key curricular elements are addressed for each unit/module, Locate where supplemental resources might be required to address depths and dimensions unique to the KAS or to a local context, Provide broad-based access and ease of use to support navigation.

Step 3: *Develop Curriculum Supports*

The final step in the process is to develop the curriculum supports aligned to each essential element. Each area of support must reflect the beliefs outlined in the instructional vision and be designed to help students meet the primary grade-level or course expectations. Developing curriculum documents that support the key features and criteria ensures that

schools and districts are providing a curriculum with meaningful guidance rather than just a set of materials or textbooks (Council of the Great City Schools, 2017). As the team develops the curriculum supports for each grade-level, they should utilise the selected HQIR to guide this work. HQIRs have been thoughtfully built and deeply reviewed for alignment to research and evidence-based practices for the specific content area including: organisation, sequencing and pacing of the standards, grade-level texts, tasks and assessments, instructional/pedagogical supports, and teacher support for diverse learners. Gaps in the primary HQIR may be identified while working through the curriculum template process prior to implementation, and subtle insufficiencies may also emerge as the resource is used over time. Where gaps are found, selecting supplemental resources, rated as high-quality.

Curriculum development

Curriculum development is a complex process with an output that uses a key product of each educational institution. Complexity of the process is predetermined by influences on its development – many stakeholders, each taking its own stance: parents, pupils, teachers, trade & industry, trade unions, religious groups, social organisations, researchers, and, of course, politics. Taking into account the definition of a business process as a set of activities that use inputs to create added value for customers, both direct and indirect, it becomes clear that curriculum development must acknowledge and reconcile different interests. The complexity multiplies with the structure of the curriculum and by placing stakeholders' interests in relation to the components.

Rationale:

- Why are they learning?
- Aims and objectives: Towards which goals are they learning?
- Content: What are they learning?
- Learning activities: How are they learning?
- Teacher role: How is the teacher facilitating their learning?
- Materials and resources: With what are they learning?
- Grouping: With whom are they learning?
- Location: Where are they learning?
- Time: When are they learning?
- Assessment: How is their learning assessed?

In addition to the complexity, determining relations between stakeholders' interests and components of the curriculum leads to a constraint matrix that makes each curriculum

development process at risk of failure. It is seen as a certainty that the risk of failure in managing a curriculum development process exists, whereas management is aimed exactly at minimising this risk. Management of a curriculum development process requires the analysis of many aspects, including regional and national interests, organisation's strategic documents, its long-term and short-term goals, all the way to individual interests of teachers and students.

Such analysis is particularly focused on different models of curriculum development and subsequent decision on a suitable model or their combination. The most common models of curriculum development are:

- Subject-Centred Curriculum;
- Learner-Centred Curriculum;
- Problem-Centred Curriculum.

Subject-Centred Curriculum

Subject-Centred curriculum focuses on the content of the curriculum. This model belongs to traditional development models, with the basis of such curriculum development set by Ralph Tyler back in 1949. This model of curriculum development is still widespread among higher education institutions. The model places pre-prepared content units into the center of learning, successively building the complete curriculum around them. By following the curriculum, learners acquire expert knowledge. Advantages of the Subject-Centered Curriculum Design model are:

- Learners have clear and pre-defined content units, and based on that gain a sense of security in the learning process;
- Learners are prepared for examination through a prepared and clearly defined learning path;
- Test results, as the assessment of knowledge, are unambiguous and easily measurable
 - Learners progress is easy to measure and monitor;
 - Subject-Centred Curriculum enables mass production of learning materials;
- This type of learning provides efficiency even in situations where continuing professional development of teachers is not possible;
 - Easy integration of new or temporary teachers in the teaching process.

As for the downsides of this model, they are all based on the fact that the learner takes no participation whatsoever in the process of learning preparation. Learners are set in

a passive position as a receptor of knowledge according to pre-prepared patterns, without interactivity and challenges in the process of reflection and acquiring new knowledge and skills.

Learner-Centred Curriculum

Learner-Centred Curriculum design could also be called Learner-Driven Curriculum Design. This approach places learners in the centre of curriculum development. Learners actively participate in the development of curriculum and teaching materials, which leads to the inclusion of learner heritage into the specifics of a learning process. Of course, this model of curriculum development requires conscious learners eager for knowledge, whilst using prior knowledge to organise the curriculum in such a way that would bring them the greatest benefit.

Advantages of such curriculum design are:

This approach perceives learners as experts who precisely know what they need to know:

- Learners clearly recognize their needs in classroom exercises and thus become more motivated;
- Transfer of knowledge into real life is eased by clear associations between learners' needs and what is taught in the classroom.

Downsides of Learner-Centred Curriculum Design.

- Learners completely rely on teachers for developing adequate learning materials for this type of teaching;
- Development of learning materials is very complex, requires great knowledge and takes a considerable amount of time. This is the main reason why the learning process often lack quality learning materials. It is often difficult to establish a good relationship between teachers and learners, due to excessive mutual expectations.

Problem-Centred Curriculum.

Problem-Centred Curriculum Design places the problem into the centre of curriculum design. In light of that, content units are organised around the problem, which can be real or hypothetical. Problems that curricula are built on in ideal cases originate from the practice, i.e. the real life.

Advantages of Problem-Centred Curriculum Design

- Learners successfully activate previously acquired knowledge thru real problems and put use them in the process of contextual learning;
- Learners are competent to integrate basic scientific knowledge into processes of solving real-world problems;
 - Learners are trained for individual work;
 - Interest for learning increases;
- Learners are taught to individually solve problems in new situations, not just reproduce acquired knowledge and repeat predefined steps while trying to solve a problem. Problems associated with this approach mostly originate from resistance by learners unaccustomed to this type of learning. Educational systems built on traditional principles dominantly stimulate repetitive learning and algorithmic way of problem solving. Placing learners in new problem situation often causes them to resist, especially in the early stages of learning.

Forms of curriculum development

Humanistic curriculum development

A humanistic curriculum is a curriculum based on intercultural education that allows for the plurality of society while striving to ensure a balance between pluralism and universal values. In terms of policy, this view sees curriculum frameworks as tools to bridge broad educational goals and the processes to reach them (Amadio, M. (2014). A humanistic curriculum development perspective holds that for curriculum frameworks to be legitimate, the process of policy dialogue to define educational goals must be participatory and inclusive. Central to this view is that curriculum policy and content must both be guided by the principles of social and economic justice, equality and environmental responsibility that constitute the pillars of sustainable development.

Types of Curriculum

There are three types of curriculum. These types are:

Explicit - This type of curriculum is what appears in documents and teachers' plans. It is closely aligned with the historical curriculum definitions 1-3 and 5.

Implicit (or hidden) - This type of curriculum has to do with how particular assumptions about schooling and learning manifest in practice. For example, when a teacher has her or

his desk at the front of the classroom and "teaches" from-this area, the message that is being learned by students is that the teacher is in control, including being the knowledge authority, and is the centre of attention.

Null- The null curriculum is what is not taught. Not teaching some particular idea or sets of ideas may be due to mandates from higher authorities, to a teacher's lack of knowledge, or to deeply ingrained assumptions and biases. Many teachers are under pressure not to teach evolution, models, with basis of such curriculum development set by Ralph Tyler back in 1949. This model of curriculum development is still widespread among higher education institutions. The model places pre-prepared content units into the centre of learning, successively building the complete curriculum around them. By following the curriculum, learners acquire expert knowledge. Advantages of the Subject-Centred Curriculum Design model are:

- Learners have clear and pre-defined content units, and based on that gain a sense of security in the learning process;
- Learners are prepared for examination thru a prepared and clearly defined learning path;
- Test results, as the assessment of knowledge, are unambiguous and easily measurable
 - Learners progress is easy to measure and monitor;
 - Subject-Centred Curriculum enables mass production of learning materials;
- This type of learning provides efficiency even in situations where continuing professional development of teachers is not possible;
 - Easy integration of new or temporary teachers in the teaching process.

As for the downsides of this model, they are all based in the fact that the learner takes no participation whatsoever in the process of learning preparation. Learners are set in a passive position as a receptor of knowledge according to pre-prepared patterns, without interactivity and challenges in the process of reflection and acquiring new knowledge and skills.

Learner-Centred Curriculum. The supporters of learner-centred Curriculum give importance to individual development and they want to organise the curriculum according to the needs and interest of learners, there are fundamental differences in this approach and the subject-centred design. This movement from the traditional curriculum towards a programme that

stresses the interests and needs of students, this approach was used by Rousseau in the education of Emile, then Dewy in his laboratory School in 1896-1904. It is believed that all of these twentieth-century efforts reflect the influence of Dewey. It is a fundamental principle of education that the beginning of each instruction shall be connected with the previous experience of learners. The purpose is that the experience and the capacities that have been developed in early lessons should provide a starting point for further learning. The current importance given to student-centred programmes may not always acknowledge Dewey's philosophy and influence on the movement to incorporate more student-serving learning opportunities into the curriculum.

The association for the Advancement of Progressive Education formed in 1919, had its aim "The development of the individual, based upon the scientific study of his mental, physical, spiritual, and social characteristics and needs". The views of this association, later called the

Progressive Education Association (PEA), were compatible with the ideas of Dewey's as indicated by their principles:

- 1. Freedom to develop naturally.
- 2. Interest is the motive of all work.
- 3. The teacher is a guide, not a task-master.
- 4. Scientific study of pupil development.
- 5. Greater attention to all that affects the child's physical development.
- 6. Cooperation between school and home to meet the needs of child-life.
- 7. The progressive school is a leader in the educational movement.

The aim of using the learner-centred curriculum on the part of curriculum planners to interpret the needs and interests design as one based on common needs and interests of learners rather than on those of the particular population to be served. Reflected in curriculum plans, this interpretation could and sometimes did, become the rationale for teaching. Research on learner centred curriculum in recent years made it possible for curriculum planners to develop a better learner-centred curriculum. Modern learning theories and dissatisfaction of students and parents from the old curriculum are moving curriculum and instruction toward a design that focuses on real student needs and interests.

Characteristics

The curriculum is design on the needs and interests of students has these characteristics and features. The curriculum plan is based on knowledge of the learner"s

needs and interests in general and diagnoses the specific needs and interests of the population served by the plan.

The curriculum plan is flexible, to accept new modification to conform to the needs and interests of particular learner"s In fact, in some curriculum designs the learner may develop his or her own curriculum plan with the guidance of a teacher.

The learner is consulted and tutored individually at difficult points in the curriculum and instructional process. Learner centred approach is an example of the applications of needs and interests (activities) approach. Subject obstacles were lowered or removed as teachers combined subjects to study social problems identified by students. Students in the experimental schools were more successful in college. This practice has an ever lasting effect on secondary education.

Applications of learner Centred Curriculum:

If the learning opportunities are not based on the needs and interests of the learners then there is no assurance that the learners well equipped with the skills to participate effectively in social activities; students as adults and good citizens. Therefore, we see that the needs and interests design as especially appropriate for personal development, but not for the social competence domain. The most common approach to meet the needs and interests of learners is the grouping of students for special programmes believed by the planners to match the needs and interests of the students concerned. The major use of the needs and interests design in curriculum planning is in the provision of options for individual students. For example, the middle schools provide many special interests, exploratory courses and other experiences aimed at giving each student opportunities to explore his own interest.

Currently the movement in higher education and expansion of it by "Open University" arrangements illustrates the feature of the needs and interests design. Drunker (1969) argues for continuing education which assumes "that the more experience in life and work people have, the more eager they will be to learn and the more capable they will be of learning.

Curriculum plans emphasis the option concept:

- 1. The options are based on knowledge of learner characteristics.
- 2. Scheduling and other arrangements facilitate, selection and choice of options, with counselling services available to help students.

3. Students are actively involved in planning and evaluating the options in general and for themselves in particular.

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Community Centred Curriculum

Meaning The Community-Centred Curriculum is meant to reach out beyond the classroom and into the community where the world can be changed by students and teachers. The curriculum is based on societal issues, and the goal of the curriculum is to explore and solve those issues. This is very much an activist model, where students are encouraged to be leading activists in their community where life problems, community affairs, and real-world problems exist. The foundation of the community centred curriculum is built on real-world problems, and the content is various social issues. In the community centred curriculum, students are agents of change seeking to make a difference in their community.

Characteristics of the Community-Centered Curriculum

The main Characteristics of the community centred curriculum is the group and group action. The community centred curriculum is a problem-solving curriculum, and these problems are to be solved through the participation and efforts of the whole group. Students work to find the social relevance of their efforts and how they can improve their citizenship by the projects they take on. The experiences that the students participate in in the real world are alive, organic, real, and life changing. Students are consistently working to make the world a better place. "young people are at a formative, idealistic stage of their life, and they need to learn that they can and should make a difference in the world" (ellis, 74).

Teacher's role in the community-centred curriculum

In the community centred curriculum teachers have a very important role. They serve as facilitators: organising group efforts, showing students that they are in this together, that they need each other, and that they have to have a group to do this. Some often question why this role is so important. We need to realise that children are not born with all the necessary social skills to work together as a group. Therefore, the teacher helps children develop their social skills and create a climate for collaboration and team building. These skills and this environment are essential for success within the community centred curriculum. The teacher

is responsible for turning their class into a problem-solving unit. They help their unit solve their community based problems by planning and coordinating trips into the community. They are also responsible for making connections with community members who will further help the students with their projects. Since teamwork is such a large part of this curriculum, teachers often work with teachers throughout the school in order to help students achieve their goals.

Student's role in the community-centred curriculum

The students" role in the community centred curriculum is perhaps the most important. They do not sit at their desk with textbooks doing never ending class work. Students are responsible for being aware of the world around them and the issues that impact their life. It is from these life issues and problems that the community centred curriculum is developed. Students" goal is to leave the world a better place than they found it through group efforts. The esprit de corps (the common spirit) is a focal point of the curriculum and developed as the students work together in group projects. Students are to engage in the culture and become involved in the community that lies beyond their school and to make a

difference in that community. Participation is the true key of the community centred curriculum, and students must work together if they wish to succeed. Students start their learning process with a driving question. They then take this question and explore it through inquiry using applied knowledge. Students then engage with their peers, teachers, and community members in collaborative activities. The students" project learning can be scaffold by various supports including technology. Finally, students create tangible projects that will address their driving question. Learning environment of the community-centred curriculum

The community centred curriculum requires a classroom like any other school. Students come together to discuss community issues and decide where their course of study should go. Therefore, the classrooms and schools that participate in the community centred curriculum are like a democracy. Students make many of the key decisions. While there are the traditional grade levels based mostly on age, cross-grade level activities are very commonplace. Students must work together to solve particular issues, and sometimes that requires other grade levels. Since the community centred curriculum focuses on the real world, the real world is the community centred curriculum"s learning laboratory. Students spend much of their time outside of the classroom and school, and in the community investigating. The community centred curriculum has integrated studies where students and teachers work backwards from the problem, trying to find out how they can be of help.

Assessments in the community-centred curriculum

Assessments in the community centred curriculum usually focus around the students" efforts and outcomes. In the community centred curriculum students are working to solve problems within their community, and part of their assessment focuses on the outcomes of their efforts to solve the problem. Therefore, students are also assessed on their ability to apply their knowledge and skills when trying to solve the particular problem at hand. The community centred curriculum also allows for students to develop their citizenship and leadership abilities, as well as fostering their social growth. A group reflection takes place after a project has been completed where students can get together and share any and all thoughts about the project and what the next steps should be. Types of community centred curriculum assessment include: written work, observations, presentations, informal discussions and questions, project designs, and final products. Teachers are not the only ones involved in the assessment process, students and peers are also actively involved. Students

are given the chance to create their own rubric which the teacher can use to assess their learning.

Advantages of a community-centred curriculum

- Increases student's awareness of social issues and current events one of the benefits of the community-centred curriculum is that social issues are the foundation of the curriculum. Instead of spending their day at a desk reading textbooks and doing seatwork, students are called to participate in real world activities. The focus of the curriculum is on real life problems that are occurring in the classroom, the local community and around the world.
- Fosters positive social interactions. In the community-centered curriculum, students are constantly interacting with one another, and team building, collaborative effort, and cooperative learning are all a large part of the school experience. Group projects dominate the curriculum, which requires frequent collaboration and fosters the social skills that are necessary for participation in a group. The principles of democracy, participation and citizenship are stressed.

Subject Centred Curriculum

Subject matter is the most used and accepted curriculum Design, it is also the oldest Curriculum Design. We see the earliest example in the mediaeval era in the Middle Ages the monastery and Cathedrals and the organisations of the seven liberal arts in the schools of ancient Greece and Rome. The seven liberal arts were consisted of two divisions:

Trivium Quadrivium

These subjects were broad. In the modern period the Trivium was further divided to include literature and history and the quadrivium to include algebra, trigonometry, geography, botany, zoology, physics and chemistry. In this manner subjects added one after the other so much so that in 1930 there were over 300 different subjects. After centuries the curriculum design of the seven liberal arts are still the nucleus of the subject curriculum. In a subject based curriculum every subject is a separate unit. In this kind of curriculum four or five subjects are placed in the curriculum and each subject has a separate teacher. Every teacher try to teach his own subject, no one intervenes in the subject of another teacher.

Characteristics of Subject Curriculum

Information for future use

Importance is given to acquire knowledge and information for future use, only those subjects are considered important which have a value and the individual have benefit from it in future (vocational importance). Adult problems are given importance and the problems of children in youth are ignored.

Progress is measured to the extent the students learned the subject

In this type of curriculum subject matter is the most important thing to learn therefore the learning is measured by how much and well the subject matter has been mastered by the pupil. Frequent tests are given to students to check the degree of the achievement in the subject.

Pre- determined uniform standard of knowledge

There is a uniform standard for all the students to pass the subject else they well have to repeat the subject therefore the experts of the subject centred approach strongly support the minimum standards for examination so all achieved the set standard and qualify the examination. The teacher tries to help the weak students and to bring him to the set standard and pass the exam or repeat a grade.

Each subject is a separate entity (unit) with a logical organisation of its own

Importance is given to the acquisition of skills, facts and information for vocational purposes in different logically organised subjects. The teaching staff teaches different subjects and they do not discuss or plan subjects together.

Practice in skills is emphasised:

The main aspect of a subject based curriculum is the continuous practice or drill in a specific skill, it is one of the typical characteristics of the subject based curriculum. For this purpose multiple methods are used; evaluations, exercise sessions, tutoring classes are often dedicated to such types of practices and all the students are given equal opportunities to participate.

Subject matter is selected by adults/experts for teaching learning situation:

The content of the subject is selected in advance before the teaching learning process; the subject matter is logically organised from simple to complex with the help of the experts, specialists, teacher's supervisors, planners, writers and administrators.

Learning subject matter is an end in itself:

The main focus of the teachers, administrators and students are to complete the subject matter, to cover all the topics which are provided in the course outline by Listening to lectures, studying the recommended textbook. It is all preparation for examination on the part of students and teachers and it shows the influence of the subject centred approach. For the teacher to finish the textbook on time is a great accomplishment.

Requirements for the Operation of Subject centred Curriculum

- Trained Teachers with mastery in a subjects and expert in methodology are required to teach.
 - A separate classroom for each subject and each level.
- A fixed time table is required for different subjects according to importance of the subjects and age in the curriculum.
- Special arrangements for guidance physical education, Indoor and outdoor activities, tours and examinations etc.
 - Need of Text books and guide books for subject centred curriculum.

Criticism on Subject Centred Curriculum

Teacher has control over pupil experiences, Learning activities and conduct. The teacher follows the decision of others in the planning and evaluation process. The teacher and head teacher formulate the rules for the classroom's management. They demand a very stern discipline and they want a quiet classroom atmosphere, teacher thinks it is the best situation for the teaching-learning process.

It is compartmental and fragmentary.

The critics believed that there is no unity and continuity in the subject base matter. The subject is learned in parts. Every teacher is specialist in one subject and he feels pride to have the knowledge of his own subject and teaching and denying any responsibility for any other subject. Here they say that the learner acquires scraps of information not actual knowledge.

- Subject centred curriculum ignores the interest and activities of the learner. The critics think that the arrangement of the course content is useless and inefficient and not suitable for teaching learning process. The subjects are logically organised.
- The critics also have a viewpoint that the fact is the students know about the history what a few men had done in the past but they do not know about the current situation in their own country and what are the hopes and desires of Pakistani people and what are the social problems they have today here.
- The critics also said that subject based curriculum fails to develop habits of effective and critical thinking. This curriculum gives importance to mastery of conclusions of thought (the end result) rather than the process through which that conclusion was derived. Which supports this conclusion that it leads to uncritical thinking? The traditional assumption is that anybody who has learned the facts and information can think effectively, but the evidence does not support this assumption.

Defenses of Subject Centred Curriculum

The supporter of the subject based curriculum rejects the claim that it did not develop children's thinking. They argue that it is the most suitable method for the development of critical thinking in an individual but if one can't then the problem lies in the instruction not in the curriculum itself. A vast majority of countries select this method and they are producing botanists, doctors and geologists and so on.

The other claim that it is fragmentary and compartmental, is also not true about subject based curriculum alone because no one can study one subject in one session at once in any kind of curriculum. They use the principle of selection in the selection of course contents. In a sense anything that is learnt is a fragment and is a part of some larger unit.

It gives the teacher the idea what to teach and the student what he is supposed to learn and how much time they have to cover the course of the subject. This provides them with a constant source of security and a self-evaluation process through which they know how much course they have covered and how to complete.

Subject based curriculum uses a logically sound framework for the organisation of subject matter, it uses the cause and effect principle in science and the chronological order of the historical events but they assume an order and are reliable for learning experiences.

The evaluation of subject based curriculum is easy. It uses achievement based testing in the evaluation to find the mastery of the subject matter in the individual. It has a bright

future. Subject approach is useful for specialisation in any branch of knowledge. It is more effective.

Social Reconstructionist Curriculum

Social Reconstructionists are interested in the relationship between curriculum and the social, political and economic development of society. Social Reconstructionists are convinced that education can affect social change, citing, for example, literacy campaigns that have contributed to successful political revolutions. Aspects of re-constructionism appeared in American curriculum thought in the 1920s and 1930s. Harold Rugg was concerned about the values for which the school should work. He tried to awaken his peers to the "lag" between the curriculum, a "lazy giant" and the culture, with its fast-paced change and resultant staggering social dislocations. Rugg"s textbooks, teaching and professional leadership had one overriding quality- the spirit of social criticism. He wanted learners to use newly emerging concepts from social sciences and aesthetics to identify and solve current problems. In early 1950s, the late Theodore Brameld outlined the distinctive features of social reconstructionism:

First, he believed in a commitment to building a new culture. Brameld was infused with the conviction that people are in the midst of a revolutionary period from which the common people will emerge as controllers of the industrial system, public services, and of cultural and natural resources. Second, Brameld felt that the working people should control all principal institutions and resources if the world is to become genuinely democratic. Teachers should ally themselves with the organised working people. A way should be found to enlist the majority of people of all races and religions into a great democratic body with power to enforce its policies.

Third Brameld believed that the school should help the individual, not only to develop socially, but to learn how to participate in social planning as well. There are many premises of social reconstruction and the different directions taken by different social reconstructionist such as revolution, critical inquiry, and futurism (Ford and Lawrence Pungo, 1964). A distinction is also made between a curriculum of reconstruction, which attempts to change the social order, and a curriculum of social adaptation, which helps students fit into a world they never made.

Purpose of the social Reconstructionist curriculum

The primary purpose of the social Reconstructionist curriculum is to confront the learner with the many severe problems that humankind faces. Social Reconstructionists believe that these problems are not the exclusive concern of social studies, but of every discipline, including economics, aesthetics, chemistry and mathematics. Now it is a critical period where the crisis is universal, and the widespread nature of the crisis must be emphasised in the curriculum. According to Fry et al. (1999), the social Reconstructionist curriculum has no universal objectives and content. For example, the first year of such a curriculum might be devoted to formulating goals for political and economic reconstruction. Activities related to this objective might include the following:

- A critical survey of the community (for example, one might collect information on local patterns of savings and expenditures)
 - A study relating the local economy to national and worldwide situations
- A study treating the influence of historic causes and trends on the local economic situations. An examination of political practices in relation to economic factors.
 - A consideration of proposals for change in political practices
 - A determination of which proposals satisfies the needs of the most people.

Objectives in later years of the curriculum might include the identification of problems, methods, needs, and goals in science and art; the evaluation in the relationship between education and human relations; and the identification of aggressive strategies for effective change.

Role of the Teacher

Teachers must relate local,national and global objectives to the students. Students thus use their interests to help find solutions to the social problems emphasised in their classes. If a community wants to encourage participation of different ethnic groups in public meetings, for example, a foreign language class could help facilitate this participation by interpreting. Such a Programme provides an opportunity for students to use their special skills and interests to promote community goals in discussion groups, general assemblies, and other local organisations (Datta, 1972).

According to Chomsky, (1986), the teacher stresses cooperation with the community and its resources. For eg. Students may spend time away from the school participating in community health projects (for science classes) or in community acting, writing or dance programs (for arts and literature classes). Even the arts must be integrated with other

concerns in the programme. The interconnection between arts & science and arts & economics, for e.g, might be strengthened as the arts students look at art in home and city planning, contrasts unhealthy communities with "ideal garden cities" and attempts to see the desire for business profits affects the quality of life.

Also, as a resource person and catalyst, the teacher seeks opportunities for youth to work as equals with adults in social projects and political activities. For example the school project channels funds to students who, with adults, make grants to deserving neighbourhood undertaking such as attempting to clean up surroundings and serving meals to homeless children. However, more than encouraging social service, the teacher should challenge the beliefs of students and develop their critical consciousness.

Social reconstructionists hold that all teachers are political persons who must choose either to serve whoever is in power(Conservatives) or present options to those in power (Social reconstructionist). This is not to say that the teacher neglects course content simply to politicise students but that students learn to recognize that content is never neutral and it is in the favour of the community (Butchvarov, 1970).

Models of curriculum development

Tyler's model.

Objectives form the basis for the selection and organisation of learning experiences. Objectives form the basis for assessing the curriculum. Objectives are derived from the learner, contemporary life and subject specialist. The Tyler Model, developed by Ralph Tyler in the 1940's, is the quintessential prototype of curriculum development in the scientific approach. One could almost dare to say that every certified teacher in America and maybe beyond has developed curriculum either directly or indirectly using this model or one of the many variations. Tyler did not intend for his contribution to the curriculum to be a lockstep model for development. Originally, he wrote down his ideas in a book Basic Principles of Curriculum and Instruction for his students to give them an idea about principles for making curriculum. The brilliance of Tyler's model is that it was one of the first models and it was and still is a highly simple model consisting of four steps.

- Determine the school's purposes (aka objectives)
- Identify educational experiences related to purpose
- Organise the experiences
- Evaluate the purposes

Wheeler's model of (1967)

The Wheeler model of curriculum development or cyclic model, asserts that curriculum should be a continuous cycle which is responsive to changes in the education sector and makes appropriate adjustments to account for these changes. It focuses on situational analysis: the context in which the curriculum decisions are taken is considered important, as this is believed to help make the most effective decisions. Wheeler contends that aims should be discussed as behaviour referring to the end product of learning which yields the ultimate goals. Aims are formulated from general to the specific in curriculum planning. Content is distinguished from the learning experiences which determine that content. This model consists of five interconnected stages.

- 1.Aims,
- 2.Goals,
- 3. Objectives:
- 4. Learning experiences.
- 5. Content.

Organisation and integration of learning experiences and content.

Evaluation once the cycle has been followed once, it begins again at step one and continues onward to continuously improve the curriculum in the face of any changes that may have been imposed or come about naturally. It is different from other models in that 'selection of learning experiences' comes before 'selection of content': it specifically gears the content in the curriculum to learners, where most models follow the opposite structure. Wheeler viewed evaluation as particularly important, stating that valuation enables us to compare the actual outcomes with the expected outcomes without it, it is impossible to know whether objectives have been realised, and if they have, to what extent' (Wheeler,1976, cited in Carl, 2009). While Wheeler's approach, like other cyclical models, has been popular in teaching practice for its flexibility and relevance to learners in particular situations, it is not always practical to use because of time constraints. Undertaking a detailed situational analysis that Wheeler advocates is a time-consuming process that can be difficult to put into practice in the hectic conditions in modern educational practice

Outline of Wheeler's phases of the curriculum process

Wheeler (1967) further categorised the curriculum goals into ultimate, mediate and proximate goals. In phase one, he recognised the general and specific objectives. The "why" of the teaching- learning experiences. Phase two is that of the selection of learning experiences. The author locates learning experiences in the attainment of aims, goals and objectives. He cited play and field trips as examples of learning experiences. He also categorised learning experiences into three categories: physical, mental and emotional experiences. Phase three is that of the selection of the content. That selection involves the selection of the subject matter which must reflect the content. The content, explicit or implicit and established with respect to the subject matter. Phase four is that of the organisation and integration of learning experiences and content. This phase is done depending on the design of the curriculum chosen. That is either the subject curriculum and broad field activity or core curriculum. The last phase is phase five entitled evaluation. This phase is that of the evaluation of the effectiveness of phases 2, 3 and 4 in attaining what is set out in phase 1.

Kerr's model.

Kerr outlines four domains namely objective, knowledge, evaluation and school learning experiences. The objective is divided into affective, cognitive and psychomotor. Knowledge should be organised, integrated, sequence and reinforced. Evaluation is the collection of information for use in making decisions. Learning experiences are influenced by societal opportunities, school community, pupil and teacher relationships, individual differences, teaching methods, content and maturity of the learners. These experiences are evaluated through tests, interviews, assessments and other reasonable methods. Kerr's model of curriculum design According to J. Kerr ideas the objectives are distinguished from learning experience and knowledge, selected for transferring. The educator subdivides objectives into affective, cognitive and psychomotor ones. While characterising knowledge, J. Kerr stresses that it should be organised, integrated, sequenced and reinforced. Evaluation in Kerr's model is considered as collection of information in terms of curriculum efficiency. It is important to note that J. Kerr's ideas in curriculum modelling dominated in the 1960-s and 1970-s in Great Britain and America. British education expert E. C. Wragg (1997) goes further in defining school curriculum beyond the educational programme with defined goals, content, techniques and methods of its implementation. The researcher presents the curriculum as a multidimensional concept, which can be considered as a body of knowledge.

Curriculum and Instruction

Curriculum leadership is a significant improvement in academic achievement. The curriculum leader is directly involved in the design and implementation of curriculum, instruction, and assessment practices; it is his/her knowledge of instructional strategies, current research, and application of student achievement data that gives shape to instructional programming. Teacher leaders earn credibility from other teacher's respect when their expertise and their personal and professional values on instruction positively influence school culture (Patterson & Patterson, 2012). By focusing on learning, teaching and monitoring progress, curriculum leaders help educators improve their instructional practices and ensure pupil's achievement improves as a result of meaningful, supportive decisions about pedagogy, coursework, and instructional materials.

The Head teachers

Typically, each primary school has a single administrative officer, a head teacher, who is responsible for the operation of the school. In large schools, there may be one or more assistant head teachers handling other administrative roles, (Lunenburg, 2010). The administrative hierarchy may also consist of a number of department chairpersons, school counsellors, a social worker, school psychologist, diagnostician, and so on. Although functions vary by location and size, the head teacher is primarily responsible for administering all aspects of a school's operations. What then do head teachers actually do on a day-to-day basis? One way to analyse what head teachers do is to examine their job from a number of perspectives: (a) leadership functions, (b) administrative roles, (c) management skills, (d) task dimensions, (e) human resource activities, and (f) behavioural profiles of effective versus successful administrators. Head teachers combine and coordinate various kinds of resources by carrying out four basic leadership functions: planning, organising, leading, and monitoring.

Generally, planning defines where the school wants to be in the future and how to get there (Parker, 2011). Plans and the goals on which they are based give purpose and direction to the school, its subunits, and donating staff. For example, suppose the head teacher in a large, urban school district decides that the school should attempt to increase the number of pupils reading at any level by 20 percent by the year 2024. This goal and the methods needed to attain it would then serve as the planning framework for the school (Gardiner, 2011). School counsellors, social workers, school psychologists, library media specialists, department heads, and teachers would set and synchronise individual objectives

with those of the building principal. Planning in the curriculum, pedagogy, finance among others is important because it provides staff with a sense of purpose and direction, outlines the kinds of tasks they will be performing, and explains how their activities are related to the overall goals of the school (Oosterlynck, 2011).

Without this information, staff would not know precisely how to use their time tables, syllabus, curriculum and energies efficiently and effectively. Subsequently, they would respond to their job responsibilities randomly, wasting valuable human resources. Planning is also a prerequisite to other leadership functions (Goodstein, 2011). In particular, it becomes the basis for monitoring and evaluating actual performance (McDonnell, 2011). That is, plans made during the first step become benchmarks or criteria against which to measure actual performance in the monitoring step. Unless plans are formulated and mutually agreed on, there is relatively little value or basis for measuring the effectiveness of the school outcomes (Lunenburg & Irby, 2006; Lunenburg & Ornstein, 2008). In addition, comparing planned and actual results provides the head teacher with a sound basis on which to make necessary adjustments in the school's plan of action.

A head teacher is the most senior teacher within a school. They are responsible for managing the school and making sure that everything (curriculum, pedagogy, infrastructure etc) is running smoothly on a day-to-day basis. Head teachers play an important role in a variety of educational institutions including primary schools. According to Hallinger & Walker, (2014), the role of head teachers comes with a variety of important responsibilities. As well as providing guidance and expertise, head teachers must also have a strong and influential presence within the school community. Ultimately, they are held responsible for the overall education and academic achievements of the school. It's their responsibility to create a productive learning environment for staff and students, (Lwaitama & Galabawa, 2008).

But, they also have to take care of the school's finances and administration, developing and maintaining school policies and rules, the motivation, management, and discipline of staff, making sure that teachers have access to important educational resources, overseeing the recruitment process within the school, creating and maintaining a positive, organised, and rewarding teaching and learning environment. Listening to staff and students about issues in the school and reacting accordingly, working with delegates to make sure that funding is distributed adequately, providing the school with an educational vision, organising school events, keeping up to date with new educational innovations and technologies and programs (World Bank, 2010). Making sure that parents are informed

about school news and their child's development, reporting the school's performance and developments to the local community and educational authorities such as division delegates, resolving major behavioural issues with students and working with the police and other emergency services to ensure the safety of everyone on the school grounds.

In the context of the curriculum process, head teachers support and assess individuals and teams. They ensure a reasonable school/work balance for teachers and staff, sustain effective staff performance management systems, and incorporate teachers' appraisals and targets for the school's achievement into the school's development plan. They also strategize ways to use emerging technologies to expand the learning experience. School heads are stewards of learning and managing supervisors of their schools (Spillane and Zuberi, 2009). They aim to provide vision and leadership to all stakeholders in the school and create a safe and peaceful environment to achieve the mission of learning and educating at the highest level. They guide the day to day school business and oversee all activities conducted by the school. They bear the responsibility of all decision making and are accountable for their efforts to elevate the school to the best level of learning achievements for the students, best teaching skills for the teachers and best work environment for support staff. While some head teachers still do some teaching themselves, in most larger schools, most of their duties are managerial and pastoral. They are often used to discipline misbehaving students, help organise school sponsored activities and teachers report to them. The head teacher is sometimes in charge of one (in the case of a major subject) or multiple (often in smaller schools) specific departments, such as English, history, maths, science, writing, technology, etc., but maintains full teaching duties and status. They are considered part of the school executive, and often a head teacher position is a stepping-stone into administration.

Gobally, head teachers employ diverse leadership styles to enable the smooth functioning of the school. However, scholars agree that instructional leadership (IL) is one of the most useful tools for creating an effective teaching and learning environment (Pustejovsky, Spillane, Heaton & Lewis, 2009). Instructional leadership is an educational leadership that focuses on the core responsibility of a school, namely teaching and learning, by defining the school vision, mission and goals, managing the instructional program and promoting the school climate (Hoy & Miskel, 2008). King (2002) asserted that the role of an instructional leader differs from that of a traditional school administrator in a number of meaningful ways: whereas the conventional head of school spends majority of his/her time dealing strictly with administrative duties, the head of school who is an instructional leader

is charged with redefining his/her role to become the primary learner in a community striving for excellence in education.

As such, it becomes the head of school's responsibility to work with teachers to manage the instructional program. Instructional leaders know what is happening in the classrooms and develop the capacities of their staff by building on their strengths and reducing their weaknesses (Spillane & Zuberi, 2009). Instructional leaders go beyond the traditional role of school administrators and spend a lot more time focusing on developing knowledge and implementation of the curriculum, as well as instruction and assessment (Jita, 2010).

Head teacher's leadership styles

According to Notman and Henry (2010), effective head teachers use multiple leadership strategies for leading teachers to raise levels of student achievement via the school curriculum. The following are leadership strategies used by principals/ headteachers.

(a) vision and purpose, (b) focus on student achievement, (c) school improvement practices, (d) consultation with teachers and community, (e) employment of quality staff, (f) strong senior leadership team, (g) personnel support systems, (h) integration of different cultures, (i) growing other leaders, (j) and "hands on the turbine" (i.e. ecosystem).

Principle

A critical leadership skill for a successful head teacher is decision making. When staff and line employees collaborate on decision-making, leadership is imperative to substantiation, which affects the school (Crum, Sherman, & Myran, 2009). The school head may decide to organise seminars to train teachers on the curriculum conception and implementation. When the head teacher discovers that the teachers are lacking in the teaching strategies or he/she may decide to hold a seminar within the school to train teachers. That will go a long way to inculcate the skill in the teachers. The school head may decide on issues independently, this could allow for a state of higher questionability and accuracy. It is always advisable for head teachers to permit teachers and high-qualified staff to assist in decision-making and work as a team of councils to provide possible solutions to problems. This effective leadership impulse helps leaders to manage effectively (Yukl, 2009); express an axis or structure for group resiliency and decision-making. By implementing group resiliency, the traditional definition of management, which insists on control, eliminates properly and staff assimilates a self-assessment of management. Successful headteachers

seek to form partnerships with all key stakeholders acknowledging their perspectives. Distributive leadership focuses on collaboration, shared purpose, responsibility, and recognition of leadership irrespective of role or position within an organisation (Keppell, O'Dwyer, Lyon, & Childs, 2010).

The premise of 'distributive leadership' encompasses the notion of collaboration by many rather than one central authority figure. Connotations emphasise a collegial sharing of knowledge, practice and reflection, dissemination of strategies to the group, and deduces horizontal models of leadership (Ylimaki & Jacobson, 2013). Successful leadership implementation applies the broad intent and principles of distributive leadership towards the vision and 'capacity building 'of curriculum and instruction. Seemingly, educational governance understands the importance of training and skill development for educational stakeholders to assume leadership responsibility, and that the concept of distributed leadership exposed staff to new ideas and participation in knowledge creation and transfer (Davies & Davies, 2006). My contention supports the design of placing teachers in small learning communities within the school. Large department meetings do not inspire staff to express their particular ideas and for the most part seclude their ideas. This, then causes an unhealthy ethos of expression and results in negativity towards the ideas of others. In smaller groups, even within subjects, there are more opportunities for all staff to contribute and express ideas that in larger meetings could have been kept private. The impact is highly valued in successful school environments when staff communicate even if their ideas are conceptualised.

Head teacher's administrative functions in schools

The principal, as the person at the helm of affairs in the secondary school occupies a unique position. He exercises influence on the improvement of education, he interprets polices, executes instructional programs, sees to staff development and ensures adequate and proper management of the school. They are usually assisted by the vice- principals. Their administrative functions include planning, organising, directing, controlling, coordinating, communicating, evaluating, ensuring good students' academic performance, discipline and supervision of staff and students among others. The role of the principals to teachers, especially, the extent to which he/she demonstrates understanding of their peculiar problems is sure to affect their job performances (Oyewole et al., 2020).

Delegation of duties

Delegation is the assignment of any responsibility or authority to another person (normally from a manager to a subordinate) to carry out specific activities. Delegation is one of the core concepts of management leadership, (D'Souza, 2002). The term delegation of authority or duties has recently drawn the attention of many organisations and primary schools inclusive. In education management, teaching, learning, extra-curricular and administrative tasks or activities are entrusted to teachers by the head teacher in the hope that they will carry out the work or task that they have been delegated to do. Jackson (2000) sees delegation as the "accomplishment of work through others". The school, by its nature, is a complex organisation such that delegation of duties and responsibilities is unavoidable; it is therefore imperative for all school managers and administrators of secondary schools to understand the concept of delegation; what determines it, its importance and how to use it effectively.

Motivation

Motivation is seen as a driving force that compels an individual to take actions with a goal to achieve certain goals (Maslow, 1993). This implies, motivation is a force that drives one to do things that he or she would not normally do. In its more technical usage, motivation is a psychological process that facilitates an organisation of behaviour towards achieving some specific course. In order to reach the expected goals motivation should have activated by providing incentives. For Ndu, Ocho and Okeke (1977) motivation as a complex socially learned pattern of behaviour. In a primary school, motivation embraces all factors in a teacher's development toward the achievement of organisational goals. In this light, Peretomode (1991) considered motivation as the process of influencing or stimulating a person to take action that will accomplish desired goals. School managers have as one of their duties to motivate their teachers to become more engaged in teaching-learning process

Communication style

Communication is derived from the Latin word "communicare" which means "to put in common" and "to share". It then means the sharing of ideas, facts, thought and feelings for easy coexistence. It is a two-way process which involves the sender and the receiver. Communication is, therefore, concerned with transmitting and receiving information which is the key to all aspects of organisational life, whether by planning, controlling, problem-solving, decision-making, motivating, interviewing and other management activities.

Communication remains a unique instrument that integrates management functions in an organisation, (Akinnubi, 2012). This explains why communication is inevitable and indispensable in the school system for effective management.

Reinforcement

In behavioural psychology, reinforcement is a consequence applied that will strengthen an organism's future behaviour whenever that behaviour is preceded by a specific antecedent stimulus. This strengthening effect may be measured as a higher frequency of behaviour (e.g., pulling a lever more frequently), longer duration (e.g., pulling a lever for longer periods of time), greater magnitude (e.g., pulling a lever with greater force), or shorter latency (e.g., pulling a lever more quickly following the antecedent stimulus) (Schultz. 2015). The model of self-regulation has three main aspects of human behaviour, which are self-awareness, self-reflection, and self-regulation. Reinforcements traditionally align with self-regulation. According to Winkielman and Wilbarger (2005), the behaviour can be influenced by the consequence but behaviour also needs antecedents. There are four types of reinforcement: positive reinforcement, negative reinforcement, extinction, and punishment. Positive reinforcement is the application of positive reinforcement. Negative reinforcement is the practice of removing something negative from the space of the subject as a way to encourage the antecedent behaviour from that subject.

Extinction involves a behaviour that requires no contingent consequence. If something (good or bad) is not reinforced, it should in theory disappear. Lastly, punishment is an imposition of aversive consequence upon undesired behaviour. Punishment by removal is a common example of removing a benefit following poor performance. While reinforcement does not require an individual to consciously perceive an effect elicited by the stimulus, it still requires conscious effort to work towards a desired goal. According to Schultz, (2015), rewarding stimuli, which are associated with "wanting" and "liking" (desire and pleasure, respectively) and appetitive behaviour, function as positive reinforcers, the converse statement is also true: positive reinforcers provide a desirable stimulus. Reinforcement does not require an individual to consciously perceive an effect elicited by the stimulus. Thus, reinforcement occurs only if there is an observable strengthening in behaviour. However, there is also negative reinforcement, which is characterised by taking away an undesirable stimulus. Changing someone's job might serve as a negative reinforcer to someone who has back problems, (e.g. changing from a labourer's job to an office position).

In most cases, the term "reinforcement" refers to an enhancement of behaviour, but this term is also sometimes used to denote an enhancement of memory; for example, "post-training reinforcement" refers to the provision of a stimulus (such as food) after a learning session in an attempt to increase the retained breadth, detail, and duration of the individual memories or overall memory just formed. Gottfried and White (2011) opined that the memory-enhancing stimulus can also be one whose effects are directly rather than only indirectly emotional, as with the phenomenon of "flashbulb memory," in which an emotionally highly intense stimulus can incentivize memory of a set of a situation's circumstances well beyond the subset of those circumstances that caused the emotionally significant stimulus.

The Importance of Head Teachers Involvement in Curriculum Development

Without doubt, the most important person in the curriculum implementation process is the teacher, under the supervision of the head teacher. Teachers using their knowledge, experiences and competencies are central to any curriculum development effort. That notwithstanding, it is evident that better teachers support better learning because they are most knowledgeable about the practice of teaching and are responsible for introducing the curriculum in the classroom. If another party has already developed the curriculum, the teachers have to make an effort to know and understand it. Their efforts are actualized when the head teachers are present in the curriculum conception process, and further put their managerial abilities into place to ensure the teachers have a convenient environment to implement the curriculum. So, head teachers should be involved in curriculum development. For example, the head teacher's opinions and ideas should be incorporated into the curriculum for development. On the other hand, the curriculum development team has to consider the head teacher as part of the environment that affects curriculum (Carl, 2009). Hence, head teacher involvement is important for successful and meaningful curriculum development. Teachers being the implementers are part of the last stage of the curriculum development process, but under the supervision of the head teacher.

Head teacher's role in curriculum process

Educational accountability has changed very much in tradition and thoughts including the presence of new subject content and actors. Inspectors, delegates, superintendents and local school boards, the education community in general can no longer be satisfied with head teachers who simply place teachers and pupils in classrooms, provide

textbooks and teachers copies, while parading the corridors of power in their schools. Increasingly, schools and school leaders are being judged on their progress in teaching and the standards they embiid to the learners and their schools. This means that future school leaders must have in-depth knowledge of curriculum process, instruction and pupil's achievement (Gene, n.d)

School leaders and/or school heads need to understand the "big ideas" that should be taught in the core curriculum. They do not need to be experts, but they should know enough to determine whether students are being taught the body of knowledge, the understandings and the skills that they are expected to learn during their passage in that learning environment or school. Also, school leaders must have a grasp of the knowledge, skills and insight that students need to gain from career/technical courses and electives (Blasé, 1999).

Head teachers should know enough about state and national standards, objectives, and goals. The Head teachers should have a global idea in academic courses and also co-curricular fields of study, such as fine arts, manual labour, agriculture, home economics, craft, sports and others. and practical arts) to help teachers identify the most important standards. In other words, School leaders need to know that "covering everything and learning nothing" does not work. They need to be able to help teachers identify the things that students should learn in greater depth. Leaders need to know how to distinguish between a regular arts course and a domestic science class or an arithmetic and a mathematics class. In the case of another level for instance, secondary level learners in college preparatory courses, the school head should be able or are expected know that Learners at this level are suppose to do more reading and produce higher-quality work. School Leaders at this level should also understand that end course level students should concentrate on key concepts and not entry level courses.

Head teachers must understand the importance of literacy and that reading, writing and speaking are "learning tools" that are essential and should cut across the curriculum in academic courses, fine arts courses and the practical arts and what have we? Leaders should be able to recognize whether teachers are advancing students' literacy skills and requiring students to use these skills to learn in all courses.

Head teachers need to know what students are supposed to learn and the standards they are supposed to meet in determining whether teachers' exams and assessment guides are appropriate to measure output and pupil or student's achievement..

Leaders need to know enough about assessment to be able to lead teams of teachers who are working together to develop grading guides and common exams. Assessments can help teachers measure their own effectiveness as well as the amount of student learning

School leaders should have a working knowledge of research-based, student-centred instruction, such as the Socratic method, project-based learning, cooperative learning, research studies, integration of technology into instructional strategies, and integration of academic and career/technical studies whether at the basic, secondary or tertiary level. They need to understand the conditions that will enable teachers to use these methods.

They need to understand the amount of time it takes to effectively plan their administrative or pedagogic activities. Good instruction requires good planning. Teachers who are expected to teach any content at any level need time to devise ways to connect what they are asking students to learn with what these students have learned or experienced in the past.

School leaders should have a profound knowledge about teaching and learning to be able to identify teachers who are doing their best and in their student's best interest. They should be focused on their job and on raising student levels and achievement. Exemplary teachers can deliver "model" lessons and invite other teachers to observe instruction in the classroom.

School leaders must understand the school and classroom conditions that contribute to higher expectations. They need to be able to recognize whether such a "culture" exists in a classroom and to assist teachers (through mentors or other approaches) to expect more of students. Certain experiences will help teachers change their beliefs about whether students can learn advanced materials. Successful head teachers arrange for teachers to take part in the curriculum process in order for better implementation possibilities.

The Challenges Head Teachers Face in Curriculum Development

The head teachers' involvement in the curriculum development process is essential in meeting the needs of society. The process of curriculum development requires head teachers to act and reflect on society's needs in each stage of the development process. Nevertheless, sometimes this process which head teachers are requested to follow is unclear or they are not even involved. For example, in most African countries, most head teachers are not qualified and lack the necessary skills to participate in curriculum development. Their approach of participation in the process is not well defined and very difficult on head teachers, so they face many challenges regarding their involvement in curriculum development (Ramparsad, 2000). As a result, researchers think that there should be major advances in head teacher development in order for the head teachers to actively reflect on society's needs in each stage of the curriculum development process. On the other hand, in

any curriculum implementation process not all head teachers will have the chance to be involved in these processes. Professional development of head teachers is an important factor contributing to the success of curriculum development and implementation (Handler, 2010). So, we should think about what extent head teacher education programs are needed for prospective head teachers to study curriculum development.

Preparation for Head Teacher Involvement in Curriculum Development

Because head teachers have to be involved in curriculum development, the head teachers should be provided with appropriate knowledge and skills that help them to effectively contribute to curriculum development operations. As a result, all participants in curriculum development including head teachers need training and workshops, which are geared toward professional development to be able to contribute to curriculum development. On the other hand, there is an important point to make efficient involvement of head teachers in curriculum development, that is head teachers have to be empowered in the process of curriculum development (Carl, 2009). This means head teachers should have improved in many areas, such as experience and autonomy.

TYPES OF CURRICULUM

Curriculum as an important document that is key to the teaching-learning process in all educational levels most importantly the primary level. The curriculum has different types:

Overt, explicit, or written curriculum

It is simply that which is written as part of formal instruction of schooling experiences. It may refer to a curriculum document, texts, films, and supportive teaching materials that are overtly chosen to support the intentional instructional agenda of a school. Thus, the overt curriculum is usually confined to those written understandings and directions formally designated and reviewed by administrators, curriculum directors and teachers, often collectively. It appears in state and local documents like state standards, district curriculum guides, course of study, scope and sequence charts and teachers' planning documents given to schools.

Societal curriculum (or social curricula)

As defined by Cortes (1981). Cortes defines this curriculum as a massive, ongoing, informal curriculum of family, peer groups, neighbourhoods, churches, organisations,

occupations, mass media, and other socialising forces that "educate" all of us throughout our lives. This type of curricula can now be expanded to include the powerful effects of social media (YouTube; Facebook; Twitter; Pinterest, etc) and how it actively helps create new perspectives, and can help shape both individual and public opinion.

Hidden Curriculum

Hidden curriculum refers to the unwritten, unofficial, and often unintended lessons, values, and perspectives that students learn in school. While the "formal" curriculum consists of the courses, lessons, and learning activities students participate in, as well as the knowledge and skills educators intentionally teach to students, the hidden curriculum consists of the unspoken or implicit academic, social, and cultural messages that are communicated to students while they are in school. It is an unintended curriculum which is not planned but may modify behaviour or influence learning outcomes that transpire in school. The hidden curriculum begins early in a child's education. Students learn to form opinions and ideas about their environment and their classmates. For example, children learn 'appropriate' ways to act at school, meaning what's going to make them popular with teachers and students. They also learn what is expected of them; for example, many students pick up on the fact that year-end test scores are what really matter.

Null Curriculum

That which we do not teach, thus giving students the message that these elements are not important in their educational experiences or in our society. Eisner offers some major points as he concludes his discussion of the null curriculum. The major point I have been trying to make thus far is that schools have consequences not only by virtue of what they do teach, but also by virtue of what they neglect to teach. What students cannot consider, what they don't process they are unable to use, have consequences for the kinds of lives they lead. From Eisner's perspective the null curriculum is simply that which is not taught in schools. Somehow, somewhere, some people are empowered to make conscious decisions as to what is to be included and what is to be excluded from the overt (written) curriculum. Since it is physically impossible to teach everything in schools, many topics and subject areas must be intentionally excluded from the written curriculum. Null curriculum refers to what is not taught but actually should be taught in school according to the needs of society. For example, environmental education, gender or sex education, life education, career planning education, local culture and history education courses are still empty in some schools.

Phantom curriculum

Media and its uses have become important issues in schools. Exposure to different types of media often provides illustrative contexts for class discussions, relevant examples, and common icons and metaphors that make learning and content more meaningful to the real lives and interests of today's students. In an Information Age media has become a very strong type of curricula over which teachers and parents have little or no control. This type of learning has a name and definition. It is called the phantom curricula. It can be defined as - "The messages prevalent in and through exposure to any type of media. These components and messages play a major part in enculturation and socialising students into the predominant meta-culture, or in acculturating students into narrower or generational subcultures.

Concomitant Curriculum

What is taught, or emphasised at home, or those experiences that are part of a family's experiences, or related experiences sanctioned by the family. (This type of curriculum may be received at church, in the context of religious expression, lessons on values, ethics or morals, moulded behaviours, or social experiences based on the family's preferences.)

Rhetorical curriculum

It comes from those professionals involved in concept formation and content changes; from those educational initiatives resulting from decisions based on national and state reports, public speeches, from texts critiquing outdated educational practices. The rhetorical curriculum may also come from the published works offering updates in pedagogical knowledge.

Curriculum in Use

The formal curriculum (written or overt) comprises those things in textbooks, and content and concepts in the district curriculum guides. However, those "formal" elements are frequently not taught. The curriculum-in-use is the actual curriculum that is delivered and presented by each teacher.

Received curriculum

Those things that students actually take out of classrooms; those concepts and content that are truly learned and remembered. The internal Curriculum Processes, content, knowledge combined with the experiences and realities of the learner to create new

knowledge. While educators should be aware of this curriculum, they have little control over the internal curriculum since it is unique to each student.

The electronic curriculum

Those lessons learned through searching the Internet for information, or through using e-forms of communication. (Wilson, 2004) This type of curriculum may be either formal or informal, and inherent lessons may be overt or covert, good or bad, correct or incorrect depending on one's views. Students who use the Internet on a regular basis, both for recreational purposes (as in blogs, wikis, chatrooms, through instant messenger, on-line conversations, or through personal e-mails and sites like Twitter, Facebook, or Youtube) and for personal online research and information gathering are bombarded with all types of media and messages. Much of this information may be factually correct, informative, or even entertaining or inspirational. But there is also a great deal of other e-information that may be very incorrect, dated, passé, biassed, perverse, or even manipulative.

Supported Curriculum

The supported curriculum continues to have a strong influence on the taught curriculum, especially for elementary teachers, who teach four or five subjects. The textbook is often their major source of content knowledge. It includes all the facilities and materials that will help the teacher in implementing the curriculum for a successful teaching-learning process.

Assessed Curriculum

A tested or evaluated curriculum where teachers use paper-and-pencil tests, practical exams, and/or portfolios to assess the student's progress and for them to determine the extent of their teaching during and after each topic they teach. The Assessed curriculum seems to have the strongest influence on the curriculum actually taught. In an era of accountability, teachers are understandably concerned about how their students perform on tests. Much classroom time is spent on developing test-wiseness and on practising questions similar to those that will appear on district, state, and national tests. And in almost every class, students ask the perennial question: "Will this be on the test?" There is a positive side to this emphasis on tests, when they take the form of performance assessments.

Extra Curriculum

The school project programs. An activity at a school or college pursued in addition to the normal course of study.

Assessment and Research

Effective leaders must have a keen ability to monitor the progress of instruction and analyse achievement data to determine ongoing solutions to issues related to academic achievement. They focus on specific, high-yield instructional practices; use assessment data to improve pupil's learning and teacher practices; and remain vigilant about adapting programming to changes in demographics, legislation, and/or research trends (Fullan, 2009; Gabriel &Farmer, 2015). They also strive for continuous self- improvement in the field, continually adding to their knowledge base of curriculum, instruction, and assessment practices to ensure school programming is aligned to the latest educational research so that the school or district's instructional goals are within reach.

Needs Assessment

Stufflebeam, McCormick, Brinkerhoff, Nelson (1985), observed that in most areas of education, for many years there has been intense debate about the definition, purpose, validity, and methods of learner needs assessment. This argument has given rise to varied purpose, definitions, methods of conducting needs assessment and interpretation by scholars. Grant (2002), summarises learning needs assessments as follows: firstly, that learning needs assessment is a crucial stage in the educational process that leads to changes in practice, and has become part of government policy for continuing professional development. Secondly, it can be undertaken for many reasons, so its purpose should be defined and should determine the method used and the use made of findings. Lastly, exclusive reliance on formal needs assessment could render education an instrumental and narrow process rather than a creative, professional one.

A needs assessment is "a systematic exploration of the need for education or training" (Wood, 2011). The process involves first establishing who the learners are (i.e. what is their level of training and expertise) and then determining what skills they have, what skills they need and how best to deliver training to correct any deficiencies. It might be to help curriculum planning, diagnose individual problems, assess student learning, demonstrate accountability, improve practice and safety, or offer individual feedback and educational intervention. Published classifications include felt needs (what people say they need),

expressed needs (expressed in action) normative needs (defined by experts), and comparative needs (group comparison) (Gillam & Murray,1996). The defined purpose of the needs assessment should determine the method used and the use made of findings.

Furthermore, even though the concept of educational needs assessment is enshrined in practice, policy, and the educational canon, several factors indicate the need for careful planning and research in this subject. Questionnaires and structured interviews seem to be the most commonly reported methods of needs assessment, but such methods are also used for evaluation, assessment, management, education, and now appraisal and revalidation (Myers P. (1999). Together, these formal and informal methods might make an effective battery where there is clarity of purpose. The Good CPD Guide details 46 formal and informal methods of self-assessment. According to Brown, (2002), training needs assessment is an ongoing process of gathering data to determine what training needs exist so that training can be developed to help the organisation accomplish its objectives. Conducting needs assessment is fundamental to the success of a training program. Often, organisations will develop and implement training without first conducting a needs analysis. These organisations run the risk of overdoing training, doing too little training, or missing the point completely.

According to the Council of Chief State School Officers (CCSSO) (2017), in public education, delivering high-quality services to every student, particularly in our most impoverished communities, is a perennial challenge. However, state, district, and school leaders are getting increasingly adept at designing and using tools to make sure that limited resources are used most effectively to promote student learning and ongoing school improvement. They added that when formalised as a system, an assessment or similar tool can be used to identify specific needs (commonly termed a "needs assessment"), explore these needs in some depth to identify the gap or discrepancy between "what is" and "what should be" and to identify the root cause(s) of any such gaps, and then use the information and analysis to set priorities for future action.

A Guide for Comprehensive Needs Assessment, Colorado Department of Education (2008), observed that the phrase "needs assessment" is used rather loosely in the educational vernacular. As currently implemented, a needs assessment can mean anything from asking individuals connected with education what they need to close the gap between current status and some desired state, such as all students reaching proficiency, to conducting a comprehensive research project, complete with a specified set of procedures such as statistical analysis, case studies, and student focus groups. In both cases, there is an attempt

to assess or measure a perceived or actual need by collecting data to document a challenge that exists. For federal programs, typically this means that local staff must collect data that help illuminate the path to improvement. To Mulroy (2008), needs assessment as a process of identifying needs and placing them in some order of priority is crucial for successful education/training programs. There are several qualitative/ quantitative methods and techniques for educational and training needs assessment. Each has its advantages and disadvantages. It is recommended to use multiple methods for needs assessment as to balance the strengths and limitations of each.

A needs assessment is therefore the process of collecting information about an expressed or implied organisational need that could be met by conducting training. The need can be a desire to improve current performance or to correct a deficiency. A deficiency is a performance that does not meet the current standard. It means that there is a prescribed or best way of doing a task and that variance from it is creating a problem. The needs assessment process helps the trainer and the person requesting training to specify the training need or performance deficiency. Assessments can be formal (using survey and interview techniques) or informal (asking some oral questions of those involved). This gives an indication on the method that could be employed in conducting a needs assessment.

THE DESIGN STAGE

A clear and unambiguous definition of the design concept would be useful for developing a cumulative tradition for research on design. The term design can be used in many walks of life hence the definitions though similar have subtle differences. Ralph, Paul & Wand, Yair (2009), in their works on "A proposal for a formal definition of the Design Concept" proposed a formal definition of the concept design and proposed a conceptual model linking concepts related to design projects. They equally agree that the definition of design incorporates seven elements: agent, object, environment, goals, primitives, requirements and constraints. Design can be seen as a noun and as a verb, transitive. As a (noun) design is a specification of an object, manifested by an agent, intended to accomplish goals, in a particular environment, using a set of primitive components, satisfying a set of requirements, subject to constraints; and a (verb, transitive) to create a design, in an environment (where the designer operates). Microsoft Encarta (2009) defined a design verb implying to create a detailed plan of something: to make a detailed plan of the form or structure of something, emphasising features such as its appearance, convenience, and efficient functioning. Design can involve making products, machines, and structures that

serve their intended purpose and are pleasing to the eye as well. The diagram that follows illustrates. design as a noun.

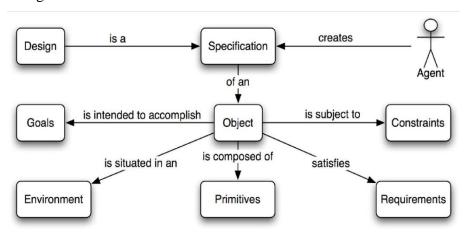


Figure 1: Conceptual Model of Design (as a noun)
Source: Ralph, Paul & Wand, Yair. (2009).

Considering design as a process (depicted in Figure2), the outcome is the specification of the design object. The goals, environment, primitives, requirements and constraints are, in principle, the inputs to the design process; however, often knowledge of the seamy emerges or changes during the process. Nevertheless, the design process must begin with some notion of the object's intended environment, the type of object to design and intentionality. By this we simply mean that design cannot be accidental. Finally, if the type of design object changes significantly (e.g. from a software system to a policy manual), the existing design effort is no longer meaningful and a new design effort begins. The possibility of changing information is related to the possibility that the design process involves exploration. It implies that the design may evolve as more information is acquired. Therefore, school leaders as supposed to pay attention to the cues that may signal the need to vary or modify an aspect of the curriculum bearing in mind the prevailing circumstances with the society.

Design can be a subject and an object; the subject of the design is the (often human) agent that manifests the design while the design object is the thing being designed, in this respect the curriculum. Design outcomes such as an artefact, a system or process that appear in some existing definitions are encompassed hereby the more general term, design object (Hevner, 2004). Some definitions mention parts, components or element soft which the design object is, to be, composed. Obviously, all artificial physical things are made from other things. We Term the lowest level of components primitives. Similarly, but perhaps less obviously, if we assume that atomic conceptual things, such as single thoughts or ideas, are

not designed (but are discovered or just are available), then all conceptual things that are designed are made from other conceptual things. Ralph, Paul & Wand, Yair (2009), proposed definition of design concepts which can be tabulated as shown below:

Table 1: Definitions of Design Concepts

| Concept | Meaning |
|---------------|---|
| Design | A specification is a detailed description of an object in terms of its |
| specification | structure, e.g., the primitives used and their connections. |
| Design Object | The design object is the entity (or class of entities) being designed. |
| | Note: this entity is not necessarily a physical object |
| Design agent | The design agent is the entity or group of entities that specifies the |
| | structural proper- ties of the design object. |
| Environment | The object environment is the context or scenario in which the object |
| | is intended to exist or operate (used for the noun form). The agent |
| | environment is the context or scenario in which the design agent |
| | creates the design (used for the verb form) |
| Goals | Goals describe the desired impacts of a design object on its |
| | environment. Goals are opt active (i.e. indicating a wish) statements |
| | that may exist at varying levels of abstraction |
| Primitives | Primitives are the set of elements from which the design object may |
| | be composed (usually defined in terms of types of components |
| | assumed to be available). |
| Requirements | A requirement is a structural or behavioural property that a design |
| | object must possess. A structural property is a quality the object must |
| | possess regardless of environmental conditions or stimuli. A |
| | behavioural requirement is a required response to a given set of |
| | environmental conditions or stimuli. This response defines the |
| | changes that might happen in the object or the impact of these |
| | changes on its environment. |
| Constraints | A constraint is a structural or behavioural restriction on the design |
| | object, where "structural" and "behavioural" have the same meaning |
| | as for requirements. |
| | |

Curriculum Design

According to The Wallace Foundation (2009), on a paper title "assessing the effectiveness of school leaders: new directories and processes" ascertained that effective leadership is vital to the success of a school. Research and practice confirm that there is a slim chance of creating and sustaining high-quality learning environments without a skilled and committed leader to help shape teaching and learning. That's especially true in the most challenging schools. According to Schweitzer (2019). Curriculum design is a term used to describe the purposeful, deliberate, and systematic organisation of curriculum (instructional blocks) within a class or course. In other words, it is a way for teachers to plan instruction. When teachers design curriculum, they identify what will be done, who will do it, and what schedule to follow.

A curriculum is a product of curriculum design. Several interpretations of curriculum design could be derived from the definitions of curriculum. One of the most widely accepted is the one developed by Hilda Taba (n.d) commonly known as the grassroots curriculum. "Curriculum design is seen as a statement which identifies the elements of the curriculum, states what their relationships are to each other and indicates the principles of organisation and the requirements of that organisation for the administrative conditions under which it is to operate. A design, of course, needs to be supported with and to make explicit a curriculum theory which establishes the sources to consider and the principles to apply.

According to Schweitzer (2019), curriculum design is a term used to describe the purposeful, deliberate and systematic organisation of a curriculum (instructional blocks) within a class or course. In other words, it is a way for teachers to plan instruction. When teachers design curriculum, they identify what will be done, who will do it, and when. The role of the school authorities is therefore pivotal in ensuring that the essential resources needed to implement what has been planned to be delivered gets to the learners. To Biggs& Tang (2007), curriculum design is a very important part of creating a contextually relevant and responsive teaching and learning environment for both lecturers and students. They declared that curriculum contains the knowledge, skills and competencies that students need to master in order to move to the next level in their studies, and academic lecturers and tutors who are tasked with teaching this curriculum should, therefore, ensure that the curriculum is up to date, relevant, interesting and stimulating for students. Curriculum design has been an issue since the 1940s. Tyler (1949), identified four fundamental questions which must be answered in developing any curriculum and plan of instruction:

- 1. What educational purposes should the school seek to attain? (Defining appropriate learning objectives.)
- 2. How can learning experiences be selected which are likely to be useful in attaining these objectives? (Introducing useful learning experiences.)
- 3. How can these educational experiences be effectively organised? (Organising experiences to maximise their effect.)
- 4. How can we determine whether these purposes are being attained? (Evaluating the process and revising the areas that were not effective.) (Tyler 1949, Luo, & Zhang, 2008).

The above four goals are still effective in curriculum design till date. While selecting learning experiences as the curriculum resources, different scholars, however, hold different views on curriculum design. Brown and Richard set al. introduced the elements of curriculum and plan development (Brown,2006; Richards,2008). They offered the learners a number of teaching examples in order to help them to learn the process of curriculum design. To Onwuka (1981), these steps of Tyler 1949 may be considered as sequential, from the point of view of both time and of the operations involved. However, if we conceive aims as properly deriving from the existing situation in the society rather than being externally derived or imposed, the function of identifying must be interdependent with the steps in curriculum development. The teacher involved in curriculum organisation has many roles and responsibilities. Teachers want to enjoy teaching and watching their students develop interests and skills in their interest area. The teacher may need to create lesson plans and syllabi within the framework of the given curriculum since the teacher's responsibilities are to implement the curriculum to meet student needs (Carl, 2009).

Many studies support the empowerment of teachers through participation in curriculum development. For example, Fullan (1991) found that the involvement of teachers and especially head teachers at the centre of curriculum development leads to effective achievement of educational reform. Therefore, the teacher is an important factor in the success of curriculum development including the steps of implication and evaluation. School leaders play an even more important role in the curriculum development process. Their involvement in ensuring that resources are put at the disposal of both the teachers and school has daring consequences on the outcome of school. Creating an enabling school climate is the responsibility of the school leaders, hence the need for empowering their staff who are in direct contact with the learners.

Purpose of Curriculum Design

Teachers design each curriculum with a specific educational purpose in mind. The ultimate goal is to improve student learning, but there are other reasons to employ curriculum design as well. For example, designing a curriculum for primary or secondary school pupils or students with both elementary and high school curricula in mind helps to make sure that learning goals are aligned and complement each other from one stage to the next. If a secondary school curriculum is designed without taking prior past knowledge from elementary or primary school this may cause a smooth transition from one level to the other. The most important person in the curriculum process is the teacher, especially at the implementation phase. The teacher's knowledge, experiences and competencies cannot be underestimated and the role he can or plays as a central figure to any curriculum development efforts. Teachers' support both in teaching and helping pupils or students to learn cannot be overemphasised as they put their knowledge and expertise at the disposal of their students. The teacher's role is huge and complex. The teacher has a role to translate the curriculum into learning content and experiences with specific schemes of work and notes of lessons and content that the student needs. Therefore, teachers need to get involved in the development of the curriculum because it is a fundamental professional activity. Handler (2010) reiterated the need for teachers' involvement and the need for teachers to be involved in the curriculum process. Teachers with the support of the head teacher can contribute by contributing and effectively working with curriculum development actors and agents. To assure that what is taught must be in agreement with what is in agreement with the approved curriculum document, thus teacher and head teacher involvement in the curriculum process is a forgone conclusion. No human endeavour is flawless or perfectly finished.

A curriculum must be in want of those to implement at the level of the classroom. The curriculum can only be effective for implementation when it has been accepted by the teachers, parents, students and pupils and the rest of the education community. This study therefore examines the state of the curriculum development process in our primary schools in Cameroon and how all stakeholders including head teachers and their staff can be part of the process if not yet in this important education practice. The study is relevant and important as it comes at a time when the primary education sub system is engaging in a new paradigm when the officials of the ministry of basic education are putting into place a new and holistic curriculum.

Moreso, this study is indispensable especially with the Cameroon reality. Since Lundry et al (2008), no comprehensive study has been published on the effective involvement of school leaders in the curriculum process. Despite the effort made in Cameroon in the training of teachers,, organising workshops and seminars for in-service training programmes, there still exists a huge gap in head teacher's expertise and competence in the curriculum development process. More so, even if they were trained, their participation in the process is not really felt. It is therefore against this background that this study finds its raison-d'etre. We could not watch as a bad situation gets worse. A situation needs a scientific intervention of this capacity.

In this context, the rationale for this research is to find out the extent to which School Heads are involved in the curriculum Development process. If the intention of the curriculum is to train and prepare the younger generation for future responsibilities in the management of public and personal affairs in their future communities as well as to also render necessary services, then schools have a preponderant role in the multifaceted process of the education process of learners. The study comes in once more to enlighten the system on the maxim that "the youths are leaders of tomorrow". Therefore, those future leaders must be properly trained to develop an acceptable level of respectability while portraying and respecting such values like peace, integrity, honesty, unity and love for the motherland and others as stipulated in the 1998 laws of education.

This study is also contextually relevant as it stands for the fact that in this daunting task the key actor is the School and the Head Teacher. For the school to play such an important role, the Head Teachers must be the motor, so as to facilitate, all that the school is supposed to put in place, for the proper education of the child. Without mincing words, the school leadership should be involved in one of the most of not the most important tasks of a School project, the Curriculum Development Project. It is worth noting that to attain the goals of any curricula is to transform the curriculum document or project into an educational project, that will give birth an educational product (citizen) comes out with acceptable morals, values, develop skills in languages, particularly in the two official languages, use the skills in mathematics and other disciplines for the enhancement of the economic and social growth of the country. It is therefore imperative that the Head teacher should effectively be involved in the curriculum Development process. The aim of our study is therefore to investigate the effective involvement of Head Teachers in the curriculum process with special focus on head teachers of the Basic Education sector.

Moreover, the principals in Cameroon secondary schools have essential roles to play in the process of curriculum. Apart from their managerial role, they are called upon to mediate between the state and the school. They take opinions on the challenges and needs from the students and teachers and present to the state. They also ensure teachers' presence and participation in the curriculum design process. Some principals have to grant permission and even pay teachers' transport to attend seminars, conferences and workshops to that effect. The principals are expected to understand and master the designed curriculum in order to better make provision for its implementation. The head teachers are mostly left out in these lofty roles, as a result, they have little or no knowledge on the new curriculum and of cause difficulties in implementation. It is from this perspective that this study is worth conducting as it will unveil the almost forgotten role of the principals and create a level ground for their consideration.

Again, the top-bottom nature of Cameroon educational system is another underpinning call for concern that enacts the course of this study. In Cameroon, all secondary school curriculums are conceived by a minority from the ministries. These are people who spend their time in their offices and read other countries' curriculum and through which they adapt that of Cameroon. This poses a huge challenge in the implementation phase as the head teachers, teachers and even the learners have little or no knowledge about it. This study is relevant as it examines this top bottom formula by showcasing the importance of the head teacher's role.

TYPES OF CURRICULUM DESIGN

There are three basic types of curriculum design:

- Subject-centred design
- Learner-centred design
- Problem-centred design
- Competence based design

Subject-Centred Curriculum Design

Subject-centred curriculum design revolves around a particular subject matter or discipline. For example, a subject-centred curriculum may focus on maths or biology. This type of curriculum design tends to focus on the subject rather than the individual. It is the most common type of curriculum used in public primary schools in states and local districts in the United States. Subject-centred curriculum design describes what needs to be studied and how it should be studied. Core curriculum is an example of a subject-centred design that can be standardised across schools, states, and the country as a whole. In standardised core curricula, teachers are provided a predetermined list of things that they need to teach their

students, along with specific examples of how these things should be taught. You can also find subject-centred designs in large college classes in which teachers focus on a particular subject or discipline.

The primary drawback of subject-centred curriculum design is that it is not student-centred. In particular, this form of curriculum design is constructed without taking into account the specific learning styles of the students. This can cause problems with student engagement and motivation and may even cause students to fall behind in class.

Learner-Centred Curriculum Design

In contrast, learner-centred curriculum design takes each individual's needs, interests, and goals into consideration. In other words, it acknowledges that students are not uniform and adjust to those student needs. Learner-centred curriculum design is meant to empower learners and allow them to shape their education through choices. Instructional plans in a learner-centred curriculum are differentiated, giving students the opportunity to choose assignments, learning experiences or activities. This can motivate students and help them stay engaged in the material that they are learning. The drawback to this form of curriculum design is that it is labour-intensive. Developing differentiated instruction puts pressure on the teacher to create instruction and/or find materials that are conducive to each student's learning needs. Teachers may not have the time or may lack the experience or skills to create such a plan. Learner-centred curriculum design also requires that teachers balance student wants and interests with student needs and required outcomes, which is not an easy balance to obtain.

Problem-Centred Curriculum Design

Like learner-centred curriculum design, problem-centred curriculum design is also a form of student-centred design. Problem-centred curriculum focuses on teaching students how to look at a problem and come up with a solution to the problem. Students are thus exposed to real-life issues, which helps them develop skills that are transferable to the real world. Problem-centred curriculum design increases the relevance of the curriculum and allows students to be creative and innovate as they are learning. The drawback to this form of curriculum design is that it does not always take learning styles into consideration.

Curriculum Design Tips

The following curriculum design tips can help educators manage each stage of the curriculum design process.

- *Identify the needs of stakeholders* (i.e., students) early on in the curriculum design process. This can be done through needs analysis, which involves the collection and analysis of data related to the learner. This data might include what learners already know and what they need to know to be proficient in a particular area or skill. It may also include information about learner perceptions, strengths, and weaknesses.
- Create a clear list of learning goals and outcomes. This will help you to focus on the intended purpose of the curriculum and allow you to plan instruction that can achieve the desired results. Learning goals are the things teachers want students to achieve in the course. Learning outcomes are the measurable knowledge, skills, and attitudes that students should have achieved in the course.
- *Identify constraints* that will impact your curriculum design. For example, time is a common constraint that must be considered. There are only so many hours, days, weeks or months in the term. If there isn't enough time to deliver all of the instruction that has been planned, it will impact learning outcomes.
- Consider creating a curriculum map (also known as a curriculum matrix) so that you can properly evaluate the sequence and coherence of instruction. Curriculum mapping provides visual diagrams or indexes of a curriculum. Analyzing a visual representation of the curriculum is a good way to quickly and easily identify potential gaps, redundancies or alignment issues in the sequencing of instruction. Curriculum maps can be created on paper or with software programs or online services designed specifically for this purpose.
- *Identify the instructional methods* that will be used throughout the course and consider how they will work with student learning styles. If the instructional methods are not conducive to the curriculum, the instructional design or the curriculum design will need to be altered accordingly.
- Establish evaluation methods that will be used at the end and during the school year to assess learners, instructors, and the curriculum. Evaluation will help you determine if the curriculum design is working or if it is failing. Examples of things that should be evaluated include the strengths and weaknesses of the curriculum and achievement rates related to learning outcomes. The most effective evaluation is ongoing and summative.

• Remember that curriculum design is not a one-step process; continuous improvement is a necessity. The design of the curriculum should be assessed periodically and refined based on assessment data. This may involve making alterations to the design partway through the course to ensure that learning outcomes or a certain level of proficiency will be achieved at the end of the course.

Competence-based curriculum design

This is a design based on specific competencies which is characterised by specific, sequential, and demonstrable learning of the task, activities or skills which constitutes the act to be learned and performed by students. It refers to a design of teaching and learning activities which is learner's competence-centred. Obviously, the focus is the student's competence, not subjects and others.

Society or problem-centred design

Problem or society-centred design focuses on the problems of living both for the individual and for the society in general. The curriculum design is organised to reinforce cultural traditions and also to address community and societal needs, which are currently unmet. Problem-centred designs are planned before the arrival of pupils in class although adjustments can always be made to cater for the concerns and situations of learners. To achieve this objective, the content often cuts across subject boundaries. The design is on teaching students how to look at a problem and come up with a solution to the problem. Students are thus exposed to real life issues, which helps them develop skills that are transferable to the real-world.

Forms of society or problem-centred curriculum design

Life-situation design: This design advocates that learners can transfer learning better if what they learn in school is similar or problems they face in the « real » world. Content is organised in ways that allow learners to clearly view problem areas I.e. problem-solving procedures for learning. It presents subject matter in an integrated form by cutting across the separate subjects and related categories of social life, one limitation is to determine the scope and sequence of the essential area of living.

Core curriculum or Area of living

It is also called « social function » core. It centres on general education and is based on problems arising out of common human activities. The common needs, problems and concerns of learners comprise the centre focus. The design unifies content, presents subject matter relevant to learners and encourages cooperative learning but it departs too significantly from the traditional curriculum. It also needs a very skillful teacher to handle it. The design is intended to enable the learners to study the problems that demand personal and social action.

Social problems and reconstructionist design

Advocates of this design say that the curriculum should be related to the social, political and economic development of society. They believe that through the curriculum, educators will effect social change and ultimately create a more just society. Advocates for this design are known as social reconstructionists who stress the notion of change and the need to plan for tomorrow.

The designing of the new primary school curriculum 2018 (competency-based curriculum)

The curriculum field is currently going through an interesting development in the way curricula are recently being organised. The field is witnessing a shift in curriculum design away from the traditional subject driven, learner centred and society based models to one increasingly based on the principles of competency-based(CBE). While the roots of the competency based movement can be traced in the education reform movement in the united states of America from the 1960s to 1970s, the trend today is toward worldwide adoption of the European key-competence and 21st century skills model which finds justification in the actual educational context (McClelland 1973), Gilbert (1989 as cited in Soare, 2015). Grant et al (1979, p.6) define competency-based education as a form of education that derives the curriculum from an analysis of a prospective or actual role in contemporary society and that attempts to certify student progress on the basis of demonstrated performance in some or all aspects of that role. In the same light Jones (2002, p. 9 as cited in Saore 2015) proposes three methodological landmarks that should characterise a competence-based curriculum (CBC):

- a) a description of the competence;
- b) a means of assessing the competence;

c) a standard by which the student is judged to be competent. Therefore, in order to design a CBC, there must be adopted a common vision on the competences that will be acquired by students, and that is because it will determine a shared point of view on the learning that must take place and of the organising of the context in this respect. The design of the instructional strategies will be linked with the type and structure of the competence and will depend on the way the learning context is shaped, and that must reflect both the work market requests and the lifelong learning principles (Saore 2015).

Focusing the curriculum on competencies demands a new way of perceiving the structural components of the curriculum and how they interact with one another. In this light Mulder (2001) defines competence as the capability of a person, or an organisation, to reach specific achievements. Personal competencies comprise integrated performance-oriented capabilities, which consist of clusters of knowledge structures and also cognitive, interactive, affective and where necessary psychomotor capabilities, and attitudes and values, which are required for carrying out tasks, solving problems and more generally, effectively functioning in a certain profession, organisation, position or role. This suggests that a working definition has to be developed before proceeding with the design of the curriculum. In the context of the curricula reform in Basic Education in Cameroon, competence refers to all the knowledge, skills and attitudes required of a nursery or primary school pupil. Broad-based competencies refers to knowledge, skills and attitudes that are taught across different learning domains (Ministry of Basic Education 2016, p. 20). In this connection, competence is a central concept which operates at all curriculum levels, all curricular domain and disciplines, and in every disciplinary module that belongs to a discipline structure, becoming, this way, the organiser of the entire curricular architecture, a curricular constant for all the levels, profiles and school programs (Potolea, 2012, p. 35).

Competence and Integration

Most authors today tend to agree on the definition of competence as the spontaneous mobilisation of a set of resources in order to apprehend a situation and respond to it in a more or less relevant way (Tilman, 2000), (Alexia, et al, 2006) posit that this definition indicates that a competence can only exist in the presence of a specific situation, through the integration of different skills, themselves made up of knowledge and know-how and that three elements are essential to develop a competence. According to Roegiers, (2001), an education which has as its focus the learning of competences is a prerequisite for the implementation of a pedagogy of integration which aims to enable the learner to master those

situations, he/she will have to deal with in his/her professional and/ or private life. In this connection the pedagogy of integration has four objectives, that of process, relevance, application and association.

Two major schools of thought - the Anglo-Saxon and French Speaking - can be perceived in the arena of a pedagogy of integration separated by the accent placed on the vertical and horizontal transfer of achievement. First proposed and developed by Gagné in 1962, vertical transfer proposes that a student is able to learn higher-order skills only if s/he has previous mastery of their elements (Gagné, 1962; White & Gagné, 1974), while horizontal transfer, proposes that by solving several similar-level complex situations, provided they are presented in different contexts, the students learn to transfer. The CBC for Basic Education in Cameroon appears to be underpinned by the French-speaking pedagogical view, which places the development of competences on teaching the student to learn through a complexity of ongoing "active" methods. The transfer effort here is achieved in a global way and needs little structuring (; Legendre, 2004; Meirieu, 2005). The focus is on the learning process and applying the know-how, i.e., search for information, analyse information, and explain information.

Organisation of curriculum components Structure of the curriculum

| Core skills and Competences | Pathway Subject | Domain / Weighting |
|--|---|-------------------------------|
| Communicate in the two official languages (English and French) and use at least one national language Lifelong learning The core competences | English language, Français | Basic knowledge / (60%) |
| Use basic notions in Mathematics, Science and Technology Practise social and citizenship values (morality, good governance and budgetary transparency) Lifelong learning The core competences | Mathematics | |
| Use basic notions in Mathematics, Science and Technology Demonstrate a spirit of autonomy, a sense of initiative, creativity, and innovation Lifelong learning The core competences | Science and Technology (Health Education, Environmental | |

| | science and | |
|---|--------------------|-------------------|
| | technology) | |
| Practise social and citizenship values (morality, | Social studies | Domain 2: |
| good governance and budgetary transparency) | (Citizenship, | Communal life |
| Lifelong learning | History, and | and National |
| The core competences | Geography) | Integration (5%) |
| Demonstrate the spirit of autonomy, a sense of | Vocational | |
| initiative, creativity, and entrepreneurship | studies (Agro | Domain 3: |
| Lifelong learning | pastoral farming, | Vocational and |
| The core competences | Arts, Crafts and | life skills (20%) |
| | Home | life skills (20%) |
| | Economics) | |
| Practise physical, sports and artistic activities | | |
| • Demonstrate a spirit of autonomy, a sense of | Arts (Visual arts, | |
| initiative, creativity, and entrepreneurship | literary arts and | |
| Lifelong learning | performing arts) | |
| • The core competences | | |
| Practise physical, sports and artistic activities | Physical | |
| Lifelong learning | Education and | |
| • The core competences | Sports | |
| Communicate in the two official languages | | |
| (English and French) and use at least one national | | |
| language | National | Domain 4: |
| Lifelong learning | languages and | Cultural Identity |
| • The core competences | Cultures | (5%) |
| • Practise social and citizenship values (morality, | | |
| good governance and budgetary transparency) | | |
| Use basic information and communication | Information and | Domain 5: |
| technology concepts and tools | Communication | Digital Literacy |
| Lifelong learning | Technologies | (10%) |
| The core competences | (ICTs) | (10/0) |

Scope and sequence chart

Scope

| Subject | Class | | | | | |
|---|-------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| English Language | X | X | X | X | X | X |
| Mathematics | X | X | X | X | X | X |
| Science and Technology (Health Education, Environmental science and Technology) | X | X | X | X | X | X |
| Français | X | X | X | X | X | X |

| Social Studies (Citizenship) | X | X | X | X | | |
|--|---|---|---|---|---|---|
| (History and Geography) | | | | | X | X |
| Vocational Studies (Agro pastoral farming, Arts, Crafts) | X | X | X | X | | |
| (Home Economics) | | | | | X | X |
| Arts (Visual arts, literary arts and performing arts) | X | X | X | X | X | X |
| Physical Education and Sports | X | X | X | X | X | X |
| National Languages and Cultures | X | X | X | X | X | X |
| Information and Communication Technologies (ICTs) | X | X | X | X | X | X |

Inspired by the core skills and competences subjects have been selected and grouped into five learning domains (Basic knowledge, communal life and national integration, vocational and life skills, cultural identity and digital literacy) that will facilitate the acquisition of the skills and competences by learners. There are altogether nine subjects consisting of five individual subjects and four broad fields. The subjects brought together under a broad field are not treated as an interrelated field, but rather are composed of several self-contained units. The contents of the subjects are further divided into unit of study.

Sequence

Sequencing of the content is based on learning hierarchies, especially the principle of simple to complex (Gagné, 1972 and Briggs, 1979), who argue that sequencing should be in consonance with our knowledge about theories of learning. The sequencing of the content as can be observed from the excerpt below taken from the English Language content of the syllabuses, enables learners to gradually build constructs and principles from data and concepts and to build holes from a systematic and analytic presentation of parts. It indicates that the development of the curriculum has been correlated to the cognitive and moral stage of development of the learners.

English language

| CLASS 1 | CLASS 2 | CLASS 3 | CLASS 4 | CLASS 5 | CLASS 6 | | |
|------------------------|----------------|----------------|----------------|----------------|----------------|--|--|
| Listening and speaking | | | | | | | |
| Units/Contents | Units/Contents | Units/Contents | Units/Contents | Units/Contents | Units/Contents | | |
| Phonemic | Phonemic | | | | Sound | | |
| awareness | awareness | | Sound | Sounds | recognition | | |
| - Letter | - Sounds of | Sound | recognition | - | - Tongue | | |
| sounds | the alphabet | recognition | - Consonant | Homophones | twisters | | |
| - Sounds of | - Sounds of | - Diphthongs | clusters | - Minimal | - | | |
| digraphs | digraphs | - Triphthongs | - Contracted | pairs | Homophones | | |
| - Letter | - Letter | | forms | Etc. | - Minimal | | |
| names | names | | | | pairs etc. | | |

Vertical and Horizontal Articulation

The core competences provide interrelationships between and among the different subjects of the curriculum therefore, providing a balanced articulation of the curriculum. This is reinforced by eight learning themes that have been developed and which cut across all the subjects. Though the subject lines remain distinct, they are less so in the broad fields. Because subjects are not assigned to departments in Primary schools in Cameroon, it may facilitate the promotion of curriculum synthesis if teachers are creative enough and motivated to do so since each teacher assigned to a class teaches most of the subjects in any grade level.

Pedagogy

The curriculum has adopted a pedagogy of integration with teaching and learning anchored on Project Based Learning (PBL), Cooperative Learning (CL) and Integrated Theme Learning (ITL). It is expected that this approach will facilitate a holistic development of competences in the learners since it is a learner centred pedagogy in which teachers are expected to give attention to the promotion of gender equity, inclusiveness and multiple intelligences.

Integrated Learning Themes

| LEVEL I | LEVEL II | LEVEL III |
|-----------------------------|-----------------------------|-----------------------------|
| The home | The home | Nature |
| The village/town/the school | The village/town/the school | The village/town/the school |
| Occupations | Occupations | Occupations |
| Travelling | Travelling | Travelling |
| Health | Health | Health |
| Games | Games | Sports and leisure |
| Communication | Communication | The universe and space |

Teaching Materials

Recommended teaching materials are drawn from the following categories; Visuals, real things, audio, audio-visuals, instructional games and models. The specific materials for teaching each subject such as to enable hands on use by learners. The use of teaching materials is of primary importance in the implementation process. For each lesson learning tasks are expected to be performed by pupils and for each task the appropriate materials need to be located and made available for use by learners. Therefore, teachers are expected to devise especially locally suitable materials to accompany each lesson. These are also imperative if the teacher is to successfully use the predominantly recommended problem based and cooperative learning methods of teaching specified in the curriculum document.

Assessment

The curriculum recommends the use of authentic assessments; Performance, comprehensive and self-assessments to gather data on pupil's learning in order to assist all those concerned in the process of decision making. Diagnostic assessment is recommended for use by teachers before the start of each lesson to help determine the level of knowledge, skill and attitudes which pupil have about the new material to be learned. This will serve as a guide to the types of strategies the teacher will use to select the activities and methods that can best be able to ensure that the learning needs of each pupil are taken care of and ensure that the set learning outcomes will be achieved. Formative assessment is prescribed to be used as an integral part of the teaching and learning process and should keep learners in permanent interaction with both the learning activities and their peers, and give the teacher the opportunity to provide feedback on a sustained manner. This is expected to lead to the achievement of the goals of the curriculum. Summative assessment is used to measure the

extent to which pupils have attained the set learning outcomes of the curriculum and is recommended to be used periodically by teachers to achieve this goal.

Sample Curriculum Domains of level 1 (primary 1 & 2)

The 5 domains of level 1 (primary 1 & 2), their pathway subjects, the terminal outcomes and the suggested assessment criteria

| DOMAIN | SUBJECT | TERMINAL LEARNING OUTCOMES | EVALUATION CRITERIA |
|---------------------------------|-------------------------|---|--|
| Domain 1: Basic knowledge | | | |
| | ENGLISH LANGUAG E | listen attentively for information in a given context interpret information and react, appropriate communicate to express feelings, ideas and thoughts read texts fluently in a given context write texts legibly and coherently to express feelings, ideas and thoughts show great interest in communicating in English | Fluency in speaking Audibility in speech Sustenance of attention Willingness to take turns in speaking Use of appropriate tones in speech Fluency and audibility in reading, Respect of voice pitch Correctness of answers to comprehension questions Presentation of materials Respect of instructions Legibility, meaning, coherence, the right posture, right direction, presentation of materials, respect of instructions |
| | MATHEMA TICS | Solve problems involving sets and logic Solve problems involving number operations Solve problems involving measurement units Construct different geometric shapes Categorise statistics on graphs Use mathematical skills in daily life Show interest in mathematics | Group, match and classify objects and numbers in sets using different attributes Correct representation of sets, symbols and figures Correct use of symbols, signs and diagrams Ordering and consistency Appropriate use of operations and formulae |

| | SCIENCE AND TECHNOLO GY | Demonstrate knowledge of the human body, Its functioning as well as care and hygiene Describe the environment including plants and animals Use scientific instruments and technological tools Respect scientific procedures and norms Construct miniatures and models Reject superstitious beliefs and myths | Associating quantities to figures and symbols Proper use of mathematics tools Solve meaningful daily life problems Respect of procedures in experiments Exactitude of experiment results; Improvisation of materials in experiments; Positive observable change in behavior Dexterity (careful handling and manipulation of objects) Correct interpretation of phenomenon / results. |
|--|----------------------------------|--|--|
| | FRANCAIS | Ecouter attentivement et s'exprimer de façon compréhensible avec le geste approprié. Lire de courts textes simples en respectant la prononciation et l'intonation puis relever des informations. Écrire des petits textes d'une (01) a trois (03) phrases en rapport avec des situations de la vie quotidienne. | Correcte et coherente Adéquation de la production à la situation Respect des règles grammaticales Déchiffrage / décodage des sons, mots et phrases, informations pertinentes Respect de la prononciation et de l'intonation Adéquation du texte a la situation Correction des énoncés Coherence de la production |
| Domain 2: Communal life and national integration | SOCIAL | - identify the effects of human activities | - Display a spirit of |
| | STUDIES | - relate human activities to development | objectivity, |

| Domain 3: Vocational and life | | display a spirit of objectivity, tolerance, and patriotism practise values of harmonious living show love for nation and for the outside world respect differences in choices and personality practise behaviour which will lead to the protection and security of people and national property | tolerance, and patriotism Respect of national emblems Practise of social values Involvement in awareness campaigns Logical explanations of events Positive change of attitude |
|-------------------------------------|---------------------------|---|--|
| skills | VOCATION AL STUDIES | At the end of this level, learners will be able to: use equipment to produce objects following a spelt-out procedure acquire knowledge, skills and attitudes for productive work at home and effective home management acquire knowledge, skills and attitudes to manipulate local materials through given processes and procedures to produce objects produce arts objects using local materials demonstrate a spirit of collaboration manifest high self-esteem, interest, initiative, creativity, resourcefulness and good value judgment | Quality of material used Respect of instructions Quality of final product Consistency in the explanatory note Time used to carry out the task Involvement in team work |
| | ARTS | Create artistic objects Draw imaginative and creative literary works expressing feelings and emotions Use voice, body and/or inanimate objects conveying feelings and emotions Show interest in morality and appropriate life styles | Compliance with guidelines and techniques (correct use of geometric shapes and colours) Ability to write imaginatively, creatively expressing original thoughts Ability to create and sing a song |

| | PHYSICAL EDUCATIO N | | Synchronisation between voice variations and percussion. Ability to convey feelings and thoughts through music Mastery of the stage and respect for the text Ability to act a role freely Ability to recognize and use appropriate costumes, make-up and hairstyles Descent looks,behaviour,respect,pun ctuality, Cheerful nature,respond positively to corrections etc |
|-----------------------------------|---------------------------|---|---|
| | | Discover his/her body Practise social and interpersonal communication skills Stimulate their physical, affective, intellectual and emotional growth Maintain a healthy body | Alertness, vigilance, posture Accuracy, respect of rules, fanfare, collaboration Respect of signals, endurance Identify parts of the body and their rules Ability to carry out routine activities effectively |
| Domain 4: Cultural identity | | Communicate appropriately using at least five sentences in any given context Sing traditional songs fluently Perform cultural activities/scenes Listen attentively without interrupting the speaker Read at least five sentences and bring out the meaning in a related theme. Write a correct and coherent sentence to pass across information in any given context | - Respect of rules related to the spoken - Languages - Audibility, fluency, articulation, intonation in speech - Sustenance of dialogue and animation - Correctness of responses/correctness of gestures/actions |

| | | | Correctness of form, coherence and neatness in writing Respect of rhythm and dance steps Observance interactions with others and participation in projects. |
|-----------|--|--|---|
| Domain 5: | | | |
| Digital | | | |
| Literacy | | | |
| | INFORMAT ION AND COMMUNI CATION TECHNOLO GY | Use computer equipment and ICT tools Perform basic word processing Produce basic Spreadsheet Apply basic health and safety measures when using computers and other ICT devices Practise basic computational thinking Use ICTs responsibly | Ability to identify ICT tools and their parts Correct use of ICT tools Ability to use the keyboard Identify applications and launch them Respect health, hygiene and safety rules while manipulating ICT tools. Ability to explain computational concepts using real life situations |

Subject weighting and teaching time allocation

The weight assigned to each subject in the curriculum and the teaching time allocated for its accomplishment are indicated in the table that follows. The allocation is both for schools which run either a one or two shift system.

Time Table

| | Two shifts | | One shift | | |
|--------------------------------|--------------|--------------|-----------------|-----------------|--|
| Subjects | Annual hours | Weekly hours | Annual hours | Weekly hours | |
| Mathematics | 92 hrs | 4hrs | 115 hrs | 5hrs | |
| Science and Technology | 92 hrs | 4hrs | 92 hrs | 4hrs | |
| Social studies | 69 hrs | 3hrs | 69 hrs | 3hrs | |
| English language | 92 hrs | 4hrs | 115 hrs | 5hrs | |
| Français | 46hrs | 2hrs | 69 hrs | 3hrs | |
| National Languages and Culture | 46hrs | 2hrs | 46hrs | 2hrs | |
| Arts | 23 hrs | 1hr | 23 hrs | 1hr | |
| Vocational studies | 46hrs | 2hrs | 23 hrs | 3hrs | |
| Physical Education and Sports | 46hrs | 2hrs | 69 hrs | 2hrs | |
| ICTs | 46hrs | 2hrs | 46hrs | 2hrs | |
| Total Hours | 598 hrs | 26 hrs | 46hrs | 30hrs | |
| Breaks | 53h 20mins | 1h 40 mins | 690 hrs | 4h 30 mins | |
| Integration and evaluation | 225 hrs | 25 hrs per | 270 hrs | 30hrs per | |
| Activities | | week | | week | |
| Total instruction period | 853h 20 mins | 16h 40mins | 1104 hrs | 34h 30 | |
| | | | | mins | |

IMPLEMENTATION PHASE

Curriculum implementation entails putting into practice the officially prescribed courses of study, syllabuses and subjects. The process involves helping the learner acquire knowledge or experience. It is important to note that curriculum implementation cannot take place without the learner. The learner is therefore the central figure in the curriculum implementation process. Implementation takes place as the learner acquires the planned or intended experiences, knowledge, skills, ideas and attitudes that are aimed at enabling the same learner to function effectively in a society.

Looking at it from this perspective, curriculum implementation also refers to the stage when the curriculum itself, as an educational programme, is put into effect. Putting the curriculum into operation requires an implementing agent. Stenhouse identifies the teacher as the agent in the curriculum implementation process. She argues that implementation is the manner in which the teacher selects and mixes the various aspects of knowledge contained in a curriculum document or syllabus. Implementation takes place when the teacher-constructed syllabus, the teacher's personality, the teaching materials and the teaching environment interact with the learner.

Curriculum implementation therefore refers to how the planned or officially designed course of study is translated by the teacher into syllabuses, schemes of work and lessons to be delivered to students.

✓ Models of Curriculum Implementation

There exist several models of curriculum implementation but for the purpose of this work only the selected ones that are applicable in implementing curriculum in our various institutions shall be discussed:

• ORC model (Overcoming Resistance to Change)

The letters 'ORC' stands for 'Overcoming Resistance to Change'. This model rests on the assumption that the success or otherwise of curriculum implementation primarily depends on the impact the developer makes on the users of curriculum such as, teachers, students and the society in general. If we desire change then we must address people's difficulties, their misunderstandings, or other such related factors.

We must point out to them what the curriculum incorporates, wherever possible and appropriate, their values, assumptions and beliefs. And while addressing the persons within the system, we should remember that to get the desired result the subordinates should be motivated rather than ordered. Curriculum developers should, therefore, identify and deal with the concerns of the staff in various educational institutions when implementing new curriculum. We can group the concerns into the following four broad developmental stages:

Developmental stage versus Developmental concerns: They are the following

Unrelated Concerns: At this stage, teachers do not perceive a relationship between themselves and the suggested changes. For example, if a new programme is being developed, a teacher at this stage may or may not be aware of this effort. If he/she is aware of it, he/she may not consider it something that concerns him or her. The teacher would not resist the change, because he/she really does not perceive the change as something that influences his/her own personal or professional domain.

Personal Concerns: At this stage, the teacher will react to the innovation in relation to his/her personal situation. He/she is concerned with how the new programme compares to the one already in use.

Task-related Concerns: This stage relates to the actual use of the innovation. The teacher at this stage will be concerned with the time required for teaching the new programme, availability of materials, strategies to be adopted, etc.

Impact-related Concerns: The teacher at this stage will be concerned with how the innovation will influence others. When working with the ORC model, we must deal directly

with the concerns at stages 2, 3 and 4 in order to serve the purpose for which the change is carried out.

LOC model (Leadership-Obstacle course model)

LOC is the acronym for 'Leadership-Obstacle Course' model. This model treats staff resistance to change as problematic and proposes that we should collect data to determine the extent and nature of the resistance in implementing the curriculum. This can be carried out by the following:

- i. The organisational members must have a clear understanding of the proposed innovation;
- ii. Individuals within the organisation must be given relevant skills so that they possess the capabilities required for carrying out the innovation;
 - iii. The necessary materials and equipment for the innovation must be furnished;
- iv. If need be, the organisational structure must be modified so that it is compatible with the innovation being suggested;
- v. The participants in the innovation must be motivated to spend the required time and effort to make the innovation a success.

The LOC model considers educational change as a sequence of three stages:

- i. Initiation;
- ii. Attempted implementation; and
- iii. Incorporation.

We should note here that implementation obstacles solved at one point at a time using this model may arise again at another point. This model, therefore, has a feedback and monitoring mechanism to determine if problems once solved keep reappearing and so on.

Linkage model

The 'linkage' model recognises that there are innovators in research and development centres such as the universities. Educators in the field sometimes however, find some attempts that are innovative and inappropriate for solving the problems. What is therefore needed is a match between the problems and innovations to establish linkages with the established research centres.

This model envisages two systems: user system and resource system. There has to be a link between these two systems. The resource system should have a clear picture of the curriculum user's problems, if it is to retrieve or create appropriate educational packages. A

successful resource system must proceed through a cycle of diagnosis, search, retrieval, fabrication of solution, dissemination and evaluation in order to test out its product. Thus, in the linkage model, the basic process is the transfer of knowledge.

RCA (Rand Change Agent model)

The Rand Change Agent (RCA) model suggests that organisational dynamics seem to be the chief barriers to change. As in ORC and LOC models it puts forward the following three stages in the change process:

- i. Initiation: At this stage, the curriculum developers work to secure the support for the anticipated change. To support a change, such as a new programme people must understand and agree that it is legitimate. Thus, curriculum implementation activity requires the personal backing of the individuals involved. For example, at this stage, we should inform the teachers about the need for change and how it might take place.
- ii. Implementation: At this stage, the proposed change, i.e., the new programme and the organisational structure are adjusted to operationalize the change.
- iii. Incorporation: During this stage, the changes implemented become part of the established programme. The assumption behind this is that the success of the implementation is a function of:
 - a) The characteristics of the proposed change;
 - b) The abilities of the academic and administrative staff;
 - c) The readiness of the local community; and
 - d) The organisational structure.

During the incorporation stage, the changes implemented become part of the established programme. At this stage the programme implemented is provided with the necessary personnel and financial support

Instructional methods

From approaches of teaching, comes the different instructional methods. It is a broader term than method. It is a view of looking at things. It is a set of ideas and has no scientific logic. It is the overall view or ideas to face a problem. It is a personal philosophy of teaching. Approach can also have many methods. Teaching approach is like the form or the way we teach or how we do it. There are various approaches which are used in the teaching -learning process. The following are the main approaches of teaching learning:

- ✓ **Teacher Centred Approach**: Teacher centred approaches are more traditional in nature, focusing on the teacher as instructor. They are sometimes referred to as direct instruction, deductive teaching or expository teaching, and are typified by the lecture type presentation. In these methods of teaching, the teacher controls what is to be taught and how students are presented with the information that they are to learn.
- ✓ Child centred approach: Student centred approaches (sometimes referred to as discovery learning, inductive learning, or inquiry learning) place a much stronger emphasis on the learner's role in the learning process. When you are using student- centred approaches to teaching, you still set the learning agenda but you have much less direct control over what and how students learn.
- ✓ Inductive and Deductive approach: In inductive approach students move towards specified (example) to general (rules). At first many examples are put forward to the student and then he draws out a conclusion on the basis of these examples.
- ✓ Herbartian approach: This approach is given by John Fredric Herbart. He advocated that teaching should be planned actively if we intend to make it. This approach is based on appreciative mass theory of learning. Therefore, he gives more emphasis on teacher presentation. The proposition of that theory is that the learner is like a clean slate and all the knowledge is given from outside. If new knowledge is imparted by linking with old knowledge of the student, it may be acquired easily and retained for a longer period. The teaching content should be presented into units and units should arrange in a logical sequence. The emphasis is given on content presentation. Herbert gave five steps for this approach:
 - Preparation
 - Presentation
 - Comparison and abstraction
 - Generalisation
 - Application
- ✓ Evaluation Approach or Bloom's Approach: The concept of evaluation approach is given by B. S. Bloom. His main emphasis was that testing should be based on teaching and both these activities should be objectives centred. Today teaching is organised by using the evaluation approach. Under this approach yearly plans and unit plans are prepared. It has three main steps:
 - Formulating Educational Objectives
 - Creating Learning Experiences

- Evaluating the Change behaviour
- 6) RCEM Approach: This approach is developed at Regional College of Education Mysore (RCEM). In this approach the teaching learning situations, strategies and aid material is properly stated in the name. It has three steps:
 - Input
 - Process
 - Output

METHODS

It is the term of pedagogy; main focus is on effective presentation of subject matter to have mastery over it. It is a step by step scientific way of presenting the subject matter. Teaching method is what kind of activity we use in order to teach. Method refers to the procedure within an approach. It is nothing but a scientific way of presenting the subject keeping in mind the psychology and physical requirements of the children. It is a process or procedure whose successful completion results in learning or as a means through which teaching becomes effective. It is the formal structure of the sequence of acts. The term method covers both strategy and techniques of teaching. Different strategies may be adopted in following a method. Method is related to the nature of content of a subject to be taught. Teaching method is a style of presentation of content in the classroom. Method refers to the formal structure of the sequence of acts commonly denoted by instructions. It involves the choice of what is to be taught and in which order is to be presented. There are two main types of teaching methods which are non-participatory method and participatory method.

- Non-Participatory method: In these types of methods the teacher casts himself/herself in the role of being a master of the subject matter. The teacher is looked upon by the learners as an expert or an authority. Learners on the other hand are presumed to be passive and copious recipients of knowledge from the teacher. Examples of such methods are lecture method and demonstration method.
- ➤ Participatory methods: This refers to the way in which teachers and students are in constant interaction, active involvement and continuous exchange of views and ideas in the overall teaching and learning. These methods are sometimes known as interactive teaching methods or learner centred teaching methods. It is a shift from a belief that learners are empty plates who are supposed to be imparted with knowledge to a belief that learners can construct knowledge and learn on their own if properly guided. They are designed only for smaller groups of participants, but their advantage is that they encourage better retention

of what is learned. They are contemporary modern methods of education. Examples of such methods are discussion method, question answer method, project method, problem solving method etc.

A method being a technique of doing something or a planned way of doing something or a framework, it is the different types of teaching strategies used by teachers in their efforts to facilitate students' learning. In the course of this activity, curriculum goals and objectives are being translated into experiences. Different types of teaching strategies include:

- ➤ Lecturing: Lecturing is the oldest method of teaching applied in educational institutions. This teaching method is a one-way channel of communication of information. Students' involvement in this teaching method is just to listen and sometimes pen down some notes deemed necessary to them during the lecture, combine the information and organise it. (Umar, 2012). One of the problems in this method is to grab the attention of students in the classroom. Another big problem is that many students in the class cannot follow the theme. This method has many limitations to students' achievement of competences as it has a big gap with what they face in the world of work. However, students need to be lectured before getting to the practical part of their lessons which has a closer relationship with their working environment.
- ➤ **Demonstration:** Demonstration is a method of teaching used to communicate an idea with the aid of visuals such as flip charts, posters, power point, etc. A demonstration is the process of teaching someone how to make or do something in a step by step process according to Wikipedia on the 29th May 2021). This method is also good to be applied to learners as they have the opportunity to be demonstrated and equally demonstrate what they will meet in the world of work. In this way, their assurance for employment is guaranteed as well as their effectiveness at work.
- ➤ Explanation: "Good teaching is good explanation" (Calfee 1986:1-2). This quotation reflects the belief that the capacity to explain is very important in teaching (Havita 2000). According to Behr (1988: 189), the art of explaining to others is the central activity of teaching. Therefore, to achieve the goal of teaching, the teacher must adopt effective communication skills that can lead to learners' understanding of the subject being taught. This will in turn boost learners' morals for competence achievement.
- ➤ Cooperative learning (CL): According to the Johnson & Johnson model (1989), cooperative learning is instruction that involves students working in teams to accomplish a common goal, under conditions that include the following elements:

- Positive interdependence,
- ❖ Individual accountability,
- ❖ Face-to-face promotive interaction,
- Appropriate use of collaborative skills,
- Group processing.

Working together to achieve a common goal produces higher achievement and greater productivity than does working alone. It results in more high-level reasoning, more frequent generation of new ideas and solutions and greater transfer of what is learned within one situation to another. (p. 7). There is no person who is an island in a working environment. This draws our attention to the fact that students are to practise how to cooperate even while in school so as to enable them better their relationship at work and improve on their output.

- Experiential learning: Experiential learning is a powerful and proven approach to teaching and learning that is based on one incontrovertible reality: people learn best through experience (DA Kolb, 2014). Giving learners the opportunity to learn through experience builds their competences and as a result, prepares them for employment.
- ➤ Discussion: Discussion methods are a variety of forums for open-ended, collaborative exchange of ideas among a teacher and students or among students for the purpose of furthering students thinking, learning, problem solving, understanding or literary appreciation (Wilkinson, 2009). Participants present multiple points of view, respond to the ideas of others, and reflect on their own ideas in an effort to build their knowledge, understanding or interpretation of the matter at hand. (p. 330). The inclusion of discussion topics in school curriculum is a major step to enhance students' learning and improve on their competences achievement through the curriculum quality.
- ➤ *Dramatisation:* Dramatisation helps to develop enquiry skills, to encourage negotiation, understanding and creativity. It can enhance performance skills such as character development and storytelling and be used across the curriculum to actively involve students in their own learning according to wikipedia on the 21st of September 2021).
- ➤ Role play: it is a teaching strategy that fits within the social family of models (Joyce and Weil, 2000). This strategy emphasises the social nature of learning and sees cooperative behaviour as stimulating students both socially and intellectually. Students' competences can be well built through role play and as a result, their competences are enhanced.
- > Simulation: Simulation refers to the imitation of real world activities and processes in a safe environment. Simulations aims to provide an experience as close to the'

real thing' as possible; however, a simulated activity has the advantage of allowing learners to 'reset' the scenario and try alternative strategies and approaches. (https://blogs.shu.ac.uk on the 21st of September 2021). The use of simulation as a teaching method is very important to build up students' competences and becomes a necessity in higher education studies in Cameroon as this will help the student to be more acquainted with what they will meet in the field of work.

- ➤ Democratic learning: It is an educational ideal in which democracy is both a goal and a method of instruction. It brings democratic values to education and can include self-determination within a community of equals as well as such values as justice, respect and trust according to Wikipedia consulted on the 21st of September 2021). Democratic learning will make the employers and curriculum implementation authorities work hand in gloves to see that learners graduate with the necessary skills to have a job.
- ➤ Project-based learning (PBL): It is an instructional approach build upon learning activities and real tasks that have brought challenges for students to solve. These activities generally reflect the types of learning and work people do in the everyday world outside the classroom (Goodman, 2010). There is no doubt that when learners engage in such a type of learning they will gain excellent competences for employment.
- Research-based learning: This is a teaching and learning concept that encourages students to assume the role of researchers. Before formulating a hypothesis, students make initial investigations in their topic, then conduct a study and finally evaluate the findings (Arora, Parul & Neha, 2017). In this way, students build competences that can help them gain employment.

All these teaching strategies have an impact on the curriculum quality to be used in the teaching and learning process so as to enhance competence, achievement and subsequent employability. Arguably, it is therefore necessary to clarify the conceptualization of the term curriculum, before the outset of any curriculum-related endeavours such as curriculum development, implementation, evaluation, and empirical studies undertaken by administrators, teachers, researchers, and evaluators.

Without careful and continuing attention to implementation, planned changes in curriculum and instruction rarely succeed as intended. How change is put into practice, to a large extent, determines how well it fares Mkpa (2011) states that implementation refers to what actually happens in practice as compared to what was supposed to happen. Curriculum implementation includes the provision of organised assistance to staff in order to ensure that the newly developed curriculum and the most powerful instructional strategies are actually

delivered at the classroom level. There are two components of any implementation effort that must be present to guarantee the planned changes in curriculum and instruction succeed as intended:

- Understanding the conceptual framework of the content/discipline being implemented; and,
- Organised assistance to understand the theory, observe exemplary demonstrations, have opportunities to practise, and receive coaching and feedback focused on the most powerful instructional strategies to deliver content at the classroom level.

The superintendent/principal/ head teacher responsible for curriculum implementation and for determining the most effective way of providing organised assistance and monitoring the level of implementation. A curriculum framework will describe the processes and procedures that will be followed to assist all staff in developing the knowledge and skills necessary to successfully implement the developed curriculum in each content area. This framework will, at a minimum, describe the processes and procedures for the following curriculum implementation activities to:

- Study and identify the best instructional practices and materials to deliver the content;
 - Describe procedures for the purchase of instructional materials and resources;
- Identify/develop exemplars that demonstrate the learning behaviours, teaching, and learning environment to deliver the content;
- Study the current status of instruction in the content area (how teachers are teaching);
- Compare the desired and present delivery system, identify differences (gap analysis), and develop a plan for addressing the differences;
- Organise staff into collaborative study teams to support their learning and implementation efforts (address the gaps);
- Provide ongoing professional development related to instructional strategies and materials that focuses on theory, demonstration, practice and feedback;
 - Regularly monitor and assess the level of implementation;
- Communicate with internal and external publics regarding curriculum implementation;
- Involve staff, parents, students, and community members in curriculum implementation decisions.

It is the responsibility of the superintendent/principal to keep the board apprised of curriculum implementation activities, progress of each content area related to curriculum implementation activities, and to develop administrative regulations for curriculum implementation including recommendations to the board. New curriculum implementation in any educational jurisdiction involves a variety of stakeholders, their roles in the implementation process contribute to the degree to which the new curriculum will be successfully implemented in the local institutions. These stakeholders are governments who formulate new curriculum, middle-level administrators who interpret the new curriculum and communicate them to the actual implementers, and the teachers who implement these directives.

Desimone (2002), in reviewing and analysing the literature documenting reform implementation, found that four new curriculum attributes in addition to specificity contributed to smooth implementation, which were: consistency, authority, power, and stability. She referred to specificity as being how extensive and detailed a new curriculum is. She contended that the more specific a new curriculum was in terms of materials, information, professional development, guidance, and instructions provided, the more likely teachers were to be able to implement it. However, new curriculum as a policy often contain only shadowy guidance for practice (Matland, 1995), tending to make it difficult for local implementers to execute, or allowing the grass-roots groups too much latitude in implementation. Desimone (2002) contended that the authoritative aspects of a curriculum policy can be sorted into three categories: (1) normative authority, which includes teacher participation in decision making, participation in networks and collaborative activities, and norms related to race, ethnicity and income; (2) individual authority, i.e., principal leadership; and (3) institutional authority, which includes district leadership, resource support, and parent and community support.

Desimone (2002) argued that a policy tends to achieve more success in implementation of new curriculum if it is operated in a stable environment with little turnover, i.e., a low mobility of teachers, students, and administrators. While administrative pressure alone cannot effect changes in teachers' perceptions, and routine practices, support in terms of knowledge, skills, abilities, resources, time, etc. is needed to enable efficient implementation of ne", curriculum. From a case study of one New Zealand high school, Timperley and Robinson (1997) identified reasons for the slow implementation of the national new curriculum in the locality. They found that the local school's professional norms and beliefs about authority and the culture of conflict avoidance precluded effective

implementation. Therefore, they called for an ongoing dialogue about the adequacy and congruence of the beliefs and practices that influence both the proposed new curriculum and the local practices during the process of curriculum formulation.

In implementing the new curriculum, vocational teachers as implementers are the most important players, and they are the key to successful curriculum policy implementation. Moreover, teachers have often been diagnosed as "resistant to change", in ignoring or subverting curricular innovations (McLaughlin, 1987; Smith, 2005). Spillane et al. (2002) looked at their situation in a different light, explaining that this is because teachers often lack the capacity, the knowledge, skills, personnel, and other resources necessary to work in ways that are consistent with the new curriculum. Moreover, they may simply not understand what is expected of them or do not know how to incorporate the changes into their daily practice. Wang and Cheng (2005) concurred, saying that teachers' failure to implement new curriculum as the government had hoped may signal their uncertainty about outcomes and their personal beliefs that the new practices are not as good as the previous ones. Gross et al. (1971) argue that it is not the teachers who are at fault, but rather their supervisors or principal, who are inadequate in both supporting and motivating their subordinates. In other words, teachers' difficulties in enacting a new curriculum may be in a large part due to the lack of appropriate support from the supervisor or principal as translator of the new curriculum.

Spillane et al. (2002) have discussed impediments to implementation and reasons why implementation fails in actual practice when transmitted through the teachers who are the actual implementers. In summary, these obstacles are: teachers' lack of clear understanding of the innovation; lack of knowledge, skills, and resources needed to conform to the innovative initiative; incompatibility of organisational arrangements with the innovation; lack of staff motivation; teachers' prior knowledge, beliefs, and experiences; different interpretations of the new curriculum; and teachers' social, school culture, and historical contexts. Moreover, teachers' willingness to implement new curriculum was influenced by the social and personal dimensions of classroom teaching and by teachers' goals and beliefs. In other words, changes were mitigated by the contextual factors.

Without careful and continuing attention to implementation, planned changes in curriculum and instruction rarely succeed as intended. How change is put into practice, to a large extent, determines how well it fares. Mkpa (2011) stated that implementation refers to what actually happens in practice as compared to what was supposed to happen. Curriculum implementation includes the provision of organised assistance to staff in order to ensure that

the newly developed curriculum and the most powerful instructional strategies are actually delivered at the classroom level. There are two components of any implementation effort that must be present to the planned changes in curriculum and instructions succeed as intended:

- Understanding the conceptual framework of the content/discipline being implemented; and,
- Organised assistance to understand the theory, observe exemplary demonstrations, have opportunities to practise, and receive coaching and feedback focused on the most powerful instructional strategies to deliver the content at the classroom level.

The superintendent/principal/head teacher is responsible for curriculum implementation and for determining the most effective way of providing organised assistance and monitoring the level of implementation. A curriculum framework will describe the processes and procedures that will be followed to assist all staff in developing the knowledge and skills necessary to successfully implement the developed curriculum in each content area. This framework will, at a minimum, describe the processes and procedures for the following curriculum implementation activities to:

- Study and identify the best instructional practices and materials to deliver the content;
 - Describe procedures for the purchase of instructional materials and resources;
- Identify/develop exemplars that demonstrate the learning behaviours, teaching, and learning environment to deliver the content;
- Study the current status of instruction in the content area (how teachers are teaching);
- Compare the desired and present delivery system, identify differences (gap analysis), and develop a plan for addressing the differences;
- Organise staff into collaborative study teams to support their learning and implementation efforts (address the gaps);
- Provide ongoing professional development related to instructional strategies and materials that focuses on theory, demonstration, practice and feedback;
 - Regularly monitor and assess the level of implementation;
- Communicate with internal and external publics regarding curriculum implementation;

• Involve staff, parents, students, and community members in curriculum implementation decisions.

It is the responsibility of the superintendent/principal to keep the board apprised of curriculum implementation activities, progress of each content area related to curriculum implementation activities, and to develop administrative regulations for curriculum implementation including recommendations to the board.

THE COMPETENCY BASED APPROACH

The CBA facilitates the development of skills through the practice of Project Based Learning, Cooperative Learning and Integrated Theme Learning. The underlying philosophy of the CBA requires that learning should be based on the potentials of the learner. The learner should be responsible for his/her own learning. Focus is on learning and not on teaching. It is important for the classroom teachers to diligently determine the characteristics of their learners. Lesson preparation should always implicitly or overtly provide for gender equity, for inclusiveness and for multiple intelligences.

Through literature, various Scholars have given a variety of educational interpretations to the concept of competency, depending on the educational systems and respective objectives. According to Scallon (2000), competency is the capacity of an individual to mobilise resources in order to solve a problem. Giovanni and Lucian (2011, p.15), sees competency as a combination of knowledge, skills and attitudes; the successful application of these in practical situations. They go ahead to indicate that schools should facilitate learning in the practical application of knowledge, attitudes and skills by placing them in situations that will allow them to operate and interact, producing observable results. To Roegiers (2006 p. 7), competency is what permits each person to correctly realise a complex task. According to Jonnaert (2009), Competency is a person's or group of persons' abilities to apply knowledge, behaviours or attitudes, know-how or adaptability in a given situation. The scholar adds that Competency is always contextualised in a specific situation and always depends on how the person views the situation. To Tardif (2006), Competency is complex knowing how to act supported by effectively drawing upon and combining a variety of internal and external resources within a family of situations. From the varied meanings presented above, we could therefore say that competency is the capacity of an individual to mobilise knowledge previously acquired, abilities, skills, aptitudes and knowhow to solve daily life problems. Nevertheless, it will also be necessary to understand what it means to be competent and what it means to have competence.

Assessment in primary schools in Cameroon takes three forms (oral, written, practical). Information can be gathered about learner's progress through: observation checklists; learner's self-assessment; daily practical assignments; samples of learner's work; learner's willingness to participate and contribute in projects/conferencing; oral and written quizzes; portfolios; willingness to be involved in class and school activities

Assessment of learning is recommended to be done six times a year, implying twice a term. This is in line with the sequential assessment policy previously in use in schools in Cameroon. The CBA assessment practices range from performance assessment, comprehensive assessment, self-assessment to diagnostic assessment, and formative as well as summative assessment with emphasis on diagnostic and formative assessments. A grading system was introduced in the academic year 2019/2020 wherein upon assessment; the students' performances are graded in four principal categories in context of CBA thus;

- 0-10 is labelled CNA (competence not acquired)
- 11 14 is labelled CBA (Competence being acquired)
- 15- 17 is labelled CA (Competences acquired)
- 18 20 is labelled A⁺ indicating the learner's expertise in the said competence(s) evaluated.

Formative assessment is one of the key factors of CBA. This assessment takes the form of testing strategies put in place to get feedback during a lesson in order to ensure that learners are actually learning. Besides, remedial lessons play a primordial role in the CBA assessment policy geared at taking slow learners to the same level as those that are smarter. This grading system seems to be violated by the assessment practices as most assessment tools and processes may be invalid and without objectivity in most cases.

Teachers' practices and self-efficacy mediate curriculum implementation

A significant proportion of the literature on curriculum implementation discusses the foremost implementers of curriculum, teachers, since the way they enact and engage with the curriculum directly shapes the outcome of the reform. Pointing to the importance of teachers in implementation, Fullan (2015, p.2) argues that individuals are the core unit of change; if they do not have the adequate skills, change will not occur. This is in agreement with the idea of Kisa and Correnti (2015, p.65) that teachers' lack of knowledge or existing beliefs and practices would hinder a smooth curriculum implementation. A smart policy design takes into account the existing capacity of stakeholders, but also ambitions to shape

it in the future. The trend of autonomy-centred curriculum enactment recognises the central role of teachers in curriculum development and implementation (van den Akker, 2010). Given the understanding teachers have of their students' needs through their daily interactions with them, their input is particularly relevant for curriculum and instruction (Hargreaves and Fullan, 2012[66]).

A majority of principals across the OECD reports significant responsibility for teachers in choosing learning materials (75%), even though fewer principals report for teachers' responsibility in deciding which courses are offered (39%) (OECD, 2020[63]). The Teaching and Learning International Survey (TALIS) autonomy index in determining course content indicates that 84% of teachers on average across the OECD have control over determining course content in their target class. Yet, PISA data only reveal a moderate association between school autonomy and adaptive instruction (tailoring teaching to students' needs and helping students who struggle in a specific task) on average across OECD countries (OECD, 2016[67]; OECD, 2020). This highlights the need to factor teachers' effective autonomy in curriculum implementation. It aims to ensure that all teachers have adequate capacity to select, develop, or adapt the curriculum (Leat, Livingston and Priestley, 2013). The design of a professional development strategy should be integral to any curriculum reform (section: The selection and professional development of teachers are key).

Implementation Issues

The role of teachers

The first issue of implementation is limited involvement of teachers in matters relating to curriculum implementation either in planning or reform and that make good performances impossible, no matter the teachers methodological competence; unfortunately, teachers are not involved at this stage of the curriculum process. Ibrahim (2003) in Nwanze (2015) stated that the involvement of teachers in curriculum planning induces good quality into the curriculum, enriches the activities and also makes them more worthwhile.

He further maintained that, the conditions under which education can be made to serve the expressed aspirations of any nation revolve around the quality of the teachers. This quality will be optimally enhanced if the teachers are fully involved in the curriculum planning and other curriculum processes not only in the classroom implementation. The teacher takes the final decision as regards the actual learning experiences to be provided and so not involving or incorporating him in the planning and development process is like

separating the curriculum from instruction. (Mkpa and Izuagba (2009) in Obilo and Sangoleye (2015).

Excess content

The second issue is excess contents added to the curriculum to be covered by both the students and teachers which possess serious challenges in curriculum implementation. Some global and emerging issues, such as family life education. Citizenship education, education on HIV/AIDS and drug abuse among others which are recently introduced in the school curriculum as contents to be learnt by student/pupils without extending the instructional hours affect its implementation. Afangideh (2009) in Obilo and Sangoleye (2010) states that some teachers are having issues with such topics already, hence making its implementation a challenge. He further maintained that the above is in addition to the already existing subjects. Obilo and Saugoleye (2010) further maintained that the time allotted for the implementation of these heavy academic loads is not adequate enough. A follow-up issue on this matter is that when these new courses are introduced or included in the existing curriculum, new personnel who specialised in them were not usually employed. Neither did the government send the old staff on training on how to implement them.

Materials provision and distribution

The third issue is concerned with the provision and distribution of materials that will enhance the achievement of the teaching and learning objectives. Such materials include: textbooks, instructional, desks etc. This is because for the curriculum contents to be effectively implemented at any stage of the educational system, some materials which are expected to compliment the classroom activities of the teacher should be provided for effective implementation at the classroom levels of any of the educational programmes. Sometimes the curriculum is implemented without these resources making it difficult for learners to assimilate lessons. Fullan, (2001), argued that, if obstacles to implementation were not removed, instead of moving ahead from the implementation phase to the continuation phase, a change would suffer from the failure to be used in the intended manner and the rejection by decision-makers.

Non-involvement of the society's culture

The fourth issue of curriculum implementation is non-involvement of the society's culture in the curriculum implementation. Curriculum is the instrument through which the

society via the schools educates its citizens, both adult and young. Therefore, the quality of education of every society is subject to the quality of the society's curriculum. Even though large sums of money are spent on implementing new curriculum, several of these efforts have failed. According to Alade (2011), the main reason for the failure is the lack of understanding of the culture of the school by both experts outside the school system and educators in the system. Successful implementation of curriculum requires understanding the power relationships, the traditions, the roles and responsibilities of individuals in the school system.

Planning the implementation

It is essential that we plan the implementation of a curriculum. It will certainly help us to implement it successfully. Planning process addresses needs and changes necessary and requisite resources for carrying out intended actions. Put it differently, implementation-planning should focus on the following factors: People (learners, educationists, policy makers, and the like); programmes; and processes. Although these factors are inseparable, usually we consider any one of them as an important criteria for implementation. For example, the opinion has been that to facilitate the implementation of a major change, curriculum developers need to deal primarily with the people-factor. Some, however, consider that the primary focus should be the programme. The argument here seems to be that people will adapt, if we furnish them with different ways to meet the objectives of a programme through planning, this will facilitate smooth implementation of the curriculum.

Communication:

This is the next important issue that influences the curriculum implementation stage. We know that communication deals with messages, so sending and receiving is not sufficient enough to ensure that communication will be effective or that messages sent will be accurate or of high quality. The curriculum specialists, therefore, must be sure that the communication network is comprehensive and that avenues for sending messages exist at all levels of the curriculum implementation process. For instance, if we want to communicate some factual details about a new programme being launched, we can use such means as letters, memos, articles, books, bulletins, research reports or speeches. Supposing the new programme is a major change from the existing one, we can communicate it effectively through workshops, conferences, demonstrations and the like. Thus, it is essential that we should be able to create an atmosphere conducive to effective communication among all members of the educational

staff and community. Further, we need to inform them that their views are welcome and that they all have a responsibility to participate in sending and processing messages of curriculum implementation activity.

Once effective communication is established, we can be sure of cooperation in implementing the curriculum. Without the cooperation of all those who will be 'affected' by the new curriculum, we cannot implement it successfully. For instance, teachers have traditionally not been included in the process of curriculum activity. This is so, despite the fact that research supports the practice of engaging teachers in curriculum activity that will find expression in their classrooms. For example, in many ways, teachers are the experts in the given context. Their commitment to the new curriculum, therefore, is especially of vital importance. If teachers actively participate in curriculum development, the likelihood of successful implementation is increased.

Curriculum dissemination

Curriculum dissemination is an essential component and phase of curriculum development. It creates a bridge between the curriculum theory and its implementation or practice. Indeed, the implementation of the new curriculum is the realisation of a process of educational change. Hence the importance of curriculum dissemination strategies. In this regard, Black and Erickson (2004) observed that a major reason for the failure of the Schools Council to influence curriculum change more directly and more widely was to be found in the dissemination strategies that were adopted". According to Carl et al (2011)) and Leithwood (2013) *curriculum dissemination* or *curriculum diffusion* consists in the distribution or publication of information, reflections and decisions. It refers to the spread of information about curriculum renewal, namely about innovative instruction or instruction-related practices aimed at preparing and informing all those involved with the curriculum change.

Curriculum dissemination turns out to be a prerequisite for a meaningful and successful implementation of curriculum renewal or curriculum change. Research. show that renewal has often failed due to lack of dissemination or hasty and consequently superficial dissemination. As noted by Leithwood (2016), dissemination is pivotal since it may result in changed practices, for example, by school members, especially if they find the disseminated new ideas acceptable and decide to put them into practice. Theoretically curriculum dissemination should follow the design phase, but if design is participatory as it should be, then design blends with dissemination. In this regard, Carl et al. (20141) acknowledge the

importance of training users in preparation for the implementation of a new or adjusted curriculum; in fact, they emphasised the need to persuade and influence teachers to become involved in the design phase already.

Obviously, teachers' participation in the curriculum design is problematic since, according to Rasool (1999 p.176): Teachers' participation in the curriculum process can only be effected by a system of representative participation as has been the case. Given the numbers of teachers and the complexity of modern society, it is unrealistic or impractical for everybody to be involved in the making of all decisions. This is a thorny problem that can only be overcome with effective dissemination as a sequel to design. It follows therefore that the critical need for teachers' preparation makes them in many senses the most important educational resource we have since it is they who will determine whether the new curriculum succeeds. In this regard, the success of the new curriculum depends on the training and support that teachers receive, and their ability to mobilise and manage the resources around them to implement it. The greatest single factor in the teaching process is the teacher. No technique, no device, no gadget can guarantee success - only the teacher can do this. The greatest motivating device yet discovered is the highly motivated teacher.

Curriculum Implementation:

Curriculum Context and Factors Influencing Curriculum Implementation

The current research literature on implementing curriculum change in different parts of the world refers, with particular emphasis, to **contextual conditions** in which implementation may occur. In this regard, context is a key element that:

- On the one hand, makes policy implementation a "problem"; and
- On the other hand, contributes to the highly variable local responses that trouble policymakers.

Brown (2012) gives reasons for these problems in his contention that the effectiveness of policy implementation depends:

- On how it is interpreted and transformed at each point in the process; and
- On the response of the individual at the end of the line.

It seems, then, that curriculum outcomes depend on how the curriculum change is understood or perceived and implemented at each level, from the Ministry of Education down to the school and more particularly on the response it receives. in the classroom, which is the crucial test for the whole process. In corroboration Brown (2012) noted that "what matters most to policy outcomes are local capacity and will." In further corroboration

Darling-Hammond (2015) asserts that the fate of new programmes and ideas is decided by teachers' and administrators' opportunities and capacity to learn, experiment, and adapt ideas to their local context.

A curriculum must be implemented if it is to make any desired impact on students and to attain its goal. Unless it is implemented, it cannot be evaluated for betterment. Miller and Seller (2013) are of the opinion that; In spite of careful planning and design, it is possible that a curriculum fails to meet the needs for which it is developed. In our experience, we would have also come across educational programmes that do nothing more than gather dust on shelves. Further, much that is planned and developed often does not get implemented

Why is it so

Miller (2013) found out that there are a few issues involved in implementation. These are summarised under: Implementation as a process of change and planning Implementation. Before we do so, we should be aware that one major factor is our attitude towards the implementation stage in the curriculum development process. The focus of those who are charged with the task of curriculum training has, hitherto, been on planning and design. As a result, curriculum implementation has never been considered a crucial stage. In fact, it has surprisingly been taken for granted. It has to be, on the contrary, treated as important as the other stages in the curriculum activity. It will certainly ensure the success of a curriculum.

With this general observation in mind, we shall now look at various other issues of relevance to curriculum implementation.

Implementation: a process of change

Although many curricula agree that implementation is an essential aspect of curriculum development, it is only in the last fifteen years that implementation has become a major educational concern. Many assume that implementation is simply another step in the curriculum planning process. They, therefore, expect to proceed from the planning and design stages to the actual implementation stage with relative ease.

How far is this assumption tenable?

Let us consider some observations made by a few thinkers in this regard. Fullan and Pomfret (2007) cited by Miller and Seller (2013) remarks that "effective implementation of innovation requires time, personal interaction and contact, in-service training and other forms of people based support", There is, therefore, no substitute for the primacy of personal

contact among implementers, and between implementers and planners/consultants, if the difficult process of unlearning old roles and learning new ones is to occur. Implementation is considered a process that attempts to reduce the difference between existing practices and the practices suggested by innovators or change agents. In other words, it occurs in stages and it takes time to win people over to a change. In other words, it occurs in stages and it takes time to win people over to a change.

Ornstein and Hunkins (2008) cited by Seller (2014) sum up these observations and view implementation as a separate component in curriculum action cycle. It is the logical step once a programme has been developed and piloted. However, they point out that implementation involves attempts to change an individual's knowledge, actions and attitudes. Obviously. It takes time. They also suggest that implementation is an interaction process between those who have created the programme and those who are to deliver it and we may add those who are to use it. Thus the purpose of curriculum development, regardless of level, is to effect a change in order to enable the students to attain the society's and perhaps more importantly the students' own goals. And, implementation, as an essential part of curriculum development, brings into existence the anticipated changes. The changes can occur in several ways. The two most obvious ways are:

- i. Slow change: For example, when we incorporate minor adjustments in the course schedule, when we add some books to the library or when we update the unit plan, etc.
- ii. Rapid change: It is the result of new knowledge or social trends influencing the curriculum, such as computers being introduced in the curriculum, etc.

For curriculum change to be successfully implemented, whether slowly or rapidly, we need to consider the following guidelines:

- ➤ The changes designed to improve student achievement must be technically sound. It means that changes should reflect research about what works and what does not work as opposed to the bandwagon effect, under which we go along with whatever designs for improvement happen to be popular presently or in the future.
- ➤ There needs to be a change in the existing structure of allocation of responsibilities to students and teachers. One familiar context to us, for example, is that of the distance education system.
- The proposed changes have to be manageable and feasible. We should not attempt to incorporate ideas concerning critical thinking or problem solving when, for instance, students do not have basic language ability.

- The implementation of successful change efforts must be organic rather than bureaucratic. Strict adherence to rules and monitoring procedures, meant for the pre-change system, are not conducive for effecting change. We need to replace this bureaucratic approach with an organic or adaptive approach that permits a necessary deviation from the original plan and recognizes the problems at the grassroots level.
- ➤ It is essential to avoid the "do something, do anything syndrome". We need to focus on building a definite curriculum, the content and activities of which are sound and rational.

The guidelines clearly indicate that they are systematically interrelated and that they apply equally well to all levels of education. However, it is common knowledge that there has been resistance to change. It is more so in the case of education, and therefore, curriculum. There might be various reasons for the resistance to change.

Plan Implementation

Miller and Seller (2013) state that, apart from curriculum planning in general terms, it is essential that we plan the implementation of a curriculum. It will certainly help us to implement it successfully. Planning process addresses needs and changes necessary and requisite resources for carrying out intended actions. Put it differently, implementation-planning should focus on the following factors:

- ➤ People (learners, educationists, policy makers, and the like);
- > programmes; and
- > Processes.

Although these three factors are inseparable, usually we consider any of them for implementation. For example, the opinion has been that to really facilitate the implementation of a major change, curriculum developers need to deal primarily with the people-factor, some, however, consider that the primary focus should be the programme. The argument here seems to be that people will adapt, if we furnish them with different ways to meet the objectives of a programme. Still others think that attention should centre on the organisation, i.e., process, within which the people work. As one factor is connected to the other we need to consider all the three factors together for successful implementation. For our purposes, i.e., to impress on the 'consumers' of the need for implementing a new curriculum, communication plays a vital role. We shall therefore touch upon this aspect of implementation in some detail.

Communication

Communication deals with messages and message sending/receiving is not sufficient to ensure that communication will be effective or that messages sent will be accurate or of high quality, the curriculum specialists. Therefore, must be sure that the communication network is comprehensive and that avenues for sending messages exist at all levels of the Depending on the need, we may opt for different means for purposes of communicating the implementation of a curriculum. For instance, if we want to communicate some factual details about a new programme being launched, we can use such means as letters, memos, articles, books, bulletins, research reports or speeches. Supposing the new programme is a major change from the existing one, we can communicate it effectively through workshops, conferences, demonstrations and the like. Despite the various sophisticated and simple means available for communication, the key to communication is the individual. More often than not, the real barriers to communication are not technical, but originating from persons. Thus, it is essential that we should be able to create an atmosphere conducive to effective communication among all members of the educational staff and community. Further, we need to inform them that their views are welcome and that they all have a responsibility to participate in sending and processing messages of curriculum implementation activity.

Once effective communication is established, we can be sure of cooperation in implementing the curriculum. Without the cooperation of all those who will be 'affected' by the new curriculum, we cannot implement it successfully. For instance, teachers have traditionally not been included in the process of curriculum activity. This is so, despite the fact that research supports the practice of engaging teachers in curriculum activity that will find expression in their classrooms. For example, in many ways, teachers are the experts in the given context. Their commitment to the new curriculum, therefore, is especially of vital importance. Such commitment depends heavily on how active they have been in conceptualising and developing the new programme. If teachers actively participate in curriculum development, the likelihood of successful implementation is increased. And in the context of distance education, the participation of the academic counsellors at the study centres would be of reasonable help. This should help us understand that for change to be effective the teachers must be committed to it and they must see that it has professional value to them. We are aware that even the best educational practice is unlikely to fulfil its promise in the hands of an inadequately trained or unmotivated teacher.

Besides, the students and the society in which they live also should be taken into confidence for ensuring successful implementation. If they are not properly oriented, the curriculum may fail to serve the purpose for which it is created.

Planning of implementation should also consider the constraints in terms of time and finance. With efficient time management and adequate financial support, the process of implementation can be made effective.

Some Curriculum Implementation Models.

Miller and Seller (2013) working on the new curriculum in Indonesia, summarised the following curriculum implementation model which are helpful for implementers.

ORC Model

The letters 'ORC' here stands for 'Overcoming Resistance to Change'. This model rests on the assumption that the success or otherwise of curriculum implementation primarily depends on the impact the developer can make on the consumers, i.e., teachers, students and the society in general. If we desire change we must address people's misgivings, their misapprehensions, or other such related factors. 'Need must point out to them that the curriculum incorporates, wherever possible and appropriate, their values, assumptions and beliefs. And while addressing the persons within the system, we should remember that to get the desired result the subordinates should be motivated rather than ordered. Curriculum developers should, therefore, identify and deal with the concerns of the staff in various educational institutions. We can group the concerns into the following four broad developmental stages as given below.

Table 2: Developmental stages of concerns

| Developmental | Developmental concerns | |
|---------------|--|--|
| stage | | |
| 1 | Unrelated Concerns: At this stage, teachers do not perceive a relationship between themselves and the suggested changes. For example, if a new programme is being developed, a teacher at this stage may or may not be aware of this effort. If he/she is aware of the item, he/she may not consider it something that concerns him/her. The teacher would not resist the change, because he/she really does not perceive the change as something that influences his/her own personal or professional domain. | |
| 2 | Personal Concerns: At this stage, the teacher will react to the innovation in relation to his/her personal situation. He/she is concerned with how the new programme compares to the one already in use. Therefore, when a new programme is being launched, he/she would involve himself/herself in the activity. | |
| 3 | Task-related concerns: This stage relates to the actual use of the innovation. The teacher at this stage will be concerned with the time required for reaching the new programme, availability of materials, strategies to be adopted, etc. | |
| 4. | Task-related concerns: This stage relates to the actual use of the novation. The teacher at this stage will be concerned with the time required for reaching the new programme, availability of materials, strategies to be adopted etc. | |
| 5. | Impact-related concerns: The teacher at this stage will be concerned with how the innovation will influence others | |

When working with the ORC model, we must deal directly with the concerns at stages 2, 3 and 4 in order to serve the purpose for which the change is affected.

To achieve this purpose, we can meet the faculty members together. During this meeting, we can share our concerns and map strategies for dealing with those concerns. Depending on the context and particular needs we can administer questionnaires to gather and share information on concerns to make such meetings successful.

LOC model

'LOC' is the acronym for 'Leadership-Obstacle. Course' model. This model treats staff resistance to change as problematic and proposes that we should collect data to determine the extent and nature of the resistance. We can do this by making sure that the following five conditions exist:

1) the organisational members must have a clear understanding of the proposed innovation;

- 2) individuals within the organisation must be given relevant skills so that they possess the capabilities requisite for carrying out the innovation;
 - 3) the necessary materials and equipment for the innovation must be furnished;
- 4) if need be, the organisational structure must be modified so that it is compatible with the innovation being suggested;

The participants in the innovation must be motivated to spend the required time and effort to make the innovation a success.

The LOC model extends the ORC model in several respects. While the ORC model conceptualises educational change as a two-stage process: initiation and incorporation (or the innovation as part of the ongoing processes of the organisation). The LOC model considers educational change as a sequence of three stages: initiation; attempted implementation and incorporation. We should note here that implementation obstacles solved at one point of time using this model may arise again at another point. This model, therefore, has a feedback and monitoring mechanism to determine if problems once solved keep reappearing, etc.

Linkage model

The 'linkage' model recognises that there are innovators in research and development centres, universities, etc. Educators in the field, however, find some of their attempts at innovations that are inappropriate for solving the problems. What is therefore needed is a match between the problems and innovations-the establishment of linkages. This model envisages two *systems*: user system and resource system. There has to be a link between these two systems. The resource system should have a clear picture of the curriculum user's problems, if it is to retrieve or create appropriate educational packages. A successful resource system must proceed through a cycle of diagnosis, search, and retrieval, fabrication of solution, dissemination and evaluation in order to test out its product. Thus, in the linkage model, the basic process is the transfer of knowledge.

Curriculum Evaluation

Process evaluation is believed as Guarantee of Quality product. Evaluation of the process of curriculum development plays a vital role in channelizing and keeping the direction of the young generation on the desired way for the achievement of national objectives and keeping the system updated with respect to the changing scenario of time. Curriculum development process also undergoes transformation due to newer developments

in education and its evaluation keeps it valid, reliable and keeps it in the right direction. Recommendations through evaluation for any process have a message of eternity for it. Therefore, the need to organise the curriculum development process in such a way which should prepare young men and women for the pursuit of higher education as well as to make them able to adjust with their practical life meaningfully and productively are necessary. Because the goals of education can be attained only through a valid reliable curriculum and proper evaluation of the process for updating and fulfilling required social needs.

Curriculum evaluation may be understood as a broad and continuous effort to trace its effects in terms of content and feasibility towards the achievement of defined goals. In this regard, on the one hand curriculum evaluation comprises evaluation or assessment of curriculum as such. It examines the adequacy of the curriculum for the learners, to what extent the curriculum enables or prevents effective teaching and learning. On the other hand, curriculum evaluation explores the process of monitoring and measurement of learning achievement in classroom practice, that is to say, the support given for the success of the pupils supplemented by suitable measurement following the formative assessment of the student. This component of curriculum evaluation is a crucial aspect of curriculum implementation. After conducting field researches Fink and Stoll (2008) assert:

Efforts to improve schools from within are certainly undermined by inadequate and inappropriate assessment strategies. If we want teachers to do a better job for students then one place to start is with the what, the how, and the why of assessment. Rather than using assessment to find weaknesses, place blame, and promote guilt, change agents need to work with teachers to find more appropriate ways to use assessments to promote students' learning. As curriculum evaluation in education should cover not only student evaluation or evaluation of learning, development and achievement, but also the assessment of different aspects of the curriculum as it is planned/developed and implemented.

In its simplest form, it refers to a process of evaluating the curriculum componentsobjects, materials, methods and evaluation processes for student assessment in order to judge as to whether or not the curriculum caters to the needs of the target group and/or the set educational purposes for which it is intended. In the process of scrutinising each of the constituents of the curriculum, we can see how a lapse in one of them affects and influences the others. Therefore, it is difficult to evaluate each of the curriculum-components in isolation. Each has to be evaluated in conjunction with the rest, as they are all interdependent.

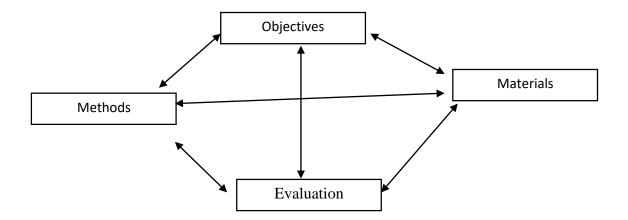


Figure 2: Curriculum components-objects, materials, methods and evaluation processes

Source: Researcher (2022)

The purpose of curriculum evaluation is therefore two-fold:

- to get feedback about a given curriculum; and
- to use the feedback for purposes of improving the curriculum

Though we are aware of the importance of curriculum evaluation, we carry it out very rarely. Of the many reasons for this indifference the two major ones are:

- i) many have come to regard evaluation as non-productive behaviour because, more often than not, evaluation results, when carried out, are ignored; and
 - ii) the resistance to accept a new pattern, despite its potential.

Both of them being manifestations of social attitudes, it takes time to break these biases. And, therefore it is essential for us to come to grips with the process involved in curriculum evaluation. Ornstein and Hunkins (2006) are of the view that the disillusionment with evaluation emerges from the misunderstanding about what it can and cannot do for the society/institution. Two factors have had a major impact on OLL curriculum evaluation over the last two decades. They are:

- i) a growing mystique linking evaluation to high-powered mathematical methods, advanced statistical designs and computer analyses; and
- ii) a growing call for 'accountability' and its requirements for standardisation tests, national norms,' and comparative ratings.

More often than not, evaluation has come to be seen as a province of a specialist or a consultant. Further, it seems to have become a ritual or a special event to be endured periodically. By implication, it has distanced the teacher from the evaluation process. And it

has relegated the critical role of evaluation to an undeserved subservience. However, in reality it has a role at every level of curricular decision-making. Whether the question is one of accountability, accreditation, policy-making, staff development programme-effectiveness, instructional activities, etc., the answer must primarily depend on evaluation. For this reason, we should acquaint ourselves with the conceptual and methodological issues of evaluation that follow.

Concept and purpose

As we have stated, evaluation is a process or/and cluster of processes that people perform in order to gather data for decision-making, i.e., whether to accept a curriculum or change it into or in part. In other words, curriculum evaluation focuses on discovering whether the curriculum is producing or can produce the desired results. It also serves to identify the strengths and weaknesses of the curriculum before implementation and the effectiveness of its delivery and its impact after implementation. Different people approach evaluation differently, depending on their philosophical orientation. Essentially, however, our approach to evaluation depends on the kind of questions we pose. They can be categorised as:

Questions of:

- intrinsic value;
- instrumental value;
- comparative value;
- idealisation (value); and
- decision value.
- i). The question of intrinsic value: It addresses the appropriateness of a curriculum in a given context. It deals with the curriculum as planned and also with the finished curriculum as it is delivered.
 - ii). The question of instrument value: It attempts to clarify
 - what the curriculum 'is good for; and
 - who the intended audience/target group is.

It tries to find out whether what is planned in the curriculum will be attained, to what extent and by whom, i.e., to identify the target group. It clearly suggests that the audience which is to be evaluated should be identified at the beginning of the curriculum activity itself. We should be aware here that not all the curriculum inputs planned will be of equal value to all students. The input-value differs, depending on the individual. Evaluation efforts

should identify the types of students who are likely to benefit the most from the curriculum being planned.

- iii) *The question of comparative value:* Usually, we go in for new programmes when we feel the existing ones are either irrelevant or inadequate. Here, we should be wary of one important factor. Often, when dealing with the question of comparative value, we get caught up in making comparisons of two dissimilar programmes with different objectives/goals. We cannot ask, f-or example, whether or not a programme that stresses skill-training is better than one that stresses the value-structure of the world. Certainly, the two are different from each other. Therefore, a comparison will be of little help for purposes of evaluation. However, if identical programmes are available, we can always ask the question of comparative value. Here comparison of programmes includes that of ease of delivery, cost, student achievement, demand on resources, community responsiveness or otherwise, etc.
- iv) *The question of idealisation value*: It is a kind of probing question to see whether there are alternative ways to make a programme better. It requires continued action throughout the delivery of the new programme. We should continuously ask ourselves how we might fine tune the programme's content materials, methods, evaluation systems, etc., so that the students can derive optimal benefits from going through it.
- v) *The question of decision value*: The main focus of this question is on decision making, i.e., whether to retain, modify, or discard the new programme. It is an ongoing question, because at every stage of curriculum development and delivery a decision has to be taken. Put together, the questions (items i-v, above) presented should help us suggest that evaluation is a process by which we can make decisions about a curriculum in terms of:
 - i) course improvement;
 - ii) individuals-teachers, students, etc.; and
 - iii) administrative effectiveness.

When evaluation is focused on course improvement, its direct purpose is to ascertain what effect the course has, how they match with the intended effects and what revisions are desirable. At times, it is possible to find that only certain types of students with particular learning styles are doing well with new content. An evaluation will help us determine why this is so. And when an evaluation is carried out on the administrative aspect of the curriculum activity, it can reveal to us the effectiveness of the implementation processes. Evaluation being a methodological activity, it is not content specific. The procedures are identical, irrespective of whether it is an evaluation of curriculum-effectiveness or fuel-

efficiency of a motor and so on. However, there exist a few methodological issues which we should address for a better comprehension of curriculum evaluation. In subsection 4.5.2, we shall look into them.

Ornstein and Hunkins (2006) stated that diversity of views characterises discussions on what evaluation is and to what purposes it should be put. A common focus of evaluation, however, has been to determine the extent to which objectives have been achieved. Some curriculum specialists have noted that a statement of objectives should show the educational intent rather than indicate the realisation of the intent. They maintain that when we formulate objectives we should also consider why we want students to perform the actions embedded in the objectives. There are a few methodologies through the application of which we can evaluate the achievement of the curriculum in relation to the set objectives. Let us present some of them here.

Intended outcomes vs. goal-free evaluation:

When we define the objectives of a programme, it is essential that we indicate the situations in which students are to be given the opportunity to accomplish the objectives. During the evaluation process, it will help us determine the worth of the curriculum or whether the curriculum allows students to attain the objectives stated. However, some advocate a 'goal-free' approach that examines the effects of an educational innovation and judges the quality of the effect produced. By implication and evaluator does not have to confine him/herself to the stated objectives of the programme. Instead, he/she can gather data to assess the outcomes, whatever they may be.

Norm-referenced and criterion-referenced measurement

Referenced measurement is the most common, in which a student's performance on a particular test is compared with that of other students. Its value is, however, questionable in the context of curriculum evaluation, since it does not address the goals or content of a particular curriculum. The alternative to the norm-referenced test is the criterion-referenced one. It reports where a student stands with regard to some fixed criteria. It focuses on the specific tasks and competencies that have been stressed in a particular curriculum. In addition to showing the overall success of the curriculum, referenced tests can also reveal whether or not a student has mastered some particular material. Thus, it can be used for students evaluation as well as curriculum evaluation.

Intrinsic and pay-off evaluation: 'Intrinsic evaluation' is the one that studies the curriculum plan per se. By 'pay-off evaluation', we mean a study of the effects of the curriculum after it is delivered to the students. Obviously we need to engage in intrinsic evaluation, i.e., see how good the curriculum is. But, most often we skip this stage and try to determine how well the curriculum achieves its goals. The implication is that, unless we have some judgement about the worth of the goals and objectives, content etc., we cannot say whether attaining those goals is «worth making the attempt. Therefore, it is essential that we start with 'intrinsic evaluation', before we consider the effects of the curriculum, i.e., pay-off evaluation. The two must go together.

Formative and Summative evaluation: In the context of curriculum evaluation, formative evaluation encompasses those activities undertaken to improve an existing programme. During the developmental and early piloting stages of a curriculum, the evaluation effort provides frequent, detailed and specific information to guide the developers. It takes place at a number of specified points during the curriculum development process. For example, during the curriculum development stage, we can check whether a particular content enables students to learn a particular concept or certain skills. Depending on the result, the content can either be retained or modified. Because curriculum development takes place over a period of time, formative evaluation is especially well suited for guiding curriculum-framing. It allows us to determine not only what intended effects are occurring but also the presence of unintended effects. It uses the process of feedback and adjustments and thus keeps the curriculum development process open.

To illustrate this, further formative evaluation encompasses:

System needs assessment:

It is associated with the pre-planning phase of a curriculum and is concerned with questions like the need for and type of a new curriculum, its possible reception, its relevance to the society etc.

- Curriculum planning: It is essentially concerned with the actual planning and designing of a curriculum.
- Process evaluation: It is concerned with the process of carrying out the curriculum and involves not only curricular activities, but also the way in which an organisation puts the curriculum into action. In other words, it evaluates curriculum-implementation. Summative evaluation aims at getting the 'total' picture of the quality of the curriculum produced. As the term 'summative' suggests, it involves evaluating the 'summed' effects of various components of a curriculum. Although it is performed at the end, i.e., after

the development and implementation of a curriculum, it should not be perceived as happening only once. In fact, comprehensive summative evaluation occurs only when evaluation is conducted at certain strategic 'end points' during the curriculum development process, such as at the end of the piloting stage, etc. The following items come under summative evaluation:

- Curriculum improvement: The focus here is on the effects of the impact of the curriculum on the intended clientele.
- Curriculum certification: In this category the focus is on curriculum comparison, compliance review, etc. Evaluation is essentially a process of finding the value of a programme -the quality of its processes and/or the quantum and quality of its products. The value of any programme, including educational programmes, lies in the realisation of its goals and objectives. So, like teaching or any other purposeful activity, evaluation has to be:
 - objective-based;
 - done mainly in terms of the desired process and the expected outcomes;
- comprehensive in that it covers the various kinds of objectives and levels of outcomes-defined as specifically as possible; and
- continuous so that the progress being made might be sensed and the achievements/outcomes assessed all through the on-going programme.

Ivowi (2014) sees evaluation as both qualitative and quantitative, it may be 'formative' (during the process of development) or 'summative' (at the end of the total programme or each phase thereof). The purpose of educational evaluation, therefore, is to improve on what has already been available. In other words, it has the dual role of guidance and assessment. In fact, the latter should be instrumental to the former. All these would require that we employ a variety of appropriate techniques and tools to collect all the different kinds of evidence required at the different stages. The techniques and tools to be used have to be selected in relation to the nature of the objectives/ outcomes (with their content) and the kinds of performance to be assessed or evidence to be collected. The outcomes, i.e., the success or otherwise of an educational programme can be adjudged in terms of the achievements of the students. They can generally be assessed through oral, written or action performance tests.

Some curriculum evaluation measures

The first major evaluation effort directed at curriculum was conducted under the direction of Ralph Tyler between 1933 and 1941. The study was concerned with the total process of curriculum development and evaluation was an integral part of that concern. Tyler

through his efforts as research director of the study greatly influenced and still influences the planning of evaluation studies. The following stages that Tyler recommended in 1942 for curriculum evaluation still hold good:

- i) establishing broad goals/objectives;
- ii) classifying objectives;
- iii) defining objectives in behavioural terms;
- iv) finding situations in which achievements of objectives can be shown;
- v) developing/selecting measurement techniques;
- vi) collecting student performance data; and
- vii) comparing data with behaviourally stated objectives.

He maintained that evaluation is a recurring process and that evaluation feedback should be used to reformulate or redefine objectives. In other words, information gathered can be ploughed into the system to modify the objectives and the programme which is being evaluated. This recycling process keeps the evaluation system dynamic.

Curriculum evaluation models

Metfessel-Michael model

Metfessel and Michael (1967) present a model with eight major steps in the evaluation process. (In fact, one can see that it is a variation of what Tyler (1942) suggested.)

We can present the model diagrammatically as follows:

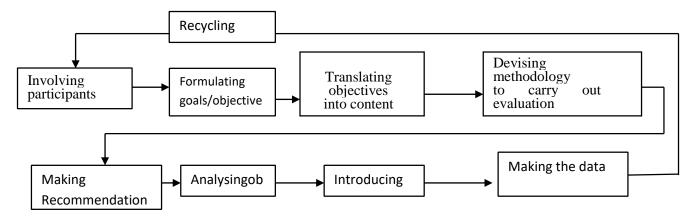


Figure 3: Metfessel-Micheal Evaluation Model

The model clearly suggests, among other things, that evaluators should involve all those who will be 'affected' by the curriculum, i.e., teachers, professional organisations, senior citizens, students, etc., besides experts who conduct periodic observations throughout the implementation and maintenance of the programme using tests, cases, etc.

Congruence-contingency model

More often than not, curriculum evaluation depends on casual observation, implicit goals, intuitive norms, subject judgements, etc. However, Stake (1967) stresses the establishment of formal evaluation procedures. According to him, formal procedures will help increase objectivity in evaluation. As they aim at furnishing data, we can make descriptions and judgements of the curriculum being evaluated. Stake argues that for evaluation purposes, we should not rely only on the statements of objectives/aims. We should allow all those 'affected' by the curriculum to extensively participate in judging the curriculum. He further maintains that the data can be collected under the following three bodies of information.

- i) **Antecedent:** This is any condition that exists prior to teaching and learning that may influence the outcomes. For example, prior knowledge, aptitudes, psychological profiles of students, etc., years of experience of teachers, teacher-behaviours, etc.
- ii) **Transactions:** Learning transactions that occur between and among teachers and students.
- iii) **Outcomes:** These are the consequences of education -immediate and long-range, cognitive and cognitive, personal and community-wide: for example, students' performance, achievements, etc. Stake, however, lays stress on even such outcomes as the impact of a new programme on teachers' perception of their competence

Let us diagrammatically represent the model below.

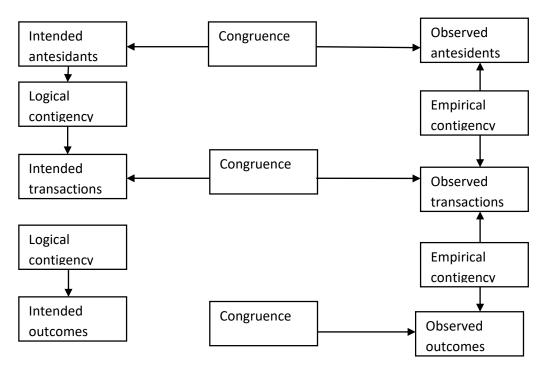


Figure 4: Metfessel- Michael Evaluation Model Source: adapted from Metfessel and Michael (1967)

The term 'contingencies' here refers to the relationships among the variables in the three categories: antecedents, transactions and outcomes. Once the evaluator collects views on a curriculum from various sources like students, teachers, support staff, etc., he puts these views on a matrix to identify the congruence and contingencies among them. The model clearly shows that it provides an organisational framework that points to the data to be considered and contrasts what is planned and what has occurred.

Discrepancy evaluation model

This model developed by Provus (1971) has the following four components:

- i) determining curriculum standards;
- ii) determining curriculum performance;
- iii) comparing curriculum with standards; and
- iv) determining whether any discrepancy exists between the standards set and the curriculum.

If there is any discrepancy, it will be communicated to the decision makers, who, in turn, have to incorporate necessary modifications at every stage. This they can do by doing anyone or more of the following:

- going to the subsequent stage; recycling to a previous stage;
- starting the curriculum over again;
- modifying the performance/standards; and
- terminating the curriculum.

A diagrammatic representation is given in Fig 6

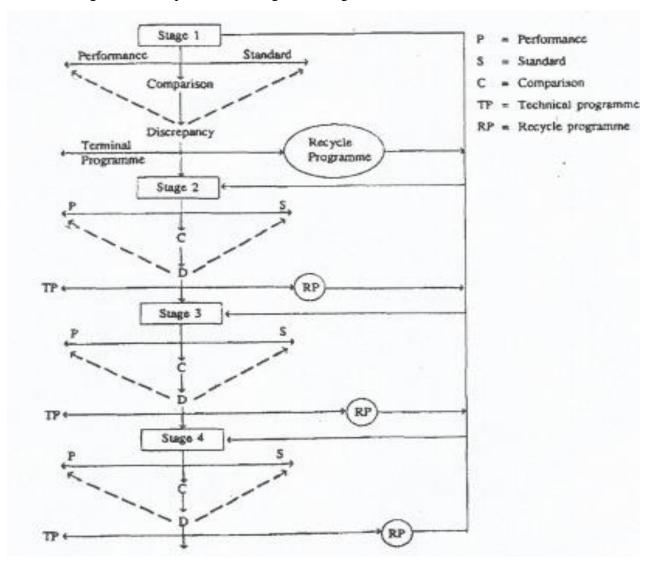


Figure 5: Discrepancy evaluation model

Source: adapted from Provus (1971)

CIPP model

'CIPP' here refers respectively to the first letters of

- context;
- input;
- process; and
- product

- Stufflebeam (1971) considers evaluation a continuous process and suggests that four types of decisions are required in evaluation efforts. The four types are:
 - planning decisions;
 - structuring decisions;
 - implementing decisions; and
 - recycling decisions.

Corresponding to these decision types there are four types of evaluation: context, input, process and product. Figure ... shows these types of evaluation in relation to the four decision types:

| Intended | Actual |
|----------|--------|
| | |

| Planning decisions to determine objectives | Recycling decisions to judge and react to attainments |
|--|---|
| Structuring decisions to design procedures | Implementing decisions to utilise, control and refine procedures. |

Context evaluation: It involves studying the environment in which we run the curriculum. Stufflebeam maintains that context evaluation is the most basic type of activity that provides a rationale for determining objectives. It helps us

- define the relevant environment;
- portray the desired conditions pertaining to that environment;
- focus on unmet needs and missed opportunities; and
- diagnose the reason for unmet needs.

It should suggest that context evaluation is not a one-time activity. It continues to furnish baseline information regarding the operations and accomplishments of the total system.

Input evaluation: The purpose of this stage is to provide information for determining how to utilise resources to meet curriculum goals. At this stage we evaluate alternative designs in terms of how they will contribute to the attainment of objectives stated and in terms of their demands upon resources, time and budget. We should consider them in the light of their procedural feasibility. In contrast to context evaluation, input evaluation is ad hoc and microanalytic. It evaluates specific aspects or components of the curriculum plan.

Process evaluation: This stage addresses curriculum implementation decisions that control and manage the plan or curriculum. Through process evaluation, we can determine the level

of congruence between the planned and actual activities. Stufflebeam (1988) presents the following three main strategies for process evaluation:

- i) To detect or predict defects in the procedural design or its implementation during the diffusion stages. In dealing with plan or curriculum defects, we should identify and monitor continually the potential sources for the failure of the curriculum. The sources may be logistical, financial, etc.;
- ii) To provide information for curriculum decisions. Here we should make decisions regarding test development prior to the actual implementation of the curriculum. Some decisions may require that certain in-service activities be planned and carried out before the actual implementation of the curriculum; and'
- iii) To maintain a record of procedures as they occur. It addresses the main features of the project design, for example, the particular content selected, the instructional strategies planned or the time allotted in the plan for such activities.

As process evaluation occurs during the production stage of the curriculum, it helps us anticipate and overcome procedural difficulties and to make pre-programmed decisions.

Product evaluation: It helps us determine whether the final curriculum product in use accomplishes the intended goals. Depending on the data collected, we can decide whether to continue, terminate or modify a curriculum.

The Kirkpatrick curriculum Evaluation Model (Donald Kirkpatrick 1950)

Best known for creating a highly influential four-level model for training programme evaluation, Kirkpatrick lived between 1924 to 2014 in the United States of America. His model is the worldwide standard for evaluating the effectiveness of training programs (Kirkpatrik, 2009). The Kirkpatrick principles are essential to maximising the transfer of learning to behaviour and subsequent organisational results as well as to demonstrate the value of training to the organisation; unquestionably critical for any world-class institution (Plifka, 2009). The four foundational principles of the theory are; the end is the beginning, return on expectation is the ultimate indicator of value, a business partnership is important to bring about positive ROE, Value must be created before it is demonstrated, the compelling chain of evidence demonstrates your bottom-line value. It considers the value of any type of training, formal or informal, across four levels. Level 1 Reaction, Level 2 Learning, Level 3 Behaviour, Level 4 Results (Kirkpatrick Partners, 2009-2020). Kirkpatrick presented this theory in a pyramidal manner and reversed it beginning from the fourth level to show that trainers need to determine the value of the programme before the training begins. This was

to ease understanding and application, trainers must begin with the desired results before determining what behaviour is needed to accomplish it (Kirkpatrick, 2009). These four levels can be presented below as;

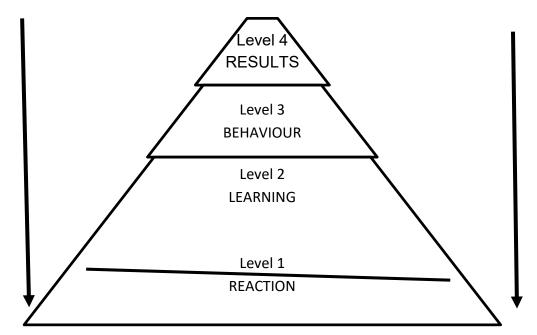


Figure 6: Presentation of Kirkpatrick's Four Level of Programme evaluation Source: Adapted from Andy Smidt, Vicki A. Reeds, Sigafoos, Sussan Balandin, (2009) in KirkPatrick's Model: Useful tools for evaluating Training outcomes.

Figure 12 presents the four steps in programme evaluation in a reverse manner, showing that to easily conduct this activity, the evaluator begins from the results. According to Smidt, et al. (2009), the first level of evaluation, reaction, typically involves learners completing a post-course evaluation of their impressions of the program. Such evaluation does not measure what participants have learned but gauges the interest, motivation, and attention levels of participants. The second level, learning, involves measuring what participants have learned in terms of both knowledge and/or skills. Learning evaluation can include trainees participating in written assessments or role-plays to demonstrate their skills. This level of evaluation allows participants to demonstrate their understanding of specific skills and/or knowledge within the learning program. The third level is behaviour or performance. This involves assessment of the trainees' ability to use their newly learned knowledge or skills in the workplace. This level of evaluation attempts to determine whether participants (who may already have demonstrated acquisition of specific skills and/or knowledge) use their new skills when they return to the work environment. The fourth level, described as results, is a measure of the impact that the training has had overall, including

financial or morale impacts. This might include improvement in, for example, staff—resident interaction, decreased incidents of challenging behaviour, and staff turnover.

This model is entirely related in this research but most specifically, the principle of the end is the beginning, return on expectation is the ultimate indicator of value are most enticing as they expiate on the importance of programme evaluation as a means of internal quality assurance in higher institutions. It posits here that the programme should work towards the attainment of the vision which is set before the programme is drowned. The return in expectation helps us to settle on the idea that value can be accorded to every training programme depending on the value it gives to the learners. This model is greatly vital to our research because it helps us to explain the concept of programme evaluation. It explains how and why a programme is evaluated taking into cognisance the vision of the institution whether profit or non-profit making institution. The model is applied before, during and after training to both maximise and demonstrate training's value to the organisation.

Just like any other model, Kirkpatrick's model of programme evaluation has experienced some challenges that make it difficult to fully cover the domain of evaluation. institutions find it very difficult to evaluate levels three and four. This is because in level three, there is no stable way of monitoring and measuring graduates' different behaviours at their respective workplaces and duties to guarantee changes. Observing a behaviour vis-àvis a particular programme can take a long time and resources, thus not all institutions can afford the cost. Moreover, the levels are chained and one leads to the other, therefore, the application of one or two may not give convincing results.

Forms of curriculum Evaluation

Programme evaluation takes two principal forms; Internal and External evaluation .

Internal evaluation;

Internal evaluation according to Niedermier (2017) is an assessment process that is conducted by the quality assurance units on the various actors(teachers, students, administrators) who are part of the programme in place. It is with the presence of these various internal stakeholders (faculty members who evaluate their own programmes) that we talk of internal evaluation. Meanwhile, if the process of evaluation is done by the students, staff and other faculty members to determine their value before the quality assurance units it is not internal evaluation but internal-self-evaluation. Most often the results

of this internal self-evaluation are presented to the QA units depending on the purpose for which it was conducted.

External evaluation

The external evaluation involves any external quality assurance body or any other external expert that evaluates either the entire institution or particular programmes for the purpose of accreditation, amelioration or otherwise, depending on the institution. External evaluators visit institutions upon formal invitation, and after the internal evaluation results are ready. Within the context of programme evaluation, different actors involved in the design and implementation of the programme are evaluated. We have student's evaluation, students-teacher's evaluation, staff-staff evaluation, course evaluation among others.

Course evaluation

Course evaluation is indispensable and the oldest tool that is applied to determine if the teaching and learning process is taking place as planned and the courses are designed to fit the purpose or satisfy the learner's interest. This type of evaluation is done between students (student's survey), the course structure and the instructors who are actively partaking in the teaching-learning process. Most often, students are given the chance to evaluate their learning experiences in specific courses at the end of every semester. Questions about the course like the provision of the clear course outline, the relevance of reading material, alignment of assignments with course objectives, the inclusion of current development in the field and finally, questions concerning instructors like; preparedness for class, promotion of learning, encouragement of student's participation, use of suitable evaluation methods on students learning, availability for help. The results are analysed and send to the various stakeholders for the right decisions to be made (University of Duisburg-Essen, 2013)

Staff Evaluation

The programme of a university can as well be evaluated through the staff and other stakeholders. The academic staffs involved in the day-to-day practice of the process are in a better place to give opinions or views on the nature of the university programs. In this process, the approach of the programme content is evaluated against the school's vision, objectives or outcomes. Apart from using the staff, most universities have been employing

all stakeholders in the process. A most applauded strategy that envelopes the opinions of both parties to promote quality in the system.

According to UNESCO (2018), some higher education institutions' like the American International University in Bangladesh and the Vienna University of Economics and Business achieved quality through the involvement of all stakeholders like students, academic and administrative staff, industry representative, and practitioners and academic peers from abroad and evaluated an innovative and highly interactive format during a one-day workshop. It shows that the institution's program can be evaluated by staff and stakeholders and because of the institutions' vision and objective enables the institution to assure the quality of its output.

Students-Staff Evaluation

In evaluating a programme, the institutional head or even the quality assurance unit evaluate the teachers' ability in exploring the programme. How teachers teach, how teachers plan lessons, give objectives per lesson, how they relate with learners and students rate teachers according to given standards. This form of evaluation also enables the institution to identify errors, weaknesses, on the part of the teachers and make provisions to ameliorate through empowerment.

Staff-Staff (peer) Evaluation

In this form of evaluation, teachers evaluate their peers' works and award marks. According to Niedermiere (2017), under these circumstances, staff members evaluate the practices and achievement of their colleagues. Through this method, assure are also expose that need urgent correction in order to enhance performance in the process of implementing the programme.

Methodological Constraints and Challenges in curriculum evaluation

The shoestring approach

The shoestring evaluation approach is designed to assist evaluators operating under limited budget, limited access or availability of data and limited turnaround time, to conduct effective evaluations that are methodologically rigorous (Bamberger, Rugh, Church & Fort, 2004). This approach has responded to the continued greater need for evaluation processes that are more rapid and economical under difficult circumstances of budget, time constraints and limited availability of data. However, it is not always possible to design an evaluation

to achieve the highest standards available. Many programmes do not build an evaluation procedure into their design or budget. Hence, many evaluation processes do not begin until the programme is already underway, which can result in time, budget or data constraints for the evaluators, which in turn can affect the reliability, validity or sensitivity of the evaluation. The shoestring approach helps to ensure that the maximum possible methodological rigor is achieved under these constraints.

Budget Constraints

Frequently, programmes are faced with budget constraints because most original projects do not include a budget to conduct an evaluation (Bamberger et al., 2004). Therefore, this automatically results in evaluations being allocated smaller budgets that are inadequate for a rigorous evaluation. Due to the budget constraints it might be difficult to effectively apply the most appropriate methodological instruments. These constraints may consequently affect the time available in which to do the evaluation (Bamberger et al., 2004). Budget constraints may be addressed by simplifying the evaluation design, revising the sample size, exploring economic data collection methods (such as using volunteers to collect data, shortening surveys, or using focus groups and key informants) or looking for reliable secondary data (Bamberger et al., 2004).

Time Constraints

The most time constraint that can be faced by an evaluator is when the evaluator is summoned to conduct an evaluation when a project is already underway if they are given limited time to do the evaluation compared to the life of the study, or if they are not given enough time for adequate planning. Time constraints are particularly problematic when the evaluator is not familiar with the area or country in which the programme is situated (Bamberger et al., 2004). Time constraints can be addressed by the methods listed under budget constraints as above, and also by careful planning to ensure effective data collection and analysis within the limited time space.

Data Constraints

If the evaluation is initiated late in the programme, there may be no baseline data on the conditions of the target group before the intervention began (Bamberger et al., 2004). Another possible cause of data constraints is if the data have been collected by program staff and contain systematic reporting biases or poor record keeping standards and is subsequently

of little use (Bamberger et al., 2004). For him, another source of data constraints may result if the target group are difficult to reach to collect data from - for example homeless people, drug addicts, migrant workers, et cetera.

Data constraints can be addressed by reconstructing baseline data from secondary data or through the use of multiple methods. Multiple methods, such as the combination of qualitative and quantitative data can increase validity through triangulation and save time and money. Additionally, these constraints may be dealt with through careful planning and consultation with program stakeholders. By clearly identifying and understanding client needs ahead of the evaluation, costs and time of the evaluative process can be streamlined and reduced, while still maintaining credibility. All in all, time, monetary and data constraints can have negative implications on the validity, reliability and transferability of the evaluation. The shoestring approach has been created to assist evaluators to correct the limitations identified above by identifying ways to reduce costs and time, reconstruct baseline data and to ensure maximum quality under existing constraints (Bamberger et al., 2004).

Five-tiered Approach

The five-tiered approach to evaluation further develops the strategies that the shoestring approach to evaluation is based upon. It was originally developed by Jacobs (1988) as an alternative way to evaluate community-based programmes. The five-tiered approach is offered as a conceptual framework for matching evaluations more precisely to the characteristics of the programmes themselves, and to the particular resources and constraints inherent in each evaluation context. In other words, the five-tiered approach seeks to tailor the evaluation to the specific needs of each evaluation context. The earlier tiers (1-3) generate descriptive and process-oriented information while the later tiers (4-5) determine both the short-term and the long-term effects of the program. The five levels are organized as follows:

- Tier 1: needs assessment (sometimes referred to as pre-implementation)
- Tier 2: monitoring and accountability
- Tier 3: quality review and program clarification (sometimes referred to as understanding and refining)
 - Tier 4: achieving outcomes
 - Tier 5: establishing impact

For each tier, purposes are identified, along with corresponding tasks that enable the identified purpose of the tier to be achieved. For example, the purpose of the first tier, needs assessment, would be to document a need for a program in a community. The task for that tier would be to assess the community's needs and assets by working with all relevant stakeholders. While the tiers are structured for consecutive use, meaning that information gathered in the earlier tiers is required for tasks on higher tiers, it acknowledges the fluid nature of evaluation. Therefore, it is possible to move from later tiers back to preceding ones, or even to work in two tiers at the same time. It is important for program evaluators to note, however, that a program must be evaluated at the appropriate level. The five-tiered approach is said to be useful for family support programmes which emphasise community and participant empowerment. This is because it encourages a participatory approach involving all stakeholders and it is through this process of reflection that empowerment is achieved.

The 360° Evaluation

Multisource feedback systems, commonly referred to as 360° assessments, refer to the process of collecting multiple viewpoints in order to provide a detailed and accurate picture of an individual. When 360° evaluation is applied to school leaders, teams of evaluators are utilised to gain the input of all members of the school's professional community, thereby offering an overall Evaluation of the individual (Fletcher & Baldry, 2000). Evaluators may include supervisors (school board members, superintendents, etc.), colleagues (assistant superintendents, curriculum directors, etc.), school personnel (educators, office staff), and community members (parents, students, etc.). All participants respond to the same survey items, thereby providing many perspectives and viewpoints on the actions and impact of the school leader being evaluated.

Because 360° evaluation focuses on feedback and subsequent action to strengthen school leadership, the method reflects the research literature's support of the mechanism as a formative evaluation tool to help school leaders focus on personal and leadership development and target particular areas for professional improvement (Moore, 2009). Furthermore, by comparing a leader's perceptions with the evaluation of stakeholders, schools encourage enhanced self- awareness and performance improvement from all participants (Carlson, 1998). Anonymous 360° feedback ensures leaders get honest feedback. In turn, it can create a culture where individuals become more ready to commit themselves to seeking and accepting corrections.

The shoestring approach

The shoestring evaluation approach is designed to assist evaluators operating under limited budget, limited access or availability of data and limited turnaround time, to conduct effective evaluations that are methodologically rigorous (Bamberger, Rugh, Church & Fort, 2004). This approach has responded to the continued greater need for evaluation processes that are more rapid and economical under difficult circumstances of budget, time constraints and limited availability of data. However, it is not always possible to design an evaluation to achieve the highest standards available. Many programmes do not build an evaluation procedure into their design or budget. Hence, many evaluation processes do not begin until the programme is already underway, which can result in time, budget or data constraints for the evaluators, which in turn can affect the reliability, validity or sensitivity of the evaluation. The shoestring approach helps to ensure that the maximum possible methodological rigor is achieved under these constraints.

Budget Constraints

Frequently, programmes are faced with budget constraints because most original projects do not include a budget to conduct an evaluation (Bamberger et al., 2004). Therefore, this automatically results in evaluations being allocated smaller budgets that are inadequate for a rigorous evaluation. Due to the budget constraints it might be difficult to effectively apply the most appropriate methodological instruments. These constraints may consequently affect the time available in which to do the evaluation (Bamberger et al., 2004). Budget constraints may be addressed by simplifying the evaluation design, revising the sample size, exploring economic data collection methods (such as using volunteers to collect data, shortening surveys, or using focus groups and key informants) or looking for reliable secondary data (Bamberger et al., 2004).

Time Constraints

The most time constraint that can be faced by an evaluator is when the evaluator is summoned to conduct an evaluation when a project is already underway if they are given limited time to do the evaluation compared to the life of the study, or if they are not given enough time for adequate planning. Time constraints are particularly problematic when the evaluator is not familiar with the area or country in which the programme is situated (Bamberger et al., 2004). Time constraints can be addressed by the methods listed under

budget constraints as above, and also by careful planning to ensure effective data collection and analysis within the limited time space.

Data Constraints

If the evaluation is initiated late in the programme, there may be no baseline data on the conditions of the target group before the intervention began (Bamberger et al., 2004). Another possible cause of data constraints is if the data have been collected by program staff and contain systematic reporting biases or poor record keeping standards and is subsequently of little use (Bamberger et al., 2004). For him, another source of data constraints may result if the target group are difficult to reach to collect data from - for example homeless people, drug addicts, migrant workers, et cetera.

Data constraints can be addressed by reconstructing baseline data from secondary data or through the use of multiple methods. Multiple methods, such as the combination of qualitative and quantitative data can increase validity through triangulation and save time and money. Additionally, these constraints may be dealt with through careful planning and consultation with program stakeholders. By clearly identifying and understanding client needs ahead of the evaluation, costs and time of the evaluative process can be streamlined and reduced, while still maintaining credibility. All in all, time, monetary and data constraints can have negative implications on the validity, reliability and transferability of the evaluation. The shoestring approach has been created to assist evaluators to correct the limitations identified above by identifying ways to reduce costs and time, reconstruct baseline data and to ensure maximum quality under existing constraints (Bamberger et al., 2004).

The Concept Of Curriculum Leadership

Curriculum leadership involves a careful balance of instructional and administrative leadership responsibilities. The role is multi-faceted and complex, embedded not only in the formal trappings of authority (as supervisor) but also in functions that cut across a number of roles affecting pupil's achievement, including professional development, professional accountability, and curriculum development (Ogawa & Bossert, 1995). Much of the current thinking on the role of the curriculum leader distinguishes the traditional, or "maintenance," responsibilities commonly assigned to the position and the so-called "dynamic" tasks that extend the curriculum leader's impact to community building and school improvement processes. The former reflects those tasks of managing the instructional program, such as

spearheading textbook adoption, maintaining subject area expertise, and reviewing student achievement; the latter includes vision-building, tailoring standards and benchmarks to the particular needs of the learners, engaging and communicating with stakeholders, and managing the change process. According to Wiles (2008), the most effective curriculum leaders embrace the dynamic role and go beyond the expected responsibilities. They establish new directions, align people and resources, motivate participants, and aid school improvement processes. In this sense, strong leadership at the curriculum management level is also *inclusive*, embracing work that is carried out collaboratively with individuals at different levels of the system and with different purviews over instruction (Spillane, Halverson, & Diamond, 2001).

The Curriculum Leadership 360° Appraisal evaluates both the maintenance and dynamic responsibilities of the curriculum leader.

The most effective curriculum leaders:

- Embrace the dynamic role and go beyond expectations
- Establish new directions
- Align people and resources
- Motivate participants and aid school improvement processes

Leadership Domains

The following sections review the research literature supporting the inclusion of the six categories.

Vision and values

School heads in curriculum and instruction and/or department chairs function as leaders when they focus on improving key aspects of their school or district's progress including its mission, vision, engagement, and adaptability-and engage others in complex work to achieve these goal. By contributing to and directly engaging with the goals of their institution, they create policies, structures and incentives that build upon school or district assets. Effective curriculum leaders are proactive and analytical, conscious of emerging issues and concerns related to personnel. They pinpoint problems through effective questioning, monitor the effectiveness of school practices, and prioritize and coordinate plans of action with staff members. Strong curriculum leaders take responsibility for their own behaviours and distribute leadership responsibilities to colleagues who embrace the vision and goals of the school or district (Blase & Blase, 2011 and Hatch, 2014, In so doing,

educational leaders create the conditions that maximise the actions of all stakeholders by mobilising the pathways that leads to effective learning.

Effective Curriculum Leaders

- Focus on specific, high-yield instructional practices
- Use assessment data to improve student learning and teacher practices
- Remain Vigilant about adapting programming to change in demographics, Legislation. And/or research trends.

Staff Development

Because the school head or head of department directly affects teacher behaviour and attitudes, curriculum leaders are arguably the most powerful influence on the performance of school faculty. Effective curriculum leaders are focused on enhancing teacher quality at all stages of the staff development process, including mentoring, evaluating, and do so by establishing clear criteria for professional growth and by applying differentiated approaches to the support they need (Danielson, 2011). The effective curriculum leader also provides extensive staff development, regular opportunities for teacher collaboration, and encourages the formation of professional learning communities that lead to They work alongside teachers in adult learning activities such as study groups, school visits, and examination of students. They also model exemplary practices for others, helping faculty and staff develop needed pedagogical skills and understanding.

Communication and Collaboration

Research shows that teachers and students are most productive when they work in a context of caring, support, and trust (Patterson & Patterson, 2004). Curriculum leadership, then, is also about cultivating relationships with those stakeholders who can contribute to the school climate and encourage learning. Effective leaders are visible on a regular basis; they communicate their vision and goals in a clear and timely manner; they listen to staff members and are mindful of their needs, wants, and concerns. To be effective, curriculum leaders need to facilitate professional dialogue, distribute or share responsibility, value the input of their colleagues, make strategic use of staff members' special skills and form leadership teams to build strong support systems. (Gabriel and Farmer, 2012). This research thinks that school leaders should foster shared beliefs and a sense of community, recognize the influence of relationships on professional culture, and establish strong lines of

communication and interaction to build additional assets for school growth and improvement. When this is done, the work environment will be conducive for an effective school.

Management

Implementation of effective organisational processes influences student achievement (Davis et al., 2005). In order to foster instructional improvement, curriculum leaders must efficiently manage relevant school operations, including staffing, budgeting, and compliance matters. Curriculum leaders monitor organisational performance, modify organisational structures that may undermine effective practice, and provide systems thinking to address concerns that connect administrative procedures to student achievement. Strong managerial skills allow all the other dimensions of schooling to aid the improvement of student learning.

Dynamic curriculum leadership

All schools are not equal in their ability to promote desired improvements. Although basic curriculum maintenance is vital, Curriculum leadership must try to do more than manage the status quo. If there is some kind of balance between maintaining the curriculum and upgrading school programs, the curriculum leader must always seek a greater and more visionary kind of role. The fact is, our world is not static and the curriculum in school represents our nation's program for preparing students to live in the future. If we consider the changes occurring in our everyday lives, it is clear that the future will not be the same as the past or present. Communication technology and the changing nature of work, for example, call for major changes in the way we school children. The curriculum leader must be both visionary and skilled at translating such projected changes into school preparation programs. In this sense, the field of curriculum is like the "brain" of the school body; it is forever monitoring the environment and seeking a better way to serve the students. The curriculum leader is first an engineer (maintenance), but he or she must also be an architect of new school programs. Curriculum work is about programming and enhancing the lives of children.

Any number of tasks can illustrate the dynamic side of curriculum leadership. What is common to each of these more dynamic tasks is the emphasis on planned change. The dynamic curriculum leader continually seeks to move from where we are in the present to improved conditions for the learners in the future. The dynamic view of curriculum work is that it is an active process Involving the continual construction and improvement of school

programs. Improvement most often means change. For such a view to exist and be accepted in the minds of faculty, parents, and school community members, the curriculum leader must facilitate a process of *visioning*. Advancing perceptions from the present to the future includes assessing common beliefs, tangible goals, and value priorities in school programs.

Effective, dynamic curriculum leaders perform the following:

- Provide a vision
- Move beyond minimum standards
- Tailor the curriculum
- Establish authentic assessment
- Build a working curriculum team
- Engage teachers, parents and the school community
- Plan for change.
- Manage the process of change
- Use tools to empower curriculum development

For more than half a century, educators have spoken of "meeting the needs of learners" and "individualising instruction." More than 50 years of controlled research exists to document that individual students in school are not alike and that they have different strengths and intelligences. Knowing this, the curriculum leader must focus attention on how to best organise the content of curriculum to meet the needs of the client (i.e., the student). The planned instructional delivery of lessons is also a part of the curriculum (Goodlad, 2014).

As the curriculum leader redesigns the curriculum, he or she must draw attention to the expectations for the program design (the outcomes): What do we want the student to be able to do? It is simply unsatisfactory to state such expectations in terms of passing a test or being physically present for the 15,000 hours of instruction that each learner will experience in school over 12 years. We need to know what the learner will be able to do because they have experienced this learning design, and we need to be able to "see" this outcome in terms of tangible student behaviours. Our assessment of the curriculum must be observable, authentic, and real-world.

The curriculum leader who performs only maintenance functions may be able to meet requirements (reports, reviews, and standards expectations) without much assistance. But the curriculum leader who intends to define leadership as planning for regular change and school improvement will certainly need help. Teachers will be the primary source of assistance, but parents and community members may also play a valued role. Engaging

these groups will mean forming a working team and honing their skills. Such social engagement cannot be avoided.

The actual recruitment of teachers, parents, and community members to participate in curriculum activities will call for a degree of "psychology" on the part of the curriculum leader. He or she will need to better under-stand motivation and the effect of work climates on teacher behaviour. He or she will have to give thought as to the best or most effective communication mediums. The curriculum leader will have to construct teams using our best knowledge of small groups and informal leadership. Unlike business or military leaders, curriculum leaders will have to use persuasion and "power with" techniques to be successful. The curriculum leader does not have the authority to order change. The curriculum leader will have to be skilled at developing plans for changing.

The difference between successful and unsuccessful change in schools, from my experience, is found in the details of planning. Ways must be found to illuminate the problems and provide paths to solutions. The dynamic curriculum leader will need to examine the whole notion of planned change. What must be done to get others to contribute to school improvement? How can the exchange of information be facilitated? How will any change effort fit into the larger organisation of district or state education systems? These and many other questions must be addressed and strategies formulated. Dynamic curriculum will require planning.

Finally, the curriculum leader who is dynamic will need to understand the many tools that exist to boost change efforts and empower the curriculum development process in schools. The skillful use of committees, technologies, assessments, and other tools will contribute to establishing a winning effort. Comprehensive planning will bring logic and order to even an emerging curriculum design. A "can do" attitude will emerge.

School Leaders as Curriculum Leaders

As odd as it may seem, all school leaders must be curriculum leaders in order to maintain their role. In many schools, the "status leader" (principal/head teacher) is the leader in name only. The true leader in any school building will be that person who can mediate between organisational tasks and individual needs. Said another way, followers in schools get satisfaction from participating in curriculum activities to the degree their needs are met. Goodlad (2014) states that school teachers who are equally leaders working with children in classrooms each day, either follow the planned curriculum or don't follow the planned curriculum, according to whether it is satisfying to them. If the teaching staff has not been

involved in developing the curriculum they are to teach, or if it violates their values concerning teaching, the teacher may just shut the classroom door and follow his or her own dictates. For this reason, classroom teachers are the key to all curriculum work and must be fully and openly involved in the development of school programs.

Most curriculum leaders today are selected from the ranks of the best teachers in a school in many ways, curriculum leadership is a lot like classroom teaching. It is the job of the curriculum leader to determine how to best involve all teachers in curriculum work and, in order to gain commitment, determine the needs of teachers. A new curriculum leader will rarely be successful if they try to "be the boss." Instead, using his or her knowledge from the classroom, the new curriculum leader will try to mediate between the "system" (the district or school) and the needs of classroom teachers. In other words, he or she will individualise the experience for the teacher. Curriculum leadership is almost always a problem-solving process (Jenkins, 2014).

It is important according to this author to recognize that leading must go beyond the school curriculum team. Community members, particularly those with children in school, are very interested in what goes on in a school Remember, curriculum development reflects values, and a successful curriculum effort must occur within the general value structure of a community or resistance will soon be in place. Cottrell, Crow and Shumway (2007) Santeusanjo (2011) states that curriculum leaders must operate in an open, involving and facilitating way to be successful. Unlike an army general or a policeman, or even a principal of a school building, curriculum leaders do not have traditional lines of authority.

Curriculum leaders are staff leaders with authority borrowed from those in the chain of command. Curriculum leaders must use persuasion and demonstrate competence to gain support and participation from others; they must help and they must guide. In the long run, supportive or persuasive leadership (power with) is much more effective and natural than authoritative (power over) leadership. As the curriculum leader demonstrates the ability to organise, serve, and meet the needs of those in the school and the community, future leadership will be simple. The curriculum leader is helping those in the school and community to develop the program they want for children. This is a win-win situation for the leader, the teachers, parents, and members of the community. What the followers in the school will demand from the curriculum leader is competence. Competence in the role of curriculum leadership would include working effectively with others, evidencing planning skills, being able to encourage effective communication among all parties, and delivering the results that have been projected through curriculum development activities.

School leaders focus or mastery of curriculum and instruction

Bottoms (2006) states that educational accountability has changed nearly everything. Superintendents and local school boards no longer can be satisfied with principals who simply place teachers in the classroom, provide textbooks and get students to attend school. Increasingly, schools and school leaders are being judged on their progress in teaching most students to the standards that only the "best students" were expected to meet in the past. This means that future school leaders must have in-depth knowledge of curriculum, instruction and student achievement.

- School leaders need to understand the "big ideas" that should be taught in the core curriculum. They do not need to be experts, but they should know enough to determine whether students are being taught the body of knowledge, the understandings and the skills that they are expected to learn in the core curriculum, Also, school leaders must have a grasp of the knowledge, skills and under-standings that students need to gain from career/technical courses and electives.
- Leaders should know enough about state and national standards in academic courses and elective fields of study (such as fine arts and practical arts) to help teachers identify the most important standards. In other words, leaders need to know that "covering everything and learning nothing" does not work. They need to be able to help teachers identify the things that students should learn in greater depth.
- Leaders need to know how to distinguish between a regular language arts course and a college-preparatory/honours language arts course. Students in college- preparatory courses are expected to do more reading and produce higher-quality work. Leaders should end course leveling and get the faculty to teach most students the key concepts from the college-preparatory curriculum.
- Leaders must understand literacy. Reading, writing and speaking are "learning tools" that are essential across the curriculum in academic courses, fine arts courses and the practical arts. Leaders should be able to recognize whether teachers are advancing students' literacy skills and requiring students to use these skills to learn in all courses.
- Leaders need to know what students are supposed to learn and the standards they are supposed to meet in determining whether teachers' exams and assessment guides are appropriate to measure high school and middle-grades work.
- Leaders need to know enough about assessment to be able to lead teams of teachers who are working together to develop grading guides and common exams.

Assessments can help teachers measure their own effectiveness as well as the amount of student learning.

- School leaders should have a working knowledge of research-based, learner-centred instruction, such as the Socratic Method, project-based learning, cooperative learning, research studies, integration of technology into instructional strategies, and integration of academic and career/technical studies. They need to understand the conditions that will enable teachers to use these methods.
- Leaders must be able to recognize whether teachers are using instructional strategies effectively.
- They should know how to help teachers learn new instructional methods, how to gauge the amount of time it will take for teachers to master new techniques, and how to "network" teachers as they implement new approaches.
- They need to understand the amount of time it takes to plan effectively. Good instruction requires good planning. Teachers who are expected to teach higher-level content to more students need time to devise ways to connect what they are asking students to learn with what these students have learned or experienced in the past.
- School leaders should know enough about teaching and learning to be able to identify teachers who are doing the best job of raising student achievement. Why do students learn more in these teachers' classrooms? Exemplary teachers can deliver "model" lessons and invite other teachers to observe instruction in the classroom.
- School leaders must understand the school and classroom conditions that contribute to higher expectations. They need to be able to recognize whether such a "culture" exists in a classroom and to assist teachers (through mentors or other approaches) to expect more of students.

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School leader's knowledge in organising a school for greater student learning

It may be necessary to create small "learning communities" in which teams of teachers from the core academic subjects and fine arts or practical arts work together to teach a group of students. Leaders should be able to build an organisational structure that will allow teams of teachers to connect what they are teaching and to develop ways to make learning more meaningful to more students. This type of school reorganisation, which emphasises the belief that it is possible to teach more students at a higher level, is particularly effective in low-performing schools. It tends to energise young teachers and create opportunities for new leaders to emerge. Leaders need to be able to create an organisational

structure that promotes higher achievement. They can assign a team leader, a department chairperson or an interdisciplinary leader to head each team of teachers. Team leaders should be teachers who have "bought into" the concepts of higher standards, better teaching and more advanced learning. Principals need to meet continuously with their team leaders to sustain the focus on curriculum, instruction and student learning.

School leader's role in balancing the pressing need for ongoing school improvement with the heavy demands of non-instructional issues and emergencies.

Many non-instructional situations are the result of low-quality instruction and the school's inability to teach all students equally. Successful principals lead teams composed of assistant principals, team leaders, department heads and others who share a common point of view on raising student achievement. The principal should focus the staff on the important things: teaching challenging content, engaging students in learning and constantly seeking ways to raise achievement. Principals cannot delegate the tasks of creating the vision and maintaining the focus. They must perform the vital function of communicating the school's goals to teachers, students, parents and the community.

School leaders need to know how to delegate effectively and to involve school teams in an overall effort to change what is taught, how it is taught and what is expected of learners. Leaders need to understand how to use data to promote higher standards and the viewpoint that "effort matters." Leaders who make data-driven decisions can produce powerful changes. Teachers who have access to disaggregated data will have a difficult time arguing with the numbers. However, the leadership preparation programs in many training schools contain traditional courses that fail to address data collected from real classrooms or to focus on learners' assessment, school attendance, dropout rates, college entrance test results and program evaluation.

Many strategies are available to improve instruction: raising expectations, providing demanding content, planning staff development, forming study groups and promoting team participation in conferences. School leaders must be the "chief learners" and the models for higher performance. It is not enough to know "what works." Leaders must know what is needed now and what will be needed to make continuous improvement. This brings out the very important place of a school leader in the curriculum development process. Their involvement from the conception of a curriculum to the evaluation phase is primordial. When this fails, instructional implementation of the curriculum will suffer greatly. The curriculum will be seen as a vague document; which Bottoms puts as "big ideas" that should

be taught to children. The need for ongoing school improvement with heavy demands in curriculum innovation sees the school teacher as a pivot in the curriculum development process.

Curriculum reforms in the 21st century

Modern societies are facing new challenges, be they environmental, economic, health-related, or societal. Climate change and the depletion of resources question our consumption habits, the development of artificial intelligence and new technologies challenge our traditional conception of work, and ongoing globalisation entails migration, urbanisation and increasing diversity shaping countries and economies. If children in primary school keep on learning what was taught to their parents, they will not be appropriately prepared for a more uncertain future characterised by an ever-changing environment (OECD, 2020). Due to these global trends, countries have increasingly considered reviewing the curriculum as a way to equip children with the knowledge, skills and competences needed for tomorrow. In fact, several African and OECD countries have engaged in curriculum reform in recent years such as Estonia, Finland, Japan, Norway, and Wales (United Kingdom) for example. More than 40 countries are participating in the OECD-led Education 2030 project, an effort that explores the skills and competencies that are needed for children to thrive in the 21st century (OECD, 2020, p.1).

While each country has a different trajectory of reform, some similar patterns emerge in several countries, such as the emphasis on well-being, learner agency, the ability to solve problems and navigating an uncertain world. The similarity, as well as distinctiveness, of curriculum reform between different countries reflects a broader complexity about curriculum reform, which concerns the interplay of global and local influences. On one hand, curriculum reform is a national affair, as it is expected to define the knowledge and abilities that are seen to be most valuable in a society and necessary to prepare the future. On the other hand, it can be influenced by international trends, such as globalisation, and international pupil's or even student's assessments also reflect this (for instance the Programme for International Student Assessment, PISA, Trends in International Mathematics and Science Study, TIMSS, Progress in International Reading Literacy Study). Curriculum reform is an intersection between these forces. In addition to this complexity, a major issue many countries encounter when trying to reform curriculums concerns implementation of the reform.

According to Fullan (2015), curriculum implementation corresponds to the means to accomplish desired objectives, and for the new curriculum to bear fruit, it needs to be translated into classroom practices. The topic of implementation has been widely studied in fields such as public management, public policy, organisational change and education. Echoing traditions and debates in these fields, curriculum reform has previously been seen from a "top-down" perspective, where the "success" of the implementation was measured by the "fidelity" and "adherence" to the reformed curriculum by implementers, such as teachers (Wedell and Grassick, 2017). Nevertheless, this approach does not fit the trend of autonomy-centred curriculum enactment, where the central role of teachers in the process, both as enactors and mediators of the policy, makes obsolete the concept of fidelity itself (Braun, Maguire and Ball, 2010, p.6).

In effect, a more dominant view of implementation has appeared recently, shifting towards a more "bottom-up" approach that emphasises the autonomy and discretion of implementers. In this view, teachers' agency is recognised as playing a crucial role in curriculum implementation, as teachers are not solely passive executors only playing a role at the final stage of the reform, but rather active actors that should be taken into account throughout the whole reform process. Accordingly, "implementation fidelity" has given way to "implementation integrity", that is "the degree to which teachers' adaptations of materials are congruent with the curricular goals and principles undergirding the structures of curriculum" (Penuel, Phillips and Harris, 2014). From this point of view, shared by this paper, curriculum implementation encompasses a wider range of areas that go beyond the traditional "teacher fidelity" and include topics like stakeholder engagement and other contextual factors likely to affect the outcome of implementation.

Curriculum reform through the lens of education implementation

Applying a general education policy implementation framework developed by Viennet and Pont (Viennet and Pont, 2017, p.8) to the curriculum reform literature, we gather analysis and information on the key factors that policy makers can consider when they undertake curriculum renewal. Following different analyses from researchers, most of them propose an implementation framework for curriculum reform that aims to provide guidelines for countries and education systems that are trying to initiate a reform or re-examine their curriculum reform process. The majority proposes that a coherent education policy implementation strategy brings together three dimensions in an actionable way. These are: smart policy design, inclusive stakeholder engagement, and conducive context. Each

dimension includes three levers to be considered for implementation. The way the three dimensions are weaved together and communicated through an actionable lens can determine the extent to which the implementation strategy is coherent and can result in effective change. The following sections detail each of these dimensions.

The multifaceted process

As mentioned earlier, curriculum reform can be seen as a process that aims to change the objectives of learning and the way learning takes place. How such change would be implemented depends on the goal and intention behind the change. Policy design addresses the central considerations of what is to be learned, how it is to be learned, and why it is to be learned. It also addresses how the success of this learning is evaluated, and what resources are required for the attainment of the outlined objectives. In practice, there is a myriad of components that need to be taken into account in the process of curriculum design, all of which will be consequential for the successful implementation of curriculum. If the design itself is not informed by a sophisticated understanding of crucial components concerning learning and teaching, like effective pedagogical methodology, it cannot be successfully implemented (van den Akker, 2010).

The curriculum spider web:

The traditional major planning elements for curriculum are content, purpose, and organisation of learning. However, van den Akker (2010) considers it is wise to pay attention to a more elaborated list of components. His framework relies on ten components that address ten specific questions about the planning of student learning:

- Rationale or Vision: Why are they learning?
- Aims and Objectives: Toward which goals are they learning?
- Content: What are they learning?
- Learning activities: How are they learning?
- Teacher role: How is the teacher facilitating learning?
- Materials and Resources: With what are they learning?
- Grouping: With whom are they learning?
- Location: Where are they learning?
- Time: When are they learning?
- Assessment: How to measure how far learning has progressed? van den Akker (2010, p.10),

While traditional planning elements for curriculum focus mostly on content, purpose, and the organisation of learning, van den Akker (2010) considers it wise to pay attention to a more elaborated list of components stated above.

He proposes ten specific questions about the planning of student learning, among which the "Rationale/Vision" refers to overall principles while the nine other components should ideally be linked to the vision and consistent with each other. Each of the elements not only encompass substantive issues (content of the curriculum), but also organisational matters that influence learning. While all the components are important for a successful design of curriculum reform, a few are particularly crucial from the viewpoint of curriculum implementers and policy makers. The educational vision, the type of curriculum and associated documents to be developed, and the role of teachers are vital. We discuss these components more in-depth in the following text.

A new curriculum requires a clear vision

The vision of curriculum reform signifies the purpose of the curriculum change. It covers the questions of why the curriculum reform is needed, what kind of curriculum is preferred, and how the desirable changes could be achieved. Answers to these questions would affect the outcome of implementation through various ways. In the absence of a clear justification of the reform, the curriculum policy might suffer from not gaining public and political support. Moreover, if there is no consensus on what kind of support is needed, the diverging and even conflicting opinions might hinder curriculum change. Finally, if there is not a clear roadmap or theory of change that can delineate how the proposed policies would contribute to the objectives the reform set out to achieve, it might lead to confusion among key actors, undermine credibility of the policy and waste resources. All of these may disfavour the successful implementation of the curriculum reform.

Early involvement of stakeholders as a way to build support for the new curriculum

A curriculum reform can go against stakeholders' beliefs and practices. However, when stakeholders are involved early on in the reform process, they can shape and "make sense" of the new curriculum based on their existing belief system, and develop ownership that encourages their willingness to commit to the reform. Individual and collective sensemaking support implementation Curriculum implementation involves a complex process in which stakeholders translate the curriculum policies into practices that suit their local context. During this process, how stakeholders make sense of the curriculum would shape

their actions and decisions, and affect how they enact the curriculum (Carless, 2009, p. 91). Sense-making could be seen as an "(inter)active and dynamic process by which individuals and groups make meaning from the environments in which they operate, which in turn orients their actions" (Pietarinen, Pyhältö and Soini, 2017, p. 22). In other words, local actors would actively construct their understanding of the curriculum policies through the lens of their pre-existing beliefs and practices (Coburn, 2006).

Sense-making in curriculum implementation, namely the interpretation process of curriculum policies, mediates how teachers implement the curriculum (Kelchtermans, 2009). Studies show that teachers would select what to teach and what to exclude concerning the new curriculum based on their beliefs about what they regard as important for the pupils (Castro Superfine, Marshall and Kelso, 2015). Teachers whose beliefs are more aligned with the curriculum reform tend to be the ones who apply the most teaching practices required by the reform (Roehrig and Kruse, 2005, p.64). Moreover, situating the new knowledge and associated practices with existing ones is a central tool through which teachers and other actors come to understand and enact new curriculum (Mellegård and Pettersen, 2016, p.36). Sense-making may also influence student engagement, which is in turn associated with higher levels of educational achievement and attainment (Klem and Connell, 2004). Some countries have actively involved students in early design phases, such as the Netherlands (van Schaik, Voogt and Nieveen, 2017, p.96) and Finland (Pietarinen, Pyhältö and Soini, 2017, p.22), to incorporate student perspectives into curriculum design, and increase the relevance of curricular goals and values.

The development of pedagogies that connect students' culture, passions and experiences to content, such as culturally responsive teaching (Gay, 2002, p.97) and modalities of inquiry-based instruction (e.g. project-based learning, problem-based learning, design challenges) that encourage students to question, investigate, and take action on issues that matter to them (Larmer, Mergendoller and Boss, 2015, p. 98), also contribute to student sense-making and engagement. As stakeholders are not working individually, their response to the curriculum reform will be shaped by their social environment. Collective sense-making is based on a "shared set of assumptions, norms, values and cultural artefacts" that can guide and evaluate stakeholders' actions (März and Kelchtermans, 2013, p.93). In schools, it is sometimes referred to as "school culture" (Schein, 2010), and influences subconsciously the perception and behaviours of individuals within the school and their response to the curriculum reform. Recognising this collective dynamic, Coburn (2006) points out that the lack of coherent and shared sense-making at a collective level might pose

obstacles for the curriculum reform. If teachers and school principals have conflicting interpretation of the curriculum change, it is difficult to see how the curriculum would be successfully implemented (Banner, Donnelly and Ryder, 2012, p.100).

An intervention to foster sense-making will support the implementation of the reform. It can include targeted communication to disseminate the intention of the new curriculum, guidelines to articulate the new pedagogical practices with the former ones, participatory approaches such as feedback loops to gather information from stakeholders etc. At the collective level, professional learning communities or schools as learning organisations have the capacity to adapt to new circumstances thanks to collective learning, participatory leadership and leadership for change management (OECD, 2020). The inclusion of diverse stakeholders in educator teams within design-based implementation research (DBIR) provides another example of collective sense-making. DBIR proposes to co-construct curriculum according to the following principles:

- Focusing on problems of practice through the perspectives of multiple stakeholders,
 - Commitment to iterative, collaborative design,
- Emphasis on developing understanding of classroom learning and implementation,
 - Concern with developing capacity for systems-change (Penuel et al., 2011).

These types of collaborative structures help develop collective sense-making and can further support the curriculum implementation since they;

- Provide an arena for stakeholders to discuss and refine collectively the aim and possible outcomes of the new curriculum,
- Provide a source of continuous feedback and an extensive knowledge-sharing mechanism based on the multiple interactions characterising these structures
- Reduce stakeholders' anxiety caused by the potential changes through clarifying the consequences of the reform, and
- Facilitate the shared interpretation of the reform and contribute to building curriculum coherence (Pietarinen, Pyhältö and Soini, 2017).

Teacher's ownership of the new curriculum is essential to support change

The concept of ownership is more specific to teachers as implementers. Ownership in curriculum reform could be seen as "a mental or psychological state of feeling owner of an innovation, which develops through the teacher's mental and/or physical investment in it" (Ketelaar et al., 2012, p. 274). The quality of sense-making moderates the teacher's degree of ownership of the innovation, whether the reform is adopted, rejected, or resisted by the teacher (Ketelaar et al., 2012, p.106). This is concurred by studies related to "ownership" in curriculum reform where teachers feel that the curriculum is "theirs" (Kärner and Krull, 2016, p.107). The feeling of ownership conditions curriculum implementation, particularly through attitudes towards change:

- First, ownership is accompanied by the willingness to assume responsibilities, risks, and sacrifices. Experienced responsibilities motivate stakeholders to invest time and energy to advance the cause of the curriculum reform.
- Second, ownership provides individuals with a sense of satisfaction related to psychic comfort, pleasure and security, a conducive condition for stakeholders to support and carry out the new curriculum (Pierce, Kostova and Dirks, 2003, p.108).

Ownership can be strengthened through structured processes, such as the previously described DBIR, where teachers co-construct curriculum (Penuel et al., 2011, p.102). A similar approach builds curricular capacity through collaborative design in teacher teams. Teacher learning is characterised by three elements:

- Mediated through the activity of developing concrete curriculum materials,
- Social in nature through solving problems and making decisions, including iterative interpretation and negotiation, and
- Situated and culturally embedded in the context of their own school (Pieters, Voogt and Pareja Roblin, 2019, p.110).

However, the level of ownership depends on teachers' authority to speak on the curriculum, on their understanding of the students' needs and ability, and on the available resources that could make the reform work (Kirk and MacDonald, 2001, (111). In other words, little ownership can be expected from a teaching workforce with limited capacity. As ownership is also positively linked to autonomy, it leads to a positive orientation towards change when the change is self-initiated, evolutionary and additive, but may stimulate resistance when changes are imposed, revolutionary and subtractive (Pierce, Kostova and Dirks, 2003, p.108).

School leaders are a key change actor

School leaders play a crucial role in curriculum reforms, as they can guide and mediate its effective implementation at the school level. They can create a culture that fosters changes and that are conducive for teacher and student learning (Thompson, Gregg and Niska, 2004, p.113). Jackson and Davis (2000, p. 157) state that "no single individual is more important to initiating and sustaining improvement in middle grades school students' performance than the school principal". The kind of leadership adopted depends on the level of capacity of an education system, especially at the school level. In environments with low school autonomy and capacity, central leadership is generally favoured (OECD, 2015, p.48). In education systems where the teaching profession is highly developed, distributed leadership may be a more prevalent pattern as in New Zealand or in Japan (OECD, 2018, p. 44). In educational systems where school leaders have the responsibility for curriculum and exercise instructional leadership, school leaders play a key role in initiating, communicating, and convincing teachers to implement the new curriculum. More importantly, they can set up the school processes for teachers to collaborate in the development of the curriculum, for targeted training and development to take place at the school level, and for including curriculum reform in their school development plans.

In systems where the principals' role is more administrative, school leaders can support the curriculum implementation by supporting teacher's professional development, promoting professional learning communities, an open arena to discuss the reform and conducive to developing collective sense-making. Particular approaches to school development, such as professional learning communities, can be conducive to curriculum reform as they can bring together school professionals to focus collectively on developing and implementing the curriculum. These are in turn positively associated with the speed of innovation adoption, such as a new curriculum (European Commission, 2017).

Curriculum Reform In Cameroon Basic Education

The Need for Curriculum Reform

To successfully carry out the implementation of the above decision, a new national curriculum, needed to be developed based on the following general and specific objectives of the national education policy in sections 4 and 5: "The general purpose of education is to train children for their intellectual, physical, civic and moral development and their smooth integration into society bearing in mind prevailing economic, socio-cultural, political and moral factors". ... and that the objectives of education shall be to:

- Train citizens who are firmly rooted in their culture, but open to the world and
- respectful of the general interest and the common weal;
- Inculcate the major universal ethical values which are dignity and honour, honesty and integrity as well as a sense of discipline in pupils and students;
 - Promote family life;
 - Promote national languages;
- Provide an introduction to the democratic culture and practice, respect for human rights and freedoms, justice and tolerance, the fight against all forms of
- discrimination, the love of peace and dialogue, civic responsibility and the promotion of regional and sub-regional integration;
- Cultivate the love of effort and work well done, the quest for excellence and team spirit;
 - Develop creativity, a sense of initiative and the spirit of enterprise;
 - Provide physical, sports, artistic and cultural training for the child;
 - Promote hygiene and health education" (Law No. 98/004, 1998 pp.21 22),

Following this decision the ministry selected 75 primary schools nationwide were an experimental pilot study was carried out from the beginning of 2004 to the end of the 2005 academic year. The results of the evaluation of the pilot phase took place at the end of 2005 and proved to be satisfactory. Consequently, Cameroon participated in a comparative study of modalities for implementing curriculum reforms alongside Gabon, Tunisia, Mali and Senegal from 2008 to 2009. This led in 2010 to a study on the reform of the Cameroon primary school curriculum with the support of the French Development Agency (AFD) through the C2D-E Program (Ministry of Basic Education 2016, p 9).

Context of the reform

Following the Education For All Conference (1990) organised in Jomtien, Thailand, by UNESCO, several countries worldwide engaged in a vast array of reforms to render their educational systems more responsive and productive internally and externally. During the Dakar meeting of 2000 in Senegal, participating countries reaffirmed their determination to achieve the Millennium Development Goals (MDG) and the EFA goals by 2015. To improve on the quality and usability of education, many countries in the world have adopted the competency-based approach in their education and training systems and some (France, Ghana, Brazil and India) have also resorted to the elaboration of national core competences (Cameroon Ministries of Education, 2013).

In 1995 the national forum on education proposed new orientations to national education which were encapsulated in the 1998 law to lay down guidelines for education. The general and specific objectives of this law are outlined above. To respond to these major strategic orientations, Cameroon engaged in the elaboration of an Education Sector Strategy (ESS) between 2006 and 2011, based on the Poverty Reduction Strategy Paper (PRSP, 2003). In adopting the Growth and Employment Strategy Paper (GESP, 2009) the government took an option to promote growth as a source of wealth and employment. It is within this framework that the vision 2035 (to make Cameroon an emergent, democratic and united society) finds expression. The education sector vision consists on the one hand to provide the youth with quality education, requisite competencies and professional attitudes, and on the other to facilitate their insertion into the professional world.

National Core Skills and Competences

It was in this connection that the Prime Minister of Cameroon, appointed a committee from the five ministries in charge of education (ministries of Basic, Secondary and Higher education, ministries of Employment and Vocational Training and of Labour and Social Insurance) to develop national core competences that will suffuse national curricula and meet the needs of the labour market. The core national skills and competences show clearly the skills and competences to be developed by learners by the end of the school programme. They constitute the knowledge, skills and attitudes related to Cameroon reality and selected to enable all participants involved in pedagogy to successfully accomplish their teaching effectively. The seven National Core Skills and four broad-based competencies to be acquired by the end of the primary school programme are:

- Communicate in the two official languages (English and French) and using at least one national language
 - Use basic notions in mathematics, science and technology
- Practise social and citizenship values (Morality, good governance and budgetary transparency)
- Demonstrate a spirit of autonomy, a sense of initiative, creativity, and 5. Entrepreneurship
 - Use basic information and communication technology concepts and tools
 - Lifelong learning
 - Practise physical, sport and artistic activities

Broad-based competencies

- Intellectual competences
- Methodological competence
- Personal and interpersonal competencies
- Communication competences" (Socle National de competence, pp.9 10)

Method of curriculum Implementation adopted in Cameroon

According to Daniel and Belibi (2019) In line with the vision of making Cameroon an emergent economy by 2035, the Ministry of Secondary Education (MINESEC) adopted reforms in August 2012 which consisted in aligning educational goals with the demands of a more skilled workforce. And that was the main thrust of the CBA. MINESEC explained that this new pedagogical innovation was aimed at "making sure that the learners [could] apply what they learn in class in real-life situations outside the classroom" (*Pedagogic Guide: English to Francophones* 2014). In fact, the previous paradigm, the Skills-Based Approach, was more focused on learners' acquisition of knowledge instead of enabling them to use that knowledge in order to solve real-life problems. The new approach went through a trial period for two academic years (2012-2013 and 2013-2014) before its effective implementation began in the Primary School in the 2014-2015 academic year. Therefore, by the end of the 2018/2019 academic year, CBA would have been effective throughout the first cycle of Primary Schools in Cameroon.

A major challenge to this approach has been the lack of preparation of the main stakeholders who were tasked to implement it. In fact, studies including Foaleng (2014), Nforbi and Siewoue (2015), and Belibi (2018) have concluded that accompanying measures were not taken to ease the effects of context-related hurdles such as large classrooms, insufficient funding, training and professional development of teachers, and the lack of teaching and learning materials. It was only obvious that classroom teachers would face difficulties in the course of implementing the new approach (Daniel and Belibi, 2019).

With the adoption of competency-based approach in primary education in Cameroon, the Primary School Curriculum became carefully structured in a manner to achieve the CBA goals. Firstly, CBA to education in Cameroon is based on building already defined competences the learners will acquire by the end of a given learning period. The Primary School Curriculum as well as that of other levels of the school system in Cameroon outlines competences to be built in the learners within specific learning periods and achievable through objectives or learning outcomes. These competences are in the form of National

Core Competences (7 in number) and Broad-Based or Transversal (4 in number). Secondly, competences constitute a combination of knowledge, skills/know-how and attitudes. These have to do with the understanding of human actions in the world within a given learning domain. Thirdly, Competence Based Approach also consists of learning that permits a person to react to situations or solve problems in the real world. Also, competences can be both subject based and transversal. Lastly, competence can be expressed and understood according to given national context and culture. The underlying philosophy of the CBA requires that learning should be based on the potential of the learner. The learner should be responsible for his/her own learning. Focus is on learning and not on teaching. It is important for the classroom teachers to diligently determine the characteristics of their learners.

In actual fact, competency can only be developed in situations. Competency development in education can be achieved in the classroom through the learning process, in family of situations or what some scholars called "class of situations" and the level of practising a profession. This entails that "situations" centre on the development of competencies.

Learning Situations

Considering that concept of situation is a central factor in the development of competences, and is very essential for learning, the lesson planning according to the primary school curriculum makes provision for didactic situations at the presentation stage of a lesson in the English Language as well as in other disciplines. The didactic situation necessitates that teachers create a physical problem around a real-life phenomenon. This gives an opportunity to learners to propose solutions through their own reflections. This strategy encourages formative assessment which is an essential element of Competency-based approach to learning. Brahimi (2011), reiterates this aspect when he points out that learning does not always occur in an authentic context, in this case, the trainer or teacher will create learning situations that reflect reality as closely as possible to enable the learner develop effective competences.

Family of Situations

According to Tardif (2006), competency is exercised in a "family of situation". Other authors like Jonnaert (2009), call it "class of situation". A family or class of situation refers to a set of similar situations that may belong to the same category because they share the

same characteristics or they have many things in common. The family or class of situation to be addressed is used to develop a competency.

Professional situations

A professional situation according to Brahimi (2011) is a situation that people encounter at work places and must manage them efficiently. To Le Boterf, professional situations are key activities associated with a set of criteria or professional requirements. The government of Cameroon recognises the important rule of education as the main driver of development. This falls in line with SDG number 4 which seeks to ensure inclusive and equitable quality education and promote lifelong learning for all. The primary school curriculum is designed using the Competence Based Approach (CBA) as an approach that gives the opportunity for this goal to be achieved. This leads us to the next section that gives an understanding of the CBA being used in the education system in Cameroon.

Complex Situations

It is a problem- situation in which the learners need to deploy their knowledge recall skills (savoir), appropriate action/know – how skills (savoir- faire) and attitudinal (savoir- etre) Resources learnt formally and to resolve. It is putting learning into practice; it is checking if the learner has acquired new knowledge and knows how to apply it autonomously and behaviorally in societal problem- solving situations. For such a complex task to be resolved by the learner, the teacher during their teaching must provide clear instructions following pre- determined criteria and engage his/her learner in a work situation. He /she organises learners to work in pairs, groups and workshops thereby discussing with peers to compare what they have understood. Learners further work individually to exhibit their competence in problem solving.

Integrated Pedagogy

In the past, pedagogy was more of theory than practice; whereas if we merged the two (theory and practice), a learner would come out complete in the learning process. It was just like giving a learner a pot, some cups of rice, meat, oil, salt and cooking ingredients and explaining the process of cooking fried rice and serving it to a group of visiting friends. If the learner has all of these items and processes without getting into a kitchen, he/she can never be a good cook or ever cook good fried rice. An integration situation/pedagogy is one that gives the learner an opportunity for them to put into practice the *competences* learnt in

a *didactic situation* (a situation of classroom practice). It is a confirmation of the integration/application of new pieces of knowledge garnered and verification if the new objectives have been attained. An integration situation opposes but complements a didactic situation.

With regard to language (e.g. English), past pedagogic approaches empowered the student with language skills and usage norms hoping that the student when faced with a language use situation, would apply the knowledge learnt in class. This was never effective. Following a *paradigm shift* in Cameroon to the competence- based Approach, new evaluation systems must follow suit. Instead of disjointed out-of-context tests, tests now must follow a complex/integration situation system. Integration pedagogy is aimed at following up and helping individual learners (remediation) after a feedback diagnostic. Consequently, in assessing learners, each student script is considered independently of the others. This is where a criterion- *referenced test* has its forte because the well-defined content of this test enables each examinee to be rated independently of the others.

Competences as presented in the Cameroon's Primary School Curriculum

The Cameroon's Primary School curriculum presents seven (07) National Core Competences and four (04) Broad-based Competencies. The Ministry of Basic Education intends to develop the knowledge, skills and attitudes of learners such that at the end of the primary school cycle, the learner is expected to have acquired the national core competences in view of stepping into the secondary school or engaging into other learning contexts or activities.

Core Competences

It is hoped that at the end of the primary school cycle any child who goes through the primary school in Cameroon has to; - Communication in the two Official Languages (French and English) and at least one National Language. Communication in English, in French and in at least one National Language implies the ability to use the four language skills (listening, speaking, reading and writing) of these languages. The learner should be able to listen, communicate orally, and be able to read and to write. The language competence is a prerequisite for access to other core skills. Use basic notions in Mathematics, Science and Technology: Introducing notions of Mathematics, Science, and Technology involves the acquisition of knowledge, skills and attitudes in these subject areas and the ability to use them to address challenges in real life situations. Practice Social and Citizenship values: This involves inculcating patriotic, moral, citizenship values and values

of good governance in the learners of both cycles so as to prepare them for a harmonious insertion into the society.

Furthermore, Display a sense of autonomy, initiative, creativity and entrepreneurship:

Developing this competence in the learner calls for the assembling of multidisciplinary knowledge and skills in view of developing the learners' social integration skills, creativity as well as managerial and entrepreneurial potentials. The use of basic information communication Technology Concepts and Tools: Generally, this core skill requires the use of information and communication technology tools in school and in society. It is related to healthy, safe and responsible use of various ICT devices for learning and for leisure activities. In addition to this, it develops logical and critical thinking, automated management of information (analysing, summarising, and assessing), and apt communication skills. Practice of Lifelong Learning: This implies that the learner will demonstrate the desire and the will to continue education and organise self, especially through efficient time and information management. Practice of Physical, Sports and Artistic Activities: This competence provides learners with a platform to develop their physical, psycho-motor, artistic, personal and interpersonal skills as well as improve their wellbeing. It enables them to acquire knowledge, skills and attitudes required for their participation in various physical, psycho-motor, sports and leisure activities in order to strengthen social harmony and ensure a healthy lifestyle.

Broad-based Competencies

In addition to the National core Competences the Cameroon's Primary school curriculum also outlines four broad-based competencies that pupils should equally exhibit;

- 1. Intellectual Competences: Intellectual Competences include exploiting information, solving problems, acquiring logical thinking and a sense of observation, exercising critical judgement, practising creative and innovative thinking.
- 2. Methodological competencies: These include, giving self-efficient working methods, exploiting information and communication technologies, organising learning, arousing the desire to learn each subject.
- **3.** Personal and Interpersonal Competencies: Personal and interpersonal competencies enable the learner to develop his/her personality, acquire abilities in view of his/her socio-cultural integration and individual fulfilment and cooperate with others.

4. Communication Competences: Communication competences enable the learner to communicate in an appropriate manner in the two official languages and communicate in at least one national language.

Purpose of CBA as a curriculum implementation approach Cameroon

At the beginning of this millennium, as Cameroon strives to become an emerging nation by the year 2035, its secondary education sub sector faces many challenges including: Offering quality training and education to most young Cameroonians within the context marked by large classes in secondary education; Preparing them for smooth insertion into a more demanding job market worldwide, through a pertinent teaching/learning process. According to (MINSEC, 2014), competency-based approach was introduced with the goal of helping the secondary education sub sector to:

- Shift from a knowledge-based approach of teaching and learning to a competency-based approach through situations in real life. It is expected that the CBA will emphasise the active role of students in the learning processes, encouraging appropriate learning activities to foster a deep rather than a surface approach to learning. While the knowledge-based approach can be effective in transmitting information, it may be ineffective in promoting independent thought because students are not actively engaged, and their enthusiasm is not adequately stimulated.
- Offer a shift from a school cut off from society to one that prepares citizens for a smooth integration into the socio-cultural and economic activities of their respective communities
- Offer a shift from an evaluation of knowledge to that of competencies necessary for sustainable development, and
 - Increase the relevance of secondary education in response to growing concerns.

Lucy, (2019) CBA has as its main aim to inculcate in the learner responsible behaviour, knowledge and competencies, necessary for meeting with the challenges of the rapidly changing technological world. It is also expected to help the learner to focus on what s/he can do after leaving school, which is, developing a career (Bipoupout, Matip & Nanga, 2011).

Specific Objectives of CBA approach of curriculum implementation in Cameroon After being taught using the CBA, the learner is expected to:

- Understand and explain natural phenomena;

- Solve real life problems, through the use of the scientific approach in problem-solving
- Acquire skills that will enable him/her to work in a group, respect others, and their opinions;
 - Manage his/her environment in a sustainable manner;
 - Have value for his/her health and that of all others in his/her surrounding;
 - Use process skills to acquire and apply knowledge;
- Acquire life skills such as reading information and applying safety and security rules;
 - Communicate results obtained and ideals developed with others;
- Do simple scientific diagnosis and repairs of scientific and technological equipment and appliances;
 - Acquire personal attributes and seek ways of enhancing them.

In order to achieve these objectives, the learner should be able to mobilize, all the pertinent resources in terms of knowledge, knowhow and attitudes. The resources to be mobilised by the learner are found in many disciplines and areas of learning. Therefore, syllabuses that are developed to teach using CBA should not be implemented in isolation but as interrelated subjects (Lucy, 2019). According to Tanyi (2019) the Effectiveness and Efficiency Implementation of CBA Depends on the Following; The paradigm shifts from Content-Based Approach to Competency Based Approach forces teachers to change their way of thinking and working. They are forced to think completely in terms of the whole true task that competent professionals perform (Hoogveld, 2003). In line with this, Subsomboon (2010) points out that the successful realisation of CBA profoundly depends on the teachers who are expected to give up their role as "knowledge transmitters" and accept the new role of "Coach" and instructional designers. Teachers are agents for change because of the role they play in implementing any curriculum reform. Studies have shown that curriculum reforms affect the school less, but they do impact teacher's practices (Ntoh, 2015). The competency Based Approach requires teachers who are professionals, knowledgeable and competent in their work particularly in implementing school curricula. If teachers are knowledgeable and comprehensible, they will be competent in implementing the CBA and this will lead to a better quality of education.

Tambo (2012) points out that qualified teachers with sufficient and appropriate knowledge and skills are one of the preconditions for a successful implementation of CBA. Consequently, the need for changes in the instructional approaches demands for the need to

train teachers (both in-service and pre-service) with the required competencies for handling new teaching paradigm, (Tchombe, 2014). Teachers are filter through which the mandated curriculum passes. In other words, teachers are key players in mediating the mandated curriculum for the student's benefit. They should first acquire ample knowledge of the desired concept, understand it and then use this experiential knowledge or skill to evolve a workable curriculum (Flinders and Thornton, 1997)

The implementation of CBA requires the use of new assessment strategies aligned with the new paradigm. To implement these changes, it is necessary that all teachers become knowledgeable and equipped with new alternative approaches to assessment (Maclellan, 2004). CBA advocates student-centred teaching and meaningful interaction in the classroom, both teachers and students are required to play new roles in the teaching/learning process. For instance, teachers become guides or facilitators instead of providers of information. They are not glued to the textbook only; instead, they are free to use authentic materials from a variety of sources beyond the officially recommended textbook, and provide authentic assessments to their learners. In the meantime, students are required to participate actively in the construction of knowledge, and are allowed to take decisions regarding their learning. In this paradigm, students take control of their own learning (Daniel and Belibi 2019).

According to Gysbers and Henderson (1988) the effectiveness of a program implementation is measured in CBA in terms of its available resources. This implies that for any program to be considered effectively implemented there is need for available resources. The authors went further to explain the fact that when program implementers know the current available resources, it will give room for creativity and when there is shortage of resources, implementers will demand for more resources and improve on the existing resources for the smooth functioning of the program. Thus, knowledge on the current available resources will be beneficial to the implementers because this will motivate them to work hard when they know the available resources that are at their disposal. Gysbers and Henderson grouped the resources into three categories. We have human resources which include all staff members and their skills. We also have financial resources which include the budget needed to purchase instructional materials, equipment's and also facilities needed to effectively implement the program. Political resources here mean government policies and laws that support the program.

Designing Competency Based Curriculum

The curriculum field is currently going through an interesting development in the way curricula are recently being organised. The field is witnessing a shift in curriculum

design away from the traditional subject driven; learner centred and society based models to one increasingly based on the principles of competency-based education (CBE). While the roots of the competency based movement can be traced in the education reform movement in the United States of America in from the 1960s to 1970s, the trend today is toward the worldwide adoption of the European Key-competence and the 21st Century Skills model which fine justification in the actual educational context (McClelland (1973), Gilbert (1989), Grant (1979 as cited in Soare, 2015). Grant et all. (1979, p. 6) define competency-based education as a form of education that derives the curriculum from an analysis of a prospective or actual role in contemporary society and that attempts to certify student progress on the basis of demonstrated performance in some or all aspects of that role. In the same light Jones (2002, p. 9 as cited in Saore 2015) proposes three methodological landmarks that should characterise a competence-based curriculum (CBC): a) a description of the competence; b) a means of assessing the competence; c) a standard by which the student is judged to be competent.

Therefore, in order to design a CBC, there must be a common vision on the competences that will be acquired by students, and that is because it will determine a shared point of view on the learning that must take place and of the organising of the context in this respect. The design of the instructional strategies will be linked with the type and structure of the competence and will depend on the way the learning context is shaped, and that must reflect both the work market requests and the lifelong learning principles (Saore 2015). Focusing the curriculum on competencies demands a new way of perceiving the structural components of the curriculum and how they interact with one another. In this light Mulder (2001) defines competence as the capability of a person, or an organisation, to reach specific achievements.

Personal competencies comprise integrated performance-oriented capabilities, which consist of clusters of knowledge structures and also cognitive, interactive, affective and where necessary psychomotor capabilities, and attitudes and values, which are required for carrying out tasks, solving problems and more generally, effectively functioning in a certain profession, organisation, position or role. This suggests that a working definition has to be developed before proceeding with the design of the curriculum. In the context of the curricula reform in Basic Education in Cameroon, competence refers to all the knowledge, skills and attitudes required of nursery primary school children. Broad-based competencies refers to knowledge, skills and attitudes that are taught across different learning domains (Ministry of Basic Education 2016, p. 20). In this connection,

competence is a central concept which operates at all curriculum levels, all curricular domain and disciplines, and in every disciplinary module that belongs to a discipline structure, becoming, this way, the organiser of the entire curricular architecture, a curricular constant for all the levels, profiles and school programs (Potolea, 2012, p. 35).

Competence and Integration

Most authors today tend to agree on the definition of competence as the spontaneous mobilisation of a set of resources in order to apprehend a situation and respond to it in a more or less relevant way (Crahay, 1997; De Ketele, 2000, 2001; Dolz & Ollagnier, 2002; Fourez, 1999; Jonnaert, 2002; Le Boterf, 1994; Legendre, 2001; Rey, 1996; Perrenoud, 1997; Roegiers, 1996, 2001, 2003; Tilman, 2000). (Alexia, et al, 2006) posit that this definition indicates that a competence can only exist in the presence of a specific situation, through the integration of different skills, themselves made up of knowledge and know-how and that three elements are essential to develop a competence. According to Roegiers, (2001), an education which has as its focus the learning of competences is a prerequisite for the implementation of a pedagogy of integration which aims to enable the learner to master those situations, he/she will have to deal with in his/her professional and/or private life. In this connection the pedagogy of integration has four objectives, that of process, relevance, application and association. Two major schools of thought - the Anglo-Saxon and French-Speaking - can be perceived in the arena of a pedagogy of integration separated by the accent placed on the vertical and horizontal transfer of achievement. First proposed and developed by Gagné in 1962, vertical transfer proposes that a student is able to learn higher-order skills only if s/he has previous mastery of their elements (Gagné, 1962)

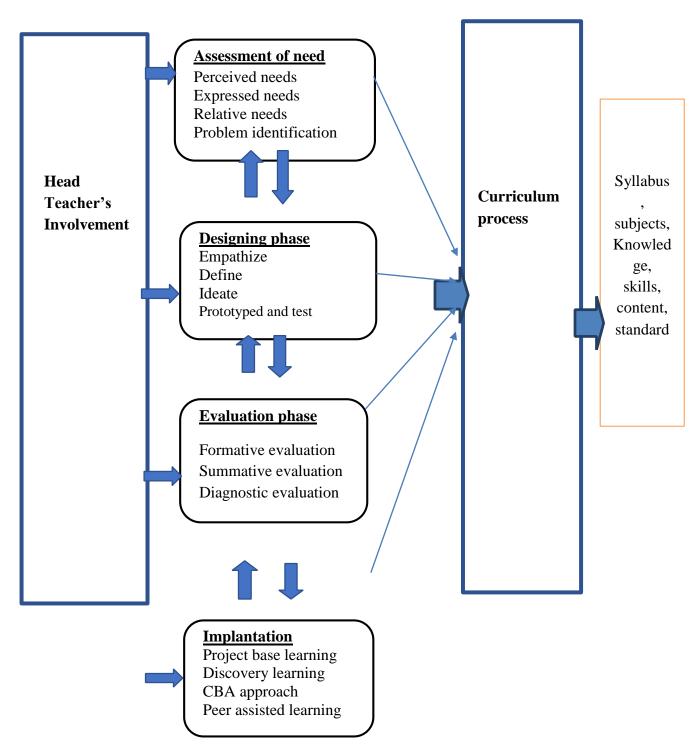


Figure 7: Conceptual diagram Source: This study (2022)

A theoretical representation of the concepts of the study. This conceptual diagram demonstrates the respective concepts and creates a relationship between them. According to fig 1 the flow of this study begins from the head teacher's involvement in which the characteristics range from needs assessment, designing process, assessment and implementation. These are the various methods or ways that the head teachers are expected to get involved in order to enable an inclusive and valid curriculum for a primary school.

THEORETICAL REVIEW

This part of the work displays theories and models that enable the explanation of the concepts in the head teacher's involvement in the curriculum process in the sphere of Cameroon primary education. It is in this part that the researcher proposed a research model that is tested in further research. According to Eisenhart (2001. p. 205 a), a theoretical framework is a structure that guides research by relying on former theories constructed by using an established, coherent explanation of certain phenomena and relationships. The selection of the theoretical framework for this inquiry took a rigorous scientific exercise that required an in depth understanding of the research problem, purpose, significance, and research questions. This was motivated by the fact that all these four constructs (the problem, the significance, purpose and the research question) must be aligned such that the theoretical framework can serve as a foundation to the inquiry and further guide the choice of research design and data analysis. The theoretical framework serves as a guide to research work and assists in determining what the researcher will measure and examine (Eisenhart, 2001b).

In the same vein, Anderson, Day and Mclaughlin (2006. p. 154) emphasis on the importance of including a sound theoretical underpinning in every dissertation study with a quote from the dissertation supervisor who stated 'I don't see how you will do a good piece of work which is theoretical'. Similarly, Sarter (2006. p. 494) addressed the limited usefulness of findings and conclusions when a study is not justified by a theoretical framework. The importance of theoretical framework in research work cannot be overemphasised for it is a powerful construct on which the entire work stands. This framework was also established using the concept mapping process to visually display how it aligns with the literature review.

A number of related theories and models exist in the field of curriculum process propounded by different educationists, psychologists, and evaluators for the logical explanation of the phenomenon that underpins the processes that take place in educational systems. Several theories do exist but some have gained wide considerations especially in

the domain of curriculum process. Kerlinger (1973, p11) observes a theory as a set of interrelated concepts, ideas, prepositions that present a systematic view of the phenomena by specifying relations among variables to explain and predict the phenomena.

According to Amin (2005), theories are logically related propositions presented in a systematic way that describe and explain phenomena and are constructed statements that summarise and organise knowledge in a particular area and are open to testing, reformulation, modifications, and revision. For the need to explain the constructs of this study, three theories have been observed in the combination of one model which fits accurately and enhance our explanation of variables used in this study.

Philosophical Review

The organisation of the curriculum suggests that a power-coercive model of curriculum reform, a constructivist philosophical perspective and developmental learning theories underpin the curriculum. Constructivism is an educational philosophy within the rationalist philosophical tradition. It is grounded on the belief that reason is the primary source of knowledge and that reality (knowledge is not transmitted) is constructed. This philosophical position is subdivided into those who favour individual constructivism and those who propose social constructivism. In addition many constructivists include context – a contemporary world view. The pursuit of individual constructivism is based on the assumptions that knowledge is constructed from experience; learning results from a personal interpretation of knowledge, and that learning is an active process in which meaning is developed on the basis of experience (Jean Piaget, 1896-1980).

However, there is significant variation concerning the interpretations regarding the nature of the knowledge construction process. Social constructivism, in contrast to the individual constructivists, is based on the assumption that learning is collaborative with meaning negotiated from a multiplicity of perspectives. Vygotsky (1980) felt social learning precedes development. As with individual constructivism, there is no general agreement on how this knowledge is in practice negotiated.

Contextualism is buttressed by the assumptions that learning should occur in real life settings, and testing should be integrated into the learning tasks. Educator generally refers to learning related to a context as "situated cognition" (Brown, Collins, and Duguid, 1989; Henning, 2004). Proponents of contextualism recommend that learning problems be presented to learners in situations akin to real life and common to everyday application. This type of learning is described as "authentic learning" and the instruction related to

the learning situation as "anchor" in real life situations (Cognition and Technology Group, 1990; Streibel, 1995). Curriculum related theories are used to develop models of change to provide explanations regarding the degree of success of some initiatives over others. Lessons from these theories can be used by curriculum implementers to guide teachers to implement the curriculum as intended (Fullan, 2001). The power coercive model allows change to be accomplished through the enforcement of compliance by those holding greater on those with less power. The centre-Periphery model is a good representation of this approach as it represents a top-down movement of innovation, and as argued by Whitehead (1980) involves a passive diffusion of a centrally prepared innovation deemed necessary to the recipient. Cameroon seems to follow this model in reforming the primacy school curriculum. Piaget's (1969) development theory is one of the most influential in the area of learning. It proposes four stages through which all humans are supposed to proceed in a fixed order as each stage brings with it the emergence of new cognitive capabilities which lead to the learner's reorganisation of her or his cognitive abilities. He proposed as cited in Smith, and Ragan, (2005) that:

- The sequence of stages is invariant and nonreversible;
- Learners cannot be taught key cognitive tasks until they reach a particular stage of development
 - Stages represent qualitative changes in cognition;
 - Children exhibit the characteristics of each stage; and
- Global restructuring characterises the shift from stage to stage, cutting across all domains of learning.

However, research (cited in Berk, 1994; Driscoll, 1994; and Slavin, 1994) runs counter to Piaget's propositions. Notwithstanding, Piaget's most valuable contribution may lie in his description of the processes that lead to shifts from one cognitive stage to another. The major processes suggested by him are that of Assimilation —which allows new knowledge to be integrated into existing cognitive structures — and Accommodation — processes that modify existing structures to enable the acceptance of new knowledge that could not fit into the existing cognitive structures. In direct contrast to Piaget (1969), Vygotsky (1978) argued that learning precedes development and used the term 'zone of proximal development' to characterise the type of problem- solving situations that are beyond the cognitive ability of the individual learner but which can be surmounted with 'scaffolding' (the assistance of a teacher or knowledgeable peer). He proposed that learner's

interaction with their sociocultural context assists them to develop cognitive capabilities that help them adapt to their environment.

Among the theories used in this study, the principal theory was the general system theory propounded by Ludwig Bantalanffy in (1968), Theory of Need Analysis in Curriculum Development by Jack (2002), Curriculum Design Theory by Johnson (1967), Bottom-up Theories on Curriculum Implementation by Barrett and Fudge (1981), and Stake's Responsive Theory of Curriculum Evaluation (1975). The choice of these theories was motivated by our hypotheses which state that there is a significant relationship between head teachers' involvement in the curriculum process.

Theory of Need Analysis in Curriculum Development by Jack (2002)

This theory states that curriculum development should be viewed as a process by which meeting learners' needs leads to improvement of learners' learning. Therefore, curriculum developers should gather as much information as possible towards the learners' needs. This procedure used to collect information about the learners' need by Richards (2002) called this needs analysis (NA). Iwai (2004) perceives these activities as those which involve the collection of information that will serve as the basis for developing a curriculum that meets the needs of a particular group of students. Moreover, the theory of need analysis on this theory, Jack (2002) states that it is the systematic collection and analysis of all relevant information necessary to satisfy the requirements of the learners within the context of the particular institutions involved in the learning situation.

Jack (2002) on his contribution to this knowledge on needs analysis theory says that the first step in conducting a needs analysis is to decide exactly what its purpose or purposes are, or simply said why a needs analysis? He argued that, needs analysis may be used for a number of different purposes, such as:

- To find out what skills a learner needs in order to perform a particular role, such as sales manager, tour guide. Or a university student.
- To help determine if an existing course adequately addresses the needs of potential students.
- To determine which students from a group are most in need of training in particular skills
- To identify a change of direction that people in a reference group feel is important.

- To identify a gap between what students are able to do and what they need to be able to do.
- To collect information about particular problem learners are experiencing Khan (2007) in explaining needs analyses theory proposed the following framework.
- Information about the learners related to their purpose of pursuing a learning program, their attitudes, their previous learning experiences, and cultural background should form a part of this information gathering process. This information can be gathered through various sources including institutional and through the learners themselves.
- Present situational analysis which may provide information about the effectiveness of the prevailing program.
 - Information regarding the preferred styles of learning or learning needs.
- Information regarding the importance of particular skills for the learners and their preferences for their learning those skills.
 - Information regarding the role relationship between the teacher and learners.
 - Information regarding the preferences for teaching learning activities.

This idea is also elaborated by Songhori on his paper entitled Introduction to needs analysis (2007), p. 21) that, concepts of needs analysis include environment situation – information about the situation in which the course will be run (means analysis): personal information about learners – factors which may affect the way they learn (wants, means, subjective needs); language information about learners – what their current skills and language use are (present information about learners); learners lacks (the gap between the present situation and professional information about learners(; learners' needs from course) – what is wanted from the course. Gagne (1979) as elucidated by Miller and Seller (1985) also put the first priority to the needs analysis as one of the 12 steps in design instruction that is based on "logical, systematic thinking" and "empirical test and fact finding". According to Gagne, perceived needs usually fall into three types: a need to conduct instruction more effectively and efficiently for some course: or a need to develop a new course".

Deriving inspiration from Hilda Taba (1962) model, Jack (2002) states that situational analysis is the systematic process of analysing the situation before the curriculum is developed effectively. Taba (1962) describes situational analysis as a diagnosis of needs. In this simpler form, situational analysis is the process of examining factors that exist in the environment or society where the curriculum is going to be implemented. Situational analysis factors include knowledge about the environment in terms of mountains, rivers, flora and fauna including places where the programme or curriculum is going to be

implemented, the social or power structure of that society, the traditions, norms, needs and aspirations of the community and the language of instruction. Bishop (1985) argued that the situational analysis must incorporate members of the general public and not only 'experts. These members should be invited to play their part in situational analysis. This is because Education itself is not a discipline like English and History but an area involving a wide variety of society with different backgrounds Hence, Parents Teachers Association (P.T.A) and religious organisations would feel to say something pertaining to the lives and future of their children. This simply means that there is a way parents and society at large would want the curriculum to shape the attitudes of their children.

In situation analysis, you need to look at the resources people possess. Rich people will contribute positively towards the education of a learner. Poor people are unable to contribute positively towards the development of the curriculum. Needs Assessment in Jack's theory is seen as a formal analysis that documents gaps between current results and the desired results. "He further defined a need as a gap between what is and what should be. Need assessment involves arranging gaps (needs) in priority of order, and selection of the needs to be resolved. Once analysed, the information is then used to set appropriate arms, goals and objectives in curriculum development. The importance of situational analysis and needs assessments is that they provide us with up-to-date information which can be used to solve the problems, set providers, identify groups which require special need intervention and can create a basis or platform for discussion as far as curriculum development is concerned.

Another importance of situational analysis and needs assessments is that policy makers (Government officials) and decision makers (curriculum specialists) can make strong arguments as far as allocation of resources is concerned. A need assessment can be a powerful tool used to develop strategies to address the curriculum needs. It will provide the met and unmet needs within the targeted groups e.g. (I) met needs may be availability of teachers and pupils, supplementary readers (ii) unmet may be the distance between the school and the learner's home. The importance of situational analysis and needs assessments is also that they will help in the formulation of curriculum intent, content, selection of learning and teaching activities. It helps educationists meet the needs and expectations of the society. Ordinarily, the content of subjects in curriculum intent is too formal and academic to meet the needs of the majority of the children who do not proceed on to higher studies especially if it was developed with situational analysis.

Importance of this theory to the study

Relating this theory to this study, curriculum developers need to gather information about learners' needs. This information is vital for any effective curriculum. From this information, the gap between the situation at hand and the intended situation will be determined, and envisaged measures to bridge the gap can be designed. To do it, situational analyses which should not only require curriculum experts, but the community as a whole starting from the learners, the teachers, head teachers, parents, local authorities, pedagogic inspectors and national inspectors of education. According to Jack (2002) needs analyses should target all categories of people such as policy makers, Ministry of education official's teachers, students, academic employers, vocational training experts, parents, influential individuals and pressure groups, academic specialists and community agencies.

Curriculum Design Theory by Johnson (1967)

Johnson's Theory of Curriculum design is centred on three notions which he states as:

An arrangement of selected or ordered learning outcomes intended to be achieved through instructions.

An arrangement of selected and ordered learning experiences to be provided in an instructional situation, and

A scheme for planning and providing learning experiences.

Elaborating on these notions, he stated that, there are two fundamental dimensions of curriculum designs in this theory.

The first has to do with the total substance, the elements and the arrangement of the document. We may speak of these as the contents of a curriculum in the same sense that we use a table of contents for a book to specify the titles of the various chapters. The second is the mode of organisation of the various parts of a curriculum, particularly the culture content. Both of these dimensions circumscribe subordinate parts. We should keep in mind that the technical terms and statements used to describe a curriculum constitute the theoretical language of curriculum design. The focus of language to explain curriculum design is upon the two dimensions. Each of these merits full discussion because they are so critical to curriculum theory and research.

Conceivably, it will be helpful to look at some of the dynamics of the schooling situation as cues for the understanding of the curriculum design theory. Important social institutions like schools may be justified only in terms of the goals or purposes they are

intended to serve. Once goals are recognized and accepted, means must be selected for the attainment of the goals. Let us use Figure1 as a model for illustrating these conditions for schools in describing this theory. In the figure, the goals lead to the selection of means to be used in achieving those goals. Two classes of means are indicated for schools. One of them is a curriculum; the other is instruction that takes place in response to the curriculum. The processes of evaluation help us to determine the adequacy of the two means in producing the desired results. The achievement of the goals and the results of evaluation help us to redefine the goals and replan the means for achieving them. Thus, a dynamic cycle is established for the planning of schooling functions.

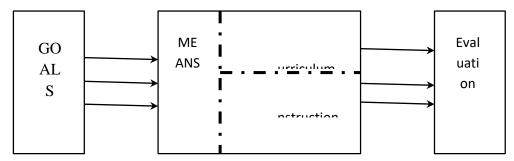


Figure 8: The dynamic cycle of schooling

This kind of reasoning, however, immediately indicates two subsystems of schooling labelled curriculum and instruction, and this designation of curriculum and instruction as two categories instead of one is another source of confusion. Related to these categories are the purposes of having a curriculum in the first place, and it is here that the theorist must bring the relationship between curriculum and instruction into focus. What the contents of a curriculum are depends entirely upon whether both curriculum strategy and instructional strategy are to be encompassed in the curriculum design, and there does not seem to be any way of avoiding this decision.

For investigators to theorise and conduct relevant research, their language and constructs have to be carefully ordered. It is rational for the two means of achieving the end of schooling to be conceived as two separate but related strategies. One set is conceptualised around the answer in response to the question "What shall we teach in the school (s)". The expression of those answers may be termed the curriculum, and their form and arrangement the curriculum design. The second set, the instructional strategies, is conceptualised around individual teachers and groups of pupils in response to the general question "How shall we teach?" A sequence of events running from the development of curriculum strategy, to the development of instructional strategy, to the actual activities of the pupils in classrooms or

elsewhere is thus a logical one. None of these strategies is pupil learning. These rather take place as a result of the strategies and events.

In fact, curriculum designers should plan only in anticipation of learning activities and outcomes. In contrast, curriculum theorists or workers who think of curriculum strategy, instructional strategy, and/or actual classroom activities as constituting a single ball of wax called curriculum, pose an entirely different problem in curriculum design. Curriculum and schooling become almost the same concept. Curriculum design then includes an arrangement of objectives, subject matter chosen, specific action plans for teaching, all forms of instructional materials to be used, time schedules, activity descriptions, and so forth. If one goes further and includes what pupils learn as part of curriculum, the many components of evaluation also have to be added.

Importance of this theory to the study

The theory of designing curriculum needs to be sequenced or arranged in ordered intended learning outcomes. This requires the input of many stakeholders in the educational milieu. The model in figure 1 on the dynamic cycle of schooling places the head teacher as a veritable implementer of the designed curriculum. His effective presence and contribution during the design phase will ease implementation at the base, where the curriculum is being exploited, that is, in the school.

Bottom-up Theories on Curriculum Implementation by Barrett and Fudge (1981)

Bottom-up approaches see implementation as a process of interaction and negotiation, taking place over time, between those seeking to put policy into effect and those upon whom action depends' (Barrett and Fudge, 1981). The main contribution of bottom-up approaches to public policy implementation is their normative stand: what matters is not how policy makers at the top get their will executed but the reactions of those on the ground at the end of the line whose reactions shape the implementation process, and the policy itself (Lipsky, 2010) Lipsky explains that the real question in policy implementation is how to support civil servants so they do not have to resort to routines that help them meet the pressure but decrease the quality of their service to end users of the policy. Another important contribution of bottom-up theorists is their highlighting the role of politics in implementation. Similar to the political economy of reform, authors such as Barrett and Fudge (1981) insist on the continuous negotiation that take place throughout the policy process. Compromising and getting actors on board with the policy does not stop with the

formulation, which makes implementation just the continuation of political debates. However, while bottom-up scholars bring new knowledge on the power relations down the policy-making process, they do not provide clear responses on how to tackle the challenges they identify.

Recognizing Policy complexity

Some approaches attempt to blend contributions from top-down and bottom-up approaches to make the knowledge they produce useful to policy making. While many of these are general approaches, they are relevant to education policy. Frameworks have been developed as alternatives to the policy cycle approach, aiming to better clarify the complexity of policy making. Among them we can highlight Paul Sabatier's Advocacy Coalition. Framework (Jenkins-Smith et al., 2014), which makes a fundamental hypothesis about policy change: for a major policy change to occur some kind of perturbation, negotiation and policy-oriented learning has to happen, along with a change in the coalition in power or a shift in the ideas successful with the coalition in power in the subsystem.

A synthesising approach includes a wide range of influential contributions. Many of these recognize that change is an organic process that needs to engage those in the group. A significant approach uses the concept of networks to analyse policy implementation. Based on the concept of "mutual dependencies" (Rhodes, 1992; Pfeffer, 1981) emphasise the role of networks because in complex policy systems, actors do not yield resources to implement a policy by themselves (Klijin, 2008). This situation is seen especially in modern education systems, where multiple actors must interact and coordinate with each other, governments included.

In their framework for education policy implementation analysis (Figure 2), Bell and Stevenson confirm the precedence of the policy decision on the implementation process (which they call "policy development" and "enactment", respectively). Yet they emphasise how the 'enactment' phase shapes the policy and its outcomes, rather than simply execute the policy. From their perspective, education policy implementation should be understood as the web of processes through which policies are interpreted, translated and reconstructed, rather than a simple process of execution.

Policy

Development

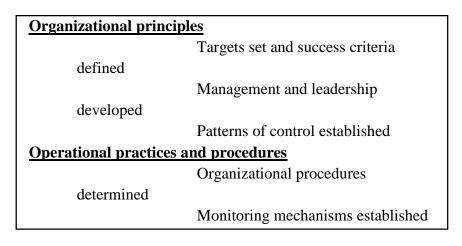




Figure 9: Top-bottom education policy implementation

Source: *Bell and Stevenson* (2015).

The debate between different perspectives, including top-down, bottom-up perspectives and synthetic approaches structure the study of policy implementation. Approaches such as Bell and Stevenson synthesise the lessons learnt from to-down and bottom-up theories to get a better understanding of the implementation process. Yet, the growing complexity of education governance and its greater importance call for clear definitions and concrete tools for policy makers to enact policy to this new policy environment.

Importance of the theory to this study

Relating this theme to this study, a curriculum is a policy document which needs implementation. When policy makers at the top impose a curriculum on the ground and get their will to be executed by those on the ground (head teachers), there are bound to be

problems particularly if these actors at ground level were not involved at the level of policy formulation and training.

John Dewey, one of the most famous and influential philosophers of the 20th century, was born on October 20, 1859 in Vermont, Burlington (U.S.). After graduating from University of Vermont in 1879, he taught in Vermont until 1881and in high school in Pennsylvania until 1882, and in 1884 he received a doctorate from John Hopkins University. He died on June 1, 1952 (Weber, 2010). According to Westbrook (1993), Dewey's ideas became the focus of cultural debate in the United States and abroad from the 1890s until his death in 1952 at the age of 93. Throughout his long career, Dewey developed a philosophy called the combination of theory and practice, and he illustrated this combination as an intellectual and political activist in his own work (Westbrook, 1993). Dewey, because of his pragmatist philosophy, has always measured thoughts and work with their impact on life and has written many works explaining the pragmatist education system (Bender, 2005). Dewey explains his views on the relation of concepts such as philosophy, democracy, society, individual, and life with education in his works. Although Dewey expressed his views on the curriculum in his works, he did not suggest a schematic model for curriculum development. In this study, it is aimed to schematically reveal the curriculum development approach by examining Dewey's views in the field of education. For the purpose of the study, document review method was used. Document review involves the analysis of written materials that contain information about the phenomenon or facts intended to be investigated (Yıldırım & Şimşek, 2011: 187)

Curriculum theory (CT) is an academic discipline devoted to examining and shaping educational curricula. There are many interpretations of CT, being as narrow as the dynamics of the learning process of one child in a classroom to the lifelong learning path an individual takes. CT can be approached from the educational, philosophical, psychological and sociological perspectives. James MacDonald states "one central concern of theorists is identifying the fundamental unit of curriculum with which to build conceptual systems. Whether this be rational decisions, action processes, language patterns, or any other potential unit has not been agreed upon by the theorists." According to MacDonald (1971), Curriculum theory is fundamentally concerned with values, the historical analysis of curriculum, ways of viewing current educational curriculum and policy decisions, and theorising about the curricula of the future. Pinar defines the contemporary field of curriculum theory as "the effort to understand curriculum as a symbolic representation'. The first mention of the word "curriculum" in university records was in 1582, at the University

of Leiden, Holland: "having completed the curriculum of his studies". However, curriculum theory as a field of study is thought to have been initiated with the publication of The Yale Report on the Defense of the Classics in 1828, which promoted the study of a classical curriculum, including Latin and Greek, by rote memorization (Hamilton, 1989).

Importance of the theory to the study

Curriculum theory provide a structure for teachers to "systematically and transparently map out the rationale for the use of particular teaching, learning and assessment approaches" in the classroom, and are regarded as an effective and essential framework for successful teachers (O'Neill 2015, p27). This theory is general to this study. It examines the takes and prospects of a curriculum which is the main concept of the study. Moreover, it is important because it enables us to understand from the perspective of this study that curriculum theory is important in formal education, the curriculum has become a dynamic process due to the changes that occur in our society. Therefore, in its broadest sense, curriculum refers to the "total learning experiences of individuals not only in school but society as well" (Bilbao et al. 2008).

Stake's Responsive Theory of Curriculum Evaluation (1975)

Stake (1975) made a major contribution to curriculum evaluation in his development of the responsive evaluation theory. The responsive theory is based explicitly on the assumption that the concerns of the stakeholders – those for whom the evaluation is done-should be paramount in determining the evaluation issues. To emphasise evaluation issues that are important for each particular curriculum, most educationists recommend the responsive evaluation approach. It is an approach that trades off some measurement precision in order to increase the usefulness of the finding to persons in and around the program. An educational evaluation is a responsive respond to audience requirements for information, and if the different value perspectives present are referred to in reporting the success and failure of the program

Stake recommends an interactive and recursive evaluation process that embodies these steps.

- The evaluator meets with clients, staff, and audiences to gain a sense of their perspectives on and intentions regarding the evaluation
- The evaluator draws on such discussions and the analysis of any documents to determine the scope of the evaluation project.

- The evaluator observes the curriculum closely to get a sense of its operation and to note any unintended deviations from announced intents
- The evaluator discovers the stated and real purposes of the project and the concerns that various audiences have about it and the evaluation.
- The evaluator identifies the issues and problems with which the evaluation should be concerned. For each issue and problem, the evaluator develops an evaluation design, specifying the kinds of data needed.
- The evaluator selects the means needed to acquire the data desired. Most often, the means will be human observers or judges.
 - The evaluator implements the data-collection procedures
- The evaluator organises the information into themes and prepares "portrayals' that communicate in natural ways the thematic reports. The portrayals may involve videotapes, artefacts, case studies, or other "faithful representation".
- By again being sensitive to the concerns of the stakeholders, the evaluator decides which audiences require which reports and chooses formats most appropriate for given audiences.

Clearly, the chief advantage of the responsive theory is its sensitivity to clients. By identifying their concerns and being sensitive to their values by involving them closely throughout the evaluation and by adapting the form of reports to meet their needs, the theory, if effectively applied, should result in evaluations of high utility to clients. The responsive theory also has the virtue of flexibility: the evaluator is able to choose from a variety of methodologies once client concerns have been identified. Its chief weakness would seem to be its susceptibility to manipulation by clients, who in expressing their concerns might attempt to draw attention away from weaknesses they did not want exposed.

The rationale referred to by stake in this theory allows for the influence of presage factors which Davis subsumes as part of his delineating sub-process. The greatest strength of stake's model is the manner in which intents and actions are defined and observed, together with standards and judgments. Stake believers that the starting off point is to determine the "intents" of a particular curriculum. These need to be described in terms of antecedents, transactions and outcomes. Antecedent intents relate to any conditions prior to the commencement of a curriculum and might include both students' and teachers' backgrounds and interests. Transaction intents are the procedures and events which it is expected will transpire as the curriculum unfolds. They take place in a classroom or teaching/learning environment. Outcome intentions are the intended student outcomes in

terms of achievements, together with the anticipated effects upon teachers, administrators and other parties.

Prior to any data collection those involved in the performance and those involved in the evaluation must meet to establish a common frame of reference with respect to the three sets of intents. Not only does this clarify the purpose of the evaluation but it also allows for checks of what stake refers to as logical consistencies between the intended antecedents, transactions and outcomes the appropriateness of the curriculum need also to be discussed and agreed upon. Again, logical consistency between the various elements can be monitored at this stage.

Once agreement has been reached the next step involves collecting observational data about the dynamics of a particular curriculum. As well as informal observations, Stake suggests that all kinds of empirical data collection should be employed, including instruments such as questionnaires and psychometric tests. Such data needs to be collected to determine the extent of discrepancies between intents and observations, standards and judgments. If discrepancies do appear, they may be either discrepancies of empirical contingency (i.e between antecedents, "transactions and outcomes) or discrepancies of congruence (ie between intents and observations of between standards and judgments)

Completion of the data collection activities leads to the third phase of the Davis model, the providing sub process. At this stage evaluation and interpretation of the data needs to be undertaken. This is almost inevitably a crucial time in any curriculum evaluation as the performers and the evaluation reassemble to discuss the information which has been collected. It is possible to develop a list of criteria that can be used for both assessment and evaluation of a curriculum. Such a list is shown in thirteen points below. Districts with sufficient resources to employ an expert consultant can use the criteria to assess the model proposed by the consultant: Districts developing a home-grown process can use the criteria to direct their own work. The Criteria will obviously result in an eclectic approach to evaluation, one that draws from the strengths of several different models. Such an eclectic process has been used successfully in evaluating a curriculum.

An effective curriculum evaluation does the following:

- 1. Can be implemented without making inordinate demands upon district resources
- 2. Can be applied to all levels of the curriculum, programs of studies, field of study and courses of study.
- 3. Makes provision for assessing all significant aspects of curriculum that is the written, the taught, the supported, the tested and the learned curricula.

- 4. Makes useful distinction between merits (intrinsic value) and worth (value for a given context).
- 5. Is responsive to the special concerns of stakeholders and is able to provide them with the data they need for decision making.
 - 6. Is goal oriented emphasising objectives and outcomes.
 - 7. Is sensitive to and makes appropriate provisions for assisting unintended effects.
- 8. Pays due attention to and makes provisions for assessing formative aspects of evaluation.
- 9. Is sensitive to and makes provisions for assessing the special context for the curriculum.
- 10. Is sensitive to and makes provision for assessing the aesthetic or qualitative aspects of the curriculum.
- 11. Makes provision for assessing opportunity cost i.e. is the opportunity lost by those studying this curriculum.
 - 12. Uses both qualitative and quantitative methods for gathering and analysing data.
 - 13. Presents finding in reports responsive to the special needs of several audiences.

Importance of this theory to the study

The process of curriculum development is not completed until it reaches the evaluation stage. For effective evaluation to take place, the main actors in the field of implementation (the head-teachers) must be involved. As recommended by stake, the evaluator observes the curriculum closely, to get a sense of its operation and notes any unintended deviation from announced intentions. This makes the effective involvement of the head-teacher in all the stages of the curriculum development process very crucial. The head teacher has to observe the curriculum closely, gets a sense of how it is being executed from intended objectives and take note of any deviations during the evaluation phase.

Examination of the 2018 new primary school curriculum in relation to the present study

Bradley's (1985) provides 10 key indicators that can be used to measure the effectiveness of a curriculum process at all levels of the educational system. Based on Bradley and researcher personal experience (20 years and counting...), the loopholes that characterise the 2018 primary school curriculum are presented on a chart. The chart in Exhibit is designed to help readers identify different perceptions regarding different indicators to appraise the curriculum process effectiveness.

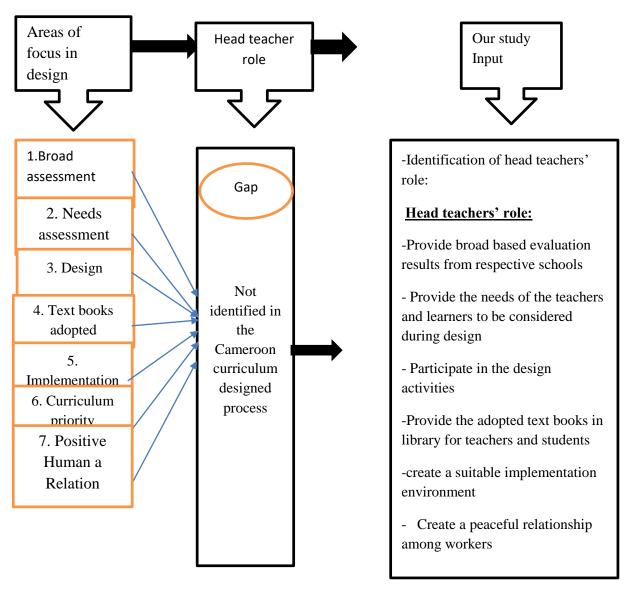


Figure 10: Diagram showing the existing research gap

The gap that exists between the literature according to earlier researchers in this field emanates from the indicators outlined for designing a good curriculum and the roles of the head teachers and teachers in the design process. From the above diagram, it is clearly observed that the indicators are stated but the roles of the head teachers are neglected. This poses a challenge to the design process and also to the implementation process viewing the important roles the head teachers have to play in the process. This study is focused on examining this gap and propose solutions to ameliorate the design process in Cameroon secondary schools. Moreover, it is also observed that Cameroon secondary schools operate in a top bottom formula. In this case, all decisions are taken from the minority in high offices, neglecting the micro level participants. The micro participants here are the, the head teachers, teachers and learners who are in school on daily bases and have a mastery of the curriculum,

its implementation and the challenges therein. once these cohort is neglected in the design process, there is bound to be a gap. This gap is therefore being tackled via this study.

EMPIRICAL REVIEW

Head teacher's involvement and needs assessment

A related study was conducted by Lin et al. (2012) in the USA, the study described a process of determining the right training needs assessment method for seven primary stakeholders with the objective of defining a two-year education fellowship in emergency medicine (EM). The priorities for discussion were decided through a modified Delphi method with a convenience sample of participant sofa breakout sessions held at a consensus conference for Academic Emergency Medicine in 2012. The sample was further broken down into smaller focus groups to facilitate discussions. The authors referred to the 'common pitfall in conducting needs assessment of over-reliance on a single assessment approach or a limited population sample' (p1421) and therefore constructed a large-scale, mixed-methods (quantitative and qualitative) needs assessment. This study of Lin et al conducted in the USA meets the demands of our study, both used the mixed-methods but for the fact that Lin's work did not detail the instrument, method of administration and the population and sample size used. Our study used the multistage, with stratified and purposive technique where the Taro Yamene formular was deployed to calculate the sample size. The administration of the instruments indicated the there was a high return rate of 95% with little mortality loss. Our study has actually made a difference, meeting up the basic demands of scientific research filling the gap.

Another related study was conducted by Zamair (2011), in India - Delhi on the vital role management of an organisation plays in the quantitative expansion and qualitative improvement by managing the resources of the organisation. Similarly heads of secondary schools manage resources available at institutional level to enhance access to secondary and provision of quality of education to the masses. Secondary education produces a middle level workforce for the development of the economy and also provides a crop for higher education. The study was designed to assess the management training needs of heads of secondary schools. The sample of the study consisted of 178 respondents (50% of the target population) with equal representation of location rural, urban, gender male and female. It was found that heads of secondary schools needed training in various management areas which included financial management, academic management, office management, human resource management and general management. Gender wise comparison indicates that male heads

needed more training than female heads in various management areas. It was also found that heads of secondary schools working in Rawalpindi district required more training as compared to heads of secondary schools working in Islamabad. It is a rich study viewing it's sample size of 178 barely an average of 50%. But the procedure and formular was not mentioned even though the location of the two studies has to do with urban and rural areas. The findings both address a similar problem, training needs of head teachers to manage the school well. The gap here is that, our study concerns the general training needs on a curriculum which is the the pedagogic governance for effective educational systems. It is not limited to only managing a particular school but involve a whole system of education for a whole nation.

Another related study was conducted by Sönmez (2020) in Kenya, the research process was structured as a case study that identifies reading and reading comprehension problems. Therefore, the research process was prepared according to the holistic-single case design of the case study. The research question is focused on: What are the secondary school students' needs regarding the problems they face in reading and reading comprehension processes? In this context, qualitative and quantitative data were collected through questionnaires, observation forms and semi-structured interviews to determine the students' needs and to make analyses via these data. Quantitative data were collected from 307 secondary school students. Then, qualitative data were obtained from the participants who were identified as homogeneous sampling in this group. The data collected during eight weeks were analysed by the quantitative and qualitative data analysis methods. According to the results of the analysis, it was found out that the students were affected by the factors that affect reading comprehension, physical factors that affect reading, reading difficulties and reading and reading comprehension problems. According to these findings, it was determined that the students have commonly the reading problems such as not caring about reading comprehension, lack of expectation against reading, get bored from the reading process, tiredness from reading, distraction, skipping reading, making habit of reading problems, not knowing punctuation, mixing letters. Based on these problems, students' needs for reading and reading comprehension were determined. To meet students' needs, suggestions were given on how reading and reading comprehension education to be designed. Sonmez (2020) is a contemporary study that actually touches the difficulties students go through in reading comprehension thus similar to our studies which has to do with needs assessment. The study used the questionnaire and semi-structured interviews from a homogeneous student population of 307 but our study equally used interviews, observations and questionnaires on a sample size of 376 on a purposive cluster sampling with a large respondents parent population of 19647, targeting 1402 with the above sample size. Thus our study is huge and covers all the 10 regions of the country with emphasis on head teachers, teachers, inspectors on the design, implementation of the curriculum in primary schools in Cameroon.

A related study was conducted by Lyaloo (2018) in WFO - AFRO. According to this study, a curriculum is a foundation of any education system, no matter how well the curriculum is developed, teachers must extensively understand and accept it for better interpretation in classrooms. Variance leads to less efficiency and puts the attainment of national goals of basic education in jeopardy. This study is suggesting that, in order to avoid this predicament, teachers should be actively involved in curriculum planning and development, a perception that makes them complete and confidence in the execution of a curriculum that they are equally implicated. This study carried out in Namibia has the same objective like ours, bridging the gap of involving the real actors in this academic exercise. The study employed a qualitative case study and used purposive and convenience sampling to select 8 teachers trained 5 years experience as participants. Participants were 8 teachers who received teachers 'training with teaching experience of 5 years from 4 schools in the Khomas region; 2 teachers per phase of basic education. In addition, this study employed a semi-structured interview to collect data. Collected data were analysed inductively using content analysis, coupled with the use of ATLAS ti.8 software.

Our study employed the purposive cluster sampling technique because the head teachers and teachers were from different primary school types, public, lay private and denominational. This in a bit to actually sample wide the opinions from all sectors. Our study used a larger population to this effect comprising of all the 10 regions in Cameroon with a wide experience range from 5 to 30 years of service where most of them are head teachers not just 8 teachers from 4 schools with 5 years experience in the case of Namibia. Our study used the mixed method to collect date involving questionnaires, interviews and focus groups which was later analysed with the help of a software SPSS version 7. so recent for standard and incredible results

The results of this study indicate that most teachers were not satisfied because they were not involved despite their experience and qualification, although few were content with it. Furthermore, the results show that these teachers are qualified and experienced, meaning that they have the necessary skills and knowledge to be integrated into the curriculum so,

teachers felt that the curriculum was imposed on them hence they only got the document to implement.

Our study has a similar objective and findings because it reveals that it is significant to involve teachers in curriculum planning and development because they know the background, learning needs and interests of learners. Involving teachers means that learners' interests are represented in the curriculum, leading to designing a curriculum which is relevant and meaningful to the learners.

As recommendations, Lyaloo (2016) opines that involving teachers in curriculum development acquaints them with an in-depth understanding of the curriculum which they can use to explain the content to the learners, to obtain learning objectives. This does not only enhance learners 'performance but attaining objectives of the national curriculum creates a path to the attainment of both national and global goals, of which Namibia's vision 2030 is to produce a knowledge-based society and to implement Sustainable Development Goal 4 (SDG4). Thus this study recommends Namibia Institute for Educational Development (NIED) together with the Ministry of Education Arts and Culture (MoEAC) to involve a substantial number of teachers in curriculum planning. Furthermore, the curriculum should be piloted to schools before it gets implemented. Additionally, schools should have school-based curriculum committees. This feelings tie dawn with our study that has version 2035, education for all (EFA), Millennium development goals(MDG), sincerely both studies share many aspects and projects together, Namibia a growing academic citadel has trained most of her high level educational staff in Cameroon in the 80s.

Head teacher's involvement and curriculum design

Mugimu and Mugisha (2013) carried on a study on Educational Practices, Curriculum Design and Implementation at the MLT Diploma Program in Uganda. They observed that Contemporary curriculum design and implementation require the use of appropriate educational practices to enhance positive teaching and learning outcomes. Their study discussed the study of educational practices and related curriculum antecedents applied during the design and implementation of the Medical Laboratory Technology (MLT) at Mulago Paramedical Schools in Uganda. The study utilised mixed methods (quantitative and qualitative) in which checklists, document analysis, questionnaires, focus group discussions, and interviews were used to gather data at different compliance levels. The sample comprised 10 educators, 30 clinical supervisors and 63 students. Results from the study revealed that the MLT diploma curriculum was implemented with a multi-disciplinary focus

in order to develop confident and dependable health professionals that could function harmoniously in interdisciplinary collaborative teams. The study also revealed that the curriculum designers and educators complied with important curriculum antecedents in its design and implementation process and it's clear that student-centred approaches were used. Furthermore, practicum training and strategies oriented students to basic practical clinical skills and competencies. The use of a variety of educational practices during curriculum implementation made the teaching and learning process more friendly and interesting. It was concluded that considerable utilisation of appropriate educational practices during curriculum development was critical. This area of curriculum development being extremely dynamic further research is needed to ensure continued relevance of curricula in the medical field.

Mugimu and Mugisha (2013) study in Uganda involved design and implementation like ours but differ because it is concern with Higher Diploma and with medics.our study has to do with design and implementation at the primary level, the base and genesis of all beginnings, it is a foundational study that pave the way for higher studies. Our emphasis here is on general and holistic knowledge to bring up and individual for use in the society no limited to professionalism. A sample of 12 educators, 30 clinical supervisors and 60 students is not only limited but insolvent for curriculum design and implementation is for experts not for students. Using a mix method in a work like this is quite commendable but no detail on the questionnaire, interview of focus group discussion was not given, even the procedure for data collection and analysis was not high-lighted. Whereas in our study all relevant detail to guide and direct modern research are strictly and rigorously implemented.

In a related study, Kimosop (2018) investigated the administrative support provided to teachers during implementation of early childhood development and education curriculum. Early childhood is the foundation of primary education and beyond, It is with this concern that proper implementation of the ECDE curriculum has to take place through provision of adequate and necessary support to pre-school teachers. This study investigated the administrative support that was provided to schools during the implementation of early childhood development education curriculum in Baringo North Sub County, Kenya. This study was guided by Gross etal theory on curriculum implementation which asserts that for any successful implementation, suitable conditions must be fulfilled such as administrative support. The study used descriptive research design. The study used selected schools in Baringo North Sub County, which had 120 pre-schools,160 pre-school teachers,120 head

teachers and 5 DICECE officers. Results showed that head teachers played a major role in the implementation in purchasing some of the required resources, through initiating the parents to support the teachers though it was found that they were not adequate at the time of the study. The head teachers and DICECE officer claimed that they never received adequate support from the Ministry of Education, Science and Technology to assist in the implementation of the ECDE curriculum. The paper recommends that for effective implementation of the curriculum, top administrative support should be provided to teachers to enhance effective curriculum implementation.

Kimosop (2018) was carried out in boringo- kenya on administrative support to head teachers and teachers in the implementation of early childhood development and education curriculum, used the descriptive designed like our study to collect data from a wide range of respondents. They used the stratified sampling, even though not mentioned, to collect data from selected schools of 4 sets of respondents;- 120 pre-school,160 pre- school teachers, 120 head teachers and 5 DICECE officers. This study fall short in the fact that, it was limited only to one small North sub county in kenya whereas our study engulf all the 10 regions of the country indiscriminately. Nothing is mentioned here on the methodology and administration even the findings are stated but the procedure is left out by error. Our study has detailed the complete procedure involved in the carring out of a comprehensive research work.

Hamzah, Juraime and Mansor (2016) investigated Malaysian Principals' Technology Leadership Practices and Curriculum Management. They claimed that school leaders face challenges in using technology to upgrade teaching and learning processes in the twenty-first century as they must also become role models in its usage. This quantitative style research used questionnaires for data collection involving 341 randomly selected Malaysian principals. Data collected was then analysed using descriptive and inference analysis. Findings show that Malaysian principals practice technology leadership at a very high level, and are also very competent at managing curriculum activity. T-test analysis found that urban principals' technology leadership practices are significantly higher than their rural counterparts, but their curriculum management competencies are at the same level. Findings also show that there is a low yet significant correlation between technology leadership and curriculum management competencies. In light of this information, we recommend further in-depth studies to explore the rural-urban gap technology leadership scenario, thus finding possible solutions in narrowing the academic achievement gap between rural and urban schools. Our study which was carried out in cameroon is similar to Hamazah (2016) done in

Malaysia on school leadership practices and curriculum management. Head teachers face a lot of difficulties in using modern technology in updating curriculum changes in the 21st century. Both studies deployed the descriptive inferential analysis and the T-test to show that urban head teachers are better in technology than rural head teachers. The findings showed a low significant correlation between head teachers technological leadership and curriculum management competences. Our study was not correlational in nature but an investigation in order to infer the implication of head teachers involvement in curriculum design and implementation in Cameroon.

Head teacher's involvement and Curriculum Implementation

Kartika, (2014) carried out a study involving two primary schools in Indonesia to investigate the view of school leaders on the implementation of the new curriculum. He made the following inputs: In 2013, the new curriculum was tried out in several school models. Then, in 2014, the curriculum was implemented in Grades I, II, IV, and V of elementary schools, Grades VII and VIII of middle secondary, and Grades X and XI of higher secondary schools. However, under the new Minister of Education, as of December 2014, the implementation of Curriculum 2013 was cancelled in several schools that just implemented it for one semester. Curriculum 2013 was characterised by three assessment aspects; cognitive, affective, and psychomotor. Character education, integration of subjects, and the lesson delivery in thematic topics also make this curriculum distinct from the previous one. The implementation of the new curriculum has been criticised, among other things concerning the preparation for putting the new curriculum into practice in the real classrooms.

This study aims to investigate schools' and parents' perceptions towards the new curriculum of 2013 and its implementation. The role of school leaders was also examined. In addition, in this study also Investigated how school leaders and teachers involved parents in the new curriculum implementation. To profit from parents' involvement, teachers and principals should acknowledge parents' role in their child's education. At school, principals and teachers are key for promoting parents' involvement, but in the 2013 curriculum implementation process there was little focus on parental involvement. A qualitative research method has been employed, and school leaders, teachers, and parents in two primary schools, public and national plus schools were involved. In this study, a quantitative research method was employed. A head teacher, teachers, and two parents in one public and one national school were involved. Semi-structured interviews were

conducted on the school sites. For one of the parents the interview was conducted by phone. Prior to the interview, each participant gave informed consent confirming their willingness to be *involved* in the study. Each interview lasted for approximately 45 minutes. The interviews were transcribed, coded and analysed.

The findings revealed that head teachers and teachers in both schools agreed that the new curriculum is not different from the old one in terms of student-centred learning. However, they found that the new curriculum had a more balanced focus on cognitive, affective, and psychomotor domains than the old one. Another important aspect of the new curriculum is its emphasis on character education that has to be embedded in every lesson. Integration of several subjects into one big theme is another distinct feature of the new curriculum. One of our informants stated: "Curriculum 2013 answers concerns a lot of people have about the absence of character education in Indonesia. It makes us aware that up until now our education had only accommodated students' cognitive abilities. Hence, we have to appreciate the government's initiative to reform the curriculum. Most teachers have been teaching in a national plus school that implements IB curriculum and got used to this kind of curriculum. They believed that with the new curriculum, teachers in the schools that still apply teacher-centred teaching, now start to realise that teaching and learning has to be student- centred, apply inquiry and constructive methods. Kartika's study conducted in Indonesia on headteachers views on the implementation of the new curriculumon parents involvement. Used the quantitative research method on 1 head teachers, teachers, 2 parents where 1 parents was contacted through phone call. A semi-structured interview that lasted for 45 minutes was transcribed, coded and analysed. The findings showed that the curriculum should integrate several subjects to be englobing because it deals with the cognotive, affective and psychomotor domains. It is a good study because it has integrated most research parameters but fall short of the fact that it was only a quantitative study, with a limited population sampled, the issue at stark here is the involvement of parents in curriculum implementation but only 2 parents were implicated in the study. Also, detail about the instrument, administration and analysis was hidden, whereas our study gives a detail presentation of the questionnaire, interviews how they were conducted to collect data which was analysis using the most recent version of SPSS. Thus our studies has a lot to contribute to fill the research gallops caused by Kartika's study.

Parents Involvement in the New Curriculum Implementation

A Study by Changilwa and Winston (2017) investigated how Catholics Sponsored community colleges in Nairobi utilise the existing physical facilities and teaching and

learning resources for effective implementation of Artisan and Craft curricula. The study adopted a mixed methods research design. Proportional stratified random sampling was used to sample 172 students and 18 teachers while four directors of community colleges were purposively selected. Questionnaires were administered to students and teachers, while directors were interviewed. Teaching and learning resources, such as workshops, equipment. lecture rooms, laboratories, raw materials for practical training and reference books, were found to be adequate, although under utilised. However, sports grounds, libraries and course texts were inadequate. Resource inadequacies were often mitigated by signing equipment co-sharing agreements with peer institutions and local firms. Teachers rated highly the influence of physical facilities on curriculum implementation.

Both students and teachers rated highly the influence of teaching and learning resources on curriculum implementation. The study concludes that, while some physical facilities and teaching and learning resources are adequate, their under utilisation and the inadequacy of other core facilities and resources, such as libraries and course textbooks, hinder effective teaching and learning in these community colleges. It also provided results which proved that teachers face enormous difficulties in implementing the curriculum. The reason for these difficulties were cited as follows:

- Teachers need mastery of the curriculum for implementation to be effective.
- There is a lot of vagueness on the designed curriculum which ground implementers cannot implement. The document is not applicable in local realities. They recommended that for effective implementation to take place, the ground implementer should have been involved in all the phases of the curriculum developmental process.

This study is quite rich since it has effectively used some basic research demands on the topic ''An investigation on how Catholics sponsored community colleges in Nairobi for the effective implementation of Artisan and Craft Curriculum'' The study used the proportional stratified random sampling technique to sample 172 students,18 teachers,4 directors were purposively selected. Questionnaires were used for students, teachers and interview for the 4 Directors. It lacked the basic explanations to guide the readerhood on an effective and accomplished research work forfilling the scientific underpins required for a sound research. The findings show that it is challenging for teachers to implement the curriculum because of too many ambiguities in the process of interpretation, lack of local realities and was concluded that all stakeholders must be implicated in curriculum development process. The gap our study has come to fill are glaring, the insufficient description of the instruments, method of data analysis even though the recommendations both invite the total involvement

of stakeholders in education to be part of the design and implementation for a holistic evaluation of the curriculum.

Head teacher's involvement in curriculum evaluation

Primary school training curriculum are evaluated constantly both internally (by the administrators, staff and students) and by external evaluators (expert agencies, organisations). Evaluation of education programmes is commonly approached by examining the differences that our efforts have made in those who take part in our programs. (Macur, 2016). Many researchers took interest in this aspect and conducted a range of research in different areas and from diverse perspectives. In most cases, they showed that there is a significant relationship between programme evaluations both in general and particular or specific programs and career readiness.

According to Papadopoulos (2013) evaluation of an ICT skills curriculum enhanced pupils' capabilities and knowledge. This paper reports on the impact and benefits of integrated business learning (IBL) on pupils learning in vocational Information Communication Technology (ICT) lessons. pupils' reactions to learning experiences located in their environment and those that model work-practices are explored through experiential learning theories and employability models. Using surveys, in-depth interviews, and focus groups, the pupil's voice is captured and triangulated with teacher and industry practitioner observations of student capabilities and employability. The findings showed that pupils highly value and benefit from IBL curriculum and provide meaningful connections to the real world around them. Learners are motivated by structured and tailored experiences that provide a strong alignment between the curriculum and professional practice, providing opportunities for both personal and professional development.

Pieto (2020) verified if a broad curriculum evaluation enhances the skills of the learner. Using data on a large sample of recent Italian primary school leavers, this paper investigates the extent to which participation in study abroad programmes during primary schools impacts subsequent workable likelihood. To address the problem of indigeneity related to participation in study abroad programmes, the researcher combined the fixed effects and instrumental variable estimation where the instrumental variable was exposed to international student exchange schemes. The results of these estimates showed that evaluating abroad programmes has a relatively large and statistically meaningful effect on the probability of being employed some years after graduation. This effect is mainly driven

by the impact that studies abroad programmes have on the employment prospects of graduates from disadvantaged (but not very disadvantaged) backgrounds, though positive but imprecise effects are also found for graduates from advantaged backgrounds.

According to another study by Somalrot, (2009) tiled an evaluation of the curriculum of Clinical Psychology Abstract Introduction. The objective of this study was to evaluate the Master's Degree programme in Clinical Psychology, offered by the Department of Psychiatry, Faculty of Medicine, Siriraj Hospital, Graduate Study, Mahidol University. He employs the CIPP Model to evaluate the programme. The sample consisted of 44 lecturers, 36 current students, 56 graduates and employers of 56 graduates. Data was collected using questionnaires and by an informal interview. Content analysis and descriptive statistics were used for analysis. The results state that research findings in the context evaluation indicated that the curriculum objectives were clearly stated, practice oriented and corresponded to social needs. The curriculum structure was well designed. The instructional and evaluation activities corresponded to the curriculum objectives. The input evaluation showed that the students who attended the programme found the selection criteria appropriate. The graduates' readiness was found to be high. The results show that the working committee and lecturers could conduct the course successfully. The educational resources were available to serve the teaching and learning process. However, some of the resources were not adequate. With regard to the process evaluation, the operation instruction and evaluation process were very good. Product evaluation suggests that graduates have achieved the general and specific competencies as mentioned in the programme objectives.

This study is most interesting as it involves both the teaching staff, current students and the graduates in the process of evaluation. The difference this study brings in is that other researchers evaluated and got views just from graduates meanwhile, there is a background that is affecting who they have become, the type of skill they have. Their schooling processes cannot be undermined because, learner's role in the training process is far reaching and the programmes alone cannot be used to conveniently confirm the learner's quality without taking into cognisance the quality of the student, discipline, attendance and readiness to work. The above studies strongly portray the process of evaluating training programmes as very influential in skill provision that prepares learners for job market.

Curriculum evaluation however has some challenges that have either or not influenced the above studies, among them we have lacked familiarity with the project being evaluated. Limited evaluation skills in those conducting the evaluation. Inability to write

for lay audiences and translate evaluation findings. Limited design/desktop publishing support for summarising findings into reports. The investigative skills of those conducting the evaluation being too narrowly focused. Lack of familiarity with both evaluation processes and the subject being evaluated, inattention to detail in collecting information, lack of commitment to working with project partners to determine collaborative impacts, failure to plan funding for the evaluation in the general implementation budget, staff turnover - by evaluation time, those responsible for implementing the education programme may have moved on to other programs. Finally, one of the most pervasive and difficult problems to address is when those in charge of a program see evaluation as a threat (Van den Ban and Hawkins, 1996). This can be a serious problem, especially in agency cultures where criticism might cause loss of face and is not seen as a positive way to help staff improve their work. The issue of perceived threat must be addressed by administrators and organisation leaders. The feedback system of an agency or institution must be supportive and encouraging - rather than responding negatively to evaluation results.

Involving English teachers in designing and developing curriculum leads to producing effective curriculum, therefore, an efficient learning process of English. This exploratory study evaluated the English teachers' involvement in designing curriculum in Saudi public schools. Also, it investigates how English teachers' absence of the process of curriculum design impacts them and their learners. Then the study suggests the collaborative curriculum design method as an alternative. The sample consists of seven teachers and two supervisors. The data were collected and analysed through qualitative research methods. The findings show that English teachers' participation is restricted to evaluating the curriculum after implementing it. This narrow role limits the creativity and productivity of English teachers and their students.

Terhoven and Aslam (2018) carried out a study on the way in which the school management teams (SMTs) of three selected working-class schools have developed and implemented a range of leadership practices within their school in order to provide a platform for optimal curriculum. The study was based on qualitative research conducted in schools on the outskirt of Cape Town. Employing the policy enactment theory advanced by Ball, Maguire and Braun (2012), the study illustrates the way in which the context of these working-class schools impact on the type of leadership practices that are employed. These practices, in turn, have an impact on the implementation of curriculum policy in these schools, the study elucidates how governmental curriculum policy reform is 'received' by the

SMTs, which the schools' formal leadership structures. And implemented in the 'messy' reality of the selected schools.

With the argument that the leadership practices of the selected schools' SMTs arc determined by the schools' materiality,' in reference to the impact of the schools' contextual circumstances on their curriculum processes and leadership practices of the selected schools' SMTs how that the schools' leadership practices are based on a narrow and one-dimensional enactment of the curriculum policy, which has negative consequences for teaching and learning in the schools. This study contributed to an understanding of the challenges faced by practices in working-class schools and the enactment of curriculum policy reform in them.

It also brought out several reasons for difficulties in the implementation of a curriculum. School management forms complained of:

- Lack of sufficient training for the team in curriculum implementation procedure
- Lack of optimal knowledge on the curriculum document
- Non participation during the production of the curriculum document
- They proposed that school management teams should be involved in all the stages involved in coming out with a curriculum document.

Curriculum Leadership And Evaluation

A study was carried out by Datnow (2009) for classroom teachers to evaluate the curriculum on Science, Technology, Engineering and Mathematics (STEM) in University of Illinois, in a population of 257, a sample of 50 teachers was selected using the simple random proportionate sampling procedure. They were expected to evaluate the curriculum which has been in use for the past two years. Structured assessment forms leading to evaluation were distributed to the sample. Interestingly, the state began the new curriculum in middle school and several years later added it in elementary school. The first several years, the students in the middle school had large gaps in their knowledge of Mathematics due to the vast difference in the Elementary Quality Core Curriculum and the middle school Georgia Performance Standards. Students throughout elementary school drilled basic skills with little focus on higher order thinking skills incorporated. Then when they entered middle school, they were expected to be able to think abstractly and apply their learning on a much deeper level than had ever been required of them.

This study carried out by Datnow in (2009) was on classroom teachers evaluation of the curriculum on science, technology, Engineering and Mathematics. [STEM] university of Illinois in the US. A population of 257 responded on a minimal sample size of 50 teachers

using the simple random proportionate sampling procedure with a structured assessment forms to evaluate the curriculum. This study is a huge project that is suppose to involve a larger population because evaluation need the services of a panoramic scenario to actually give an bird-eye conclusion. The result of the study indicate that a large gap exist in the middle school in their knowledge of mathematics because of a vast difference in the Elementary Quality Core Curriculum the middle school Georgia performance standard. The recommendations were very pointing because it invites higher thinking skills incorporation for abstract thinking in the evaluation of a curriculum but it failed to succumb to the demands of scientific research in terms instrumentation, hypothetical correlation, theoretical ontology and epistemology which our study synthetically, systematically and scientifically explains the insight of contemporary research.

Literature Review and Establishment of Knowledge Gap

Earlier researchers have done much in this field of study. From earlier studies, we align with the fact that the curriculum process is an on-going effort by the department of curriculum committee. We also review that the curriculum design is not a one-man-show, rather the combination of efforts and expertise by all educational stakeholders with the community and its constant changes at heart. Among the earlier research reviewed, we decipher that many researchers have examined the problem under study but in different geographical locations and with different methods. From the existing reviews, the majority of the earlier researchers focused on teacher's involvement in the curriculum process. A lofty and interesting path, but with a relative gap created in the chain due to the absence of head teachers. They probably neglect the head teachers who hold the steering of these institutions, make decisions, provide the necessary didactic materials, convenient teaching-learning atmosphere and ensure motivation, peace and tranquility in the schools.

In the Cameroon curriculum design process, the head teachers are left out. This impedes head teachers from exercising their administrative functions effectively. This is because they do not master what it takes to enable successful implementation of the curriculum. The head teachers who are expected to master the curriculum so that they will make provisions for success have difficulties to help their teachers because they have little or no idea of what the curriculum is all about. Due to this limitation, the head teacher cannot effectively provide the required didactic material, friendly environment, adapt classrooms, train the teachers and also motivate them to attain the school's objectives. In other realities,

these head teachers also teach and evaluate the staff, therefore they are expected to be involved in the curriculum process.

Earlier researchers on Cameroon secondary school curriculum like Alemnge (2020) opines that an examination of the new primary school curriculum suggests that salient issues relevant and fundamentally important to the Cameroonian society have not been addressed. These include multicultural, peace, gender equality, moral, and sustainability education. These abandoned areas are left out because the designers do not have an idea of what transpires between teachers who are learners on daily bases. They neglect the head teachers' roles from which the real information about indiscipline, juvenile delinquencies, genders issues and sustainable education.

Therefore, the need to involve head teachers in the curriculum process is the gap we intend to fill in the literature of this domain. The head teacher's absence in the curriculum process has a far reaching demise in the teaching-learning process, it distorts the administrative chain and creates doubts in the minds of the actors. This study therefore springs out to examine this role of head teachers in the curriculum process, in a way to fill the knowledge gap from the Cameroon context, thereby adding scientific and verifiable findings in this domain.

Summary Of Empirical Review.

13 Empirical studies were reviewed affiliated to curriculum design,implementation in relation to need assessment of head teachers and teachers lackluster abandonment in the effective participation, production and use of the curriculum in basic education in Cameroon. On need assessment 3 reviews were reviewed, Lin et al (2012) in the USA. A mixed-method was used to sample the opinion of the teachers, head teachers. Zamair (2011) carried out a similar study in India on head teacher management training needs to run secondary schools in both urban and rural areas, the study concluded that schools in town need training facilities more because of advance technology. Also,Sonmez(2020) conducted a study in Kenya on reading comprehension needs in secondary schools. The study employ the mixed-method, questionnaires and semi-structured interviews to know students need.

Considering the curriculum, 4 studies were examined. Lyaloo (2018) in WFO-AFRO on teachers involvement in curriculum. The purposive sampling was used in Khomas region in Namibia. In that same light, Mugimu and Mugisha (2013) equally carried out a protracted study on Educational practices, curriculum design and implementation in Uganda. Kimosop (2018) also look into administrative support to teacher in the implementation of early

childhood development and education curriculum in Boringo in the North sub county of Kenya. The study used the descriptive design on selected schools and concluded that head teachers play a major role in curriculum development and need government support. Hamazah, juriame and Mansor (2016) in Malaysia investigated principal leadership practices and curriculum management. The descriptive inferential analysis based on the T-test to prove that urban head teachers use technology often to upgrade curriculum improvement.

Kartika (2014) carried a study in Indonesia on head teacher views on the implementation of the new curriculum on parents involvement using the qualitative research method that include head teachers, teachers and 2 parents. The semi-structured interview, phone calls were transcribed, coded and analysed. Changilwa and Winston (2017) investigated how Catholics sponsored community colleges in Nairobi for effective implementation of Artisan and Craft curriculum. Proportional stratified random sampling was used to sample 172 students, 18 teachers and 4 directors purposively selected. It was discovered that it is very challenging for teacher to implement the curriculum because of it's ambiquities in interpretation and doesn't meet locak realities. Thus all stakeholders were called upon to be highly implicated.

One study was reviewed on head teachers involvement in curriculum evaluation. Datnow (2009) carried a study on classroom teachers evaluation of the curriculum on science and technology, Engineering and Mathematics (STEM). A population of 257 was used on a simple size of 50 teachers, simple random proportionate sampling procedure. Structured assessment forms were used to evaluate the curriculum and the results showed a large gap in middle school because of a vast difference in the Elementary Quality Core Curriculum and the middle school according to Georgia performance standard. It was recommended that higher thinking skills should be incorporated for abstract thinking. Thus 13 empirical studies were reviewed that have to do with the objective, hypothesis and significance of the study with emphasis on the procedure of collecting information, who is eligible, instrumentation, administration, validation and reliability, analysis, findings with closer attentions to the recommendations.

Conclusion

The chapter two of this study succinctly focuses on a variety of scientific issues as recommended in research like; conceptual and theoretical frameworks. Three major theories were dealt with scanning through relevant literature to unveils the works of earlier author

in order to avoid repetition. We showcase the nature of Cameroon primary school with an elaborate update on the different variables that make up this thesis like, head teacher's involvement in need assessment, in designing, implementation, and evaluation phases in curriculum procedures. A series of empirical write-ups connected to our objectives were examined to bring out the finesse it deserves, thereafter a summary and a conclusive paragraph.

CHAPTER THREE: RESEARCH METHODOLOGY

The chapter three of this study is titled research methodology. It adopts the following methodological aspects, area of the study, the research design and philosophical underpinning, the population, the target and accessible population, the sample size and sampling techniques. It further presents the research instruments, validity and reliability of the instruments, administration of the instruments, the data analysis technique, the recapitulative table with an explicit information table for this chapter and conclusion.

Research Design

A research design is the procedure for collecting, analysing, interpreting and reporting data in research studies (Creswell & Clark, 2007). It sets the procedure on the required data, the methods to be applied to collect and analyze this data, and how all of this is going to answer the research question (Grey, 2014). This study adopts the descriptive survey research design. The descriptive survey is chosen because it enables the researcher to collect data from a **wide population** at a particular point in time to describe the nature of the existing phenomenon; identify standards against which this existing phenomenon can be compared. It also helps us to scan a wide field of issues, population, institutions and programmes to describe or measure any generalised features. It further helps us to assure objectivity and generalisation of findings.

The philosophical assumption of this study is pragmatism. Pragmatism is chosen because pragmatist philosophy accepts concepts to be relevant only if they support action (Saunders et al. 2012). Pragmatists recognise that there are many different ways of interpreting the world and undertaking research. To them, no single point of view can ever give an entire picture and that there may be multiple realities (Bassong, 2017). Pragmatism as a paradigm is viewed behind the philosophical framework of mixed method research approach (Mackenzie & Knipe, 2006) as cited in Singh (2019). The focus is more on a research problem under study and types of questions asked (Creswell, 1998). In order to make the research meaningful and legitimate, research conducted within this framework is free to use the methodology of qualitative as well as quantitative paradigms (Gray, 2013). It is based on this philosophy that this researcher adopt the mixed-method approach in order to get a full understanding of the phenomenon under study (Techo, 2016). Also, this approach was chosen because the combination helps to enhance objectivity of data.

According to Tashakkori & Teddlie (2010), employing mixed-methods offers a feasible approach and unites the philosophy and methodology. Despite the advantages of the mixed-method approach, Fakis et al (2014) opined that critics hold the view that mixing qualitative and quantitative research methods are difficult because both use different ontological and epistemological assumptions. However, Tasakari and Tedlie (2010) argued that a mixed method is possible given that it frees the researcher from the dual grip of all levels of the research and provides the opportunity for using more than one design.

Area of the study

This study was carried out in Cameroon which is a country in Central Africa. It is bordered by Nigeria to the West and North; Chad to the Northeast, the Central African Republic to the East and Equatorial Guinea, Gabon and the Republic of Congo to the South. Cameroon's coastline lies on the Bight of Biafra, part of the Gulf of Guinea and the Atlantic Ocean. Sometimes it is described as Africa in miniature because it inhabits all the major climates and vegetation of the continent. Cameroon land mass is 472,710km²(182. 510 sq. Miles), with 2730km² (1,050sq miles) of water. (Fonge, 2016). According to the 2012 census statistics, its population is about 20,386,799 persons found in ten administrative regions (Decree N° 2008/376 of 12th November 2008). In this study, Cameroon was divided into three zones according to proximity and accessibility. Zone one Adamawa, North and extreme north: Zone two is the Centre, South, Littoral and East, and west and zone three Northwest and southwest. We used these zones because the curriculum process is the same for the whole country and by using zones we shall have larger participation in the study and enable the generalisation of findings. The map is presented on the appendix I.

Population of the Study

According to Shukla, (2020), research population is a set of all the units (people, events, things) that possess variable characteristics under study and for which the findings of the research can be generalised. A population determines the limit within which the research findings are applicable. The population of this study is made up of all stakeholders of the Cameroon primary schools. The population was seen in three different cultural zones of Cameroon. This research derived the zone bases on related socio-cultural practices (language, dance, marriage rights, and agriculture) (see table 3). These 3 zones were also represented by regions. To acquire the regions, we employ the stratification technique to the zones and the North, Center and south west represented the respective zones (see table 4).

In these zone, we based our study on the head quarters because they are highly populated, breathing ground for all categories and levels of education and educational headquarters. The Stakeholders here are specifically the teaching staff, head teachers, Regional Pedagogic Advisors (RPA), Regional Pedagogic Inspectors (RPI), Divisional pedagogic advisors (RPA), sub-divisional inspectors (SDI), sub-divisional animators (SDA), and primary schools without any distinction of their political, economic and socio-cultural backgrounds. Eligibility criteria for this population are; be from one of the zones identified, be a parent to a child in any English primary school, be a teacher, head teacher, worker at MINEDUB, be a Cameroonian and a curriculum expert. A situation that permits them to have a mastery of the phenomenon. The population is presented on table 3.

Table 3: Presentation of the population of the Study

| ZONES | Region | Teachers | RPIs | RP A | D P A | SDI | SDA | Total |
|--------|----------------|----------|------|------|-------|-----|-----|-------|
| | Adamawa | 3362 | 3 | 9 | 22 | 21 | 40 | 3457 |
| Zone 1 | North | 6056 | 3 | 9 | 20 | 21 | 42 | 6151 |
| | Extreme North | 10218 | 4 | 9 | 26 | 47 | 94 | 10398 |
| | Littoral | 4298 | 5 | 10 | 16 | 34 | 55 | 4418 |
| | Centre | 9599 | 5 | 10 | 50 | 70 | 140 | 9874 |
| Zone 2 | East | 3597 | 4 | 7 | 18 | 33 | 63 | 3722 |
| | South | 3391 | 5 | 6 | 19 | 29 | 45 | 3495 |
| | West | 8147 | 5 | 10 | 40 | 40 | 80 | 8322 |
| Zone 3 | North West | 4249 | 5 | 10 | 35 | 34 | 68 | 4401 |
| | South West | 3469 | 5 | 10 | 30 | 31 | 62 | 3607 |
| | National Total | 56386 | 44 | 90 | 276 | 360 | 689 | 57845 |

Source: MINEDUB (2021)

Target population

Fraenkel and Wallen (2006) opined that the target population is the actual population to which the research generalises its findings, (it is the researcher's ideal choice). In these regions, we targeted RPA, RPI, RPA, SDI, SDA, Teachers and Head teachers using the stratification method. We used these stratified participants because they form the chain of the curriculum process from the ministry to the schools and therefore participate in curriculum process in one way or the other.

Table 4: Presentation of the target population

| | | Teachers | Head | RPIs | RPA | DPA | SDI | SD | Total |
|--------|---------------|----------|----------|------|-----|-----|-----|--------------|-------|
| Zones | Region | | teachers | | | | | \mathbf{A} | |
| Zone 1 | North | 6056 | 5 | 3 | 9 | 20 | 21 | 42 | 6156 |
| Zone 2 | Center | 9599 | 5 | 5 | 10 | 50 | 70 | 140 | 9879 |
| Zone 3 | South West | 3469 | 5 | 5 | 10 | 30 | 31 | 62 | 3612 |
| | | 19124 | 15 | 13 | 29 | 100 | 122 | 244 | 19647 |

Source: This study (2022)

Since we could not meet all the targeted 19647 participants due to inaccessibility, insecurity, transfers, retirements and unwillingness to participate, we used the accessible population.

Accessible Population

According to Onen (2020), accessible population refers to the portion of the target population to which the researcher has reasonable access and from which sample can be drawn. It could be that portion of the population to which the researcher has reasonable access, may be a subset of the target population. The accessible population of this study therefore involved the teachers, RPA, RPI, RPA, SDI, SDA, head teachers in the regional headquarters of the 3 regions targeted above. These headquarters were Garoua, Yaounde and Buea.

Table 5: Presentation of the accessible Population

| Regional quarters | head | Teachers | Head teachers | RPIs | RPA | DP A | SD I | SD A | Total |
|-------------------|------|----------|------------------|------|-----|---------|------|---------|-------|
| Garoua | | 250 | 5 | 3 | 9 | 22 | 21 | 40 | 350 |
| Yaounde | | 350 | 5 | 5 | 10 | 50 | 70 | 140 | 630 |
| Buea | | 279 | 5 | 5 | 10 | 30 | 31 | 62 | 422 |
| Total | | 879 | 15 | 13 | 19 | 102 | 122 | 242 | 1402 |

Source: This study (2022)

Sample size

Onen (2020), opined that a sample is the selected elements (people or objects) procedurally chosen for participation in a study to represent the target or accessible population). To acquire the sample size for this study, we employed the sample size table as according to Research Advisors (2006). According to them, many researchers (and

research texts) suggest that the first column within the table should suffice (Confidence Level = 95%, Margin of Error = 5%). To use these values, the researcher simply determines the size of the population down the left column (use the next highest value if the exact population size is not listed). The value in the next column is the sample size that is required to generate a Margin of Error of \pm 5% for any population proportion. Therefore, we used this table to determine a sample size of 376. Therefore, the study sample of 376, the sum of teachers, head teachers and delegates who accepted to participate in this research work.

Sampling Technique

Sampling technique is the manner in which an appropriate sample size is selected for the wider study (Bryman, 2012). This study adopted the purposive cluster and simple random sampling techniques. In the selection of accessible regions, the purposive cluster sampling technique was used. We use the purposive sampling technique because it focuses on particular characteristics of a population that are of interest and enables the best research method to examine and discover the answer to your research question. The simple random sampling technique was adopted in the selection of regional pedagogic inspectors, regional pedagogic advisers, divisional pedagogic advisers, sub-divisional inspectors of basic education and pedagogic animators at the sub-divisional level and teachers. This study used the simple random sampling technique because We adopted the simple random sampling technique because it allows us to select any member of the population under the study since all the members had equal chances of being selected and the probability of each member being selected is not affected by the selection of other members. In this process, any school in the accessible population that was selected, all its teachers constituted part of the sample. Purposive sampling was achieved by including all the head teachers in the schools selected in the sample because they forfilled the required conditions.

Sources of data

This involves all the instruments and methods employed in the process of data collection and the sources from which the data was gotten.

Sources of Data

In research, data sources are classified into two; which are the primary and secondary based on their sources.

Primary Data

Primary data is a type of data that never existed before; hence it was never previously published. Primary data is collected for a specific purpose, which implies that they are critically analysed to find answers to research questions (Saunders, et al. 2012). Primary data is obtained mainly from observation of the events, processes, manipulation of variables, and contrivance of research situation including the performance of the experiment and responses to the questionnaire. When data takes any of the forms listed, it gives rise to another source known as a secondary source. In this research work, the primary data was collected using a questionnaire and interview guide that we developed. We employ the mixed method of data collection because.

Secondary Sources

Secondary sources are generated by primary sources. The data collected from secondary sources is secondary data but secondary data emanates from the processing of data from primary sources that was carried out and published by previous researchers. According to Saunders, et al. (2012) Secondary data is the type of data that has been previously published in journals, magazines, newspapers, books, online portals, YouTube videos, blog pages and other sources. In this study, we derived our secondary sources from data-based gotten from the various departments, reports from the ministry of higher education, quality assurance documents, and reports from the national employment fund. We also exploited books, internet, thesis, YouTube videos, TV interviews as secondary sources to collect data for this study

Research Instruments

In research, the instrument is any device that enables the researcher to systematically collect the data such as questionnaire, interview guide, focus group or observation.

QUESTIONNAIRE

A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents.

The results of the pilot study was collected and analysed to ensure that the necessary changes were made in order to draft the final questionnaire.

A team of 3 facilitators were recruited from each region delegation of basic education or a support staff by the principal investigator after consultation, considering Previous experience on data collection as an added advantage for selection. A quick oral interview was conducted by the researcher for a final selection of a questionnaire facilitator who were trained for 2 days to prepare them in data collection. This training covered the following aspects.

- Study purpose
- Role and responsibilities of facilitators and supervisor
- Content and use of the questionnaires, forms and material
- Item by item review including skip matters
- * Respondents selection procedure and special instructions
- Informed concerned and confidentiality procedures
- Proper interviewing techniques including listening skills and probing questions techniques
- ❖ Proper supervision technique and quality -control procedures in the field
- Final pre-testing of questionnaire
- Logistics planning

ADMINISTRATION OF QUESTIONNAIRES.

In a study like this, questionnaires can be administered in several ways;- Face To Face Administration where the interviewer presents the items orally, Paper and pencil Administration, here Items are presented on papers, Research administration questionnaire where interviews are conducted through phone or online between researcher and respondents, researcher administration questionnaires, here the researcher ensure that the respondents are representative of the target audience and finally the Computerized questionnaire administration where the Items are presented on Computer.

This researcher deployed divers channels during sectoral conferences, Fenasco games and during coordinating meetings in the ministry of basic education, with the help of research assistants to realise the goals. During such gatherings, a large number of personnel come together and the researcher with the facilitators use the direct delivery technique(DDT) or face to face method, to brief, distribute and collect the responses within a short period of time on the spot. This method has been judged far adequate because the return rate was 98% with an insignificant mortality rate of 2%. The research assistants were equally very useful in the respective regions where they administered the questionnaires. The researcher equally used structured interview guides to collect information from very top Minbase administrators and managers. Others scanned and posted their responses through whatsapp, email especially those who were out of post or difficult to reach them one on one. The data was collected, clean and analysed. Also, we employ the questionnaire because it enables the researcher to acquire adequate, precise and objective information. It is cost effective, time saving and so enables the researcher to gather much information from a greater number of respondents in a relatively short period of time. The questionnaire used was presented in two main sections: personal or demographic information (region, name of school, gender, role play, longevity in service, highest certificate) and the second part was questions on variables (need assessment. Design phase, curriculum evaluation, implementation phase) and the question on head teacher's involvement. presented according to the hypotheses. Followed by questions on extraneous variables, as summarised on table 6.

Table 6: Description of Questionnaire

| Hypotheses | Indicator | Number of items | Measuring scale |
|------------|-----------------------|-----------------|----------------------|
| RH1 | Needs assessment | Q 67– Q12 | 4 point Likert scale |
| | | | |
| RH2 | Design phase | 13-19 | 4 point Likert scale |
| RH3 | Implementation phase | 20-26 | 4 point Likert scale |
| RH4 | Curriculum evaluation | 27- 33 | 4 point Likert scale |

Source: Researcher (2022)

Weighting the Scale

The measurement scale was a four-point Likert scale. The four-point Likert scale was chosen because it is more reliable for recording opinions or ideas, and it equally eases data analysis presented. the scale was presented as (Strongly disagree-SD= 4, Disagree-D=3, Agree-A=2, and Strongly agree-SA=1). From the objective of the study, all the items were

affirmative, thus all negative responses had high points. through the Statistical Package of social science (SPSS, version 23). The respondents were expected to Tick ($\sqrt{}$) the options most suitable to them.

For the decision rule according to Tanah and Encho (2017), it refers to regulation or guide which enables a researcher to obtain a decision on whether to accept or reject an issue as seen below.

Mean

This means that any factor with a mean of 2.5 and above was accepted (positive) while those less than 2.5 were rejected (negative). Each questionnaire was made up of closed-ended questions and was to be answered anonymously and not obligatory. (*see appendix*). Given that we are carrying out a mixed research and the closed ended questionnaire can only provide quantitative data, thus we introduced the interview guide.

Description of Interview Guide

The interview guide (see annexe 02) was designed and used as the second instrument for data collection. According to Bird (2016), an interview guide is a list of subtopics that you plan on covering in the interview expressed in questions that you want to answer under each topic. We used the interview in this study because it will provide qualitative data. The goal is to enable us to understand the phenomenon from each subjects' experience. It also helps us to explain and explore research subjects' opinions, behaviour, and phenomenon. The items on the interview were open-ended so that in-depth qualitative information will be collected. The guide was made up of five questions. Each of them had three sub-structured questions to guide the interviewee's discussions. The study used interview guide to collect data from head teacher, teachers, inspectors animators and staff. The instrument contained elements of the different research constructs such as programme evaluation, graduate's tracers study, employer's involvement/ satisfaction, pedagogic practices, lecturer's quality and graduates career readiness.

Validation of the Research Instruments

Validity is defined as a measure of truth or falsity of the instrument of data collection. It is classified into internal and external validity of the instruments. This is the most important measure to take to make sure the research instruments serve their intended purpose as every instrument is designed for a particular purpose. Once it is designed appropriately, it measures

rightly, and if it is faulty, it misses the target. Validity is an important requirement for both qualitative and quantitative studies (Cohen et al. 2007). To verify the extent to which the research instruments conceived for this study measures accurately what they were intended to measure, the two instruments are subjected to content validity.

Face Validity. The instruments were then presented firstly to some lecturers and research experts who read and made some adjustments and judged the instrument appropriate and objective with the subject matter and coverage of the entire topic under study. It was then submitted to the researcher's supervisor for cross-examination and scrutiny. She examined the items by checking the language, clarity of the questions, relevance of the items to the objectives of the study, and items' ability to accurately represent a common theory and practice. After a succinct scrutiny of these instruments together with the researcher, the former brought in more corrections and modifications which were modified by the researcher. After a third examination, the items on the questionnaire were confirmed valid and relevant to the study thereby confirming the face validity of the instrument.

Content Validity. Content validity refers to the extent to which a test represents the universe of items from which it is drawn and it is particularly useful when evaluating the usefulness of the achievement test (Salkind, 2000). For Amin (2005), content validity is the degree to which the test measures what it was intended to measure. It shows how adequately the instrument samples the universe of knowledge, skills, perception and attitudes that the respondents are expected to show. Validity is therefore the degree to which an experiment of measurement actually reflects the variables designed to measure. In this study, the designer of the instrument made sure that all the questions asked in the questionnaire fully exhausted all what was implied by the research question and hypothesis. Convergent validity calculated stood at 0.7, above the threshold of 0.5 which is the alpha, meanwhile the discriminant validity was 0.65 as recommended by Fornell and Larcker (1981). Hence, confirming strong evidence of the validity of the instrument measured.

Reliability of the Instrument.

Reliability of the instruments in the study was concerned with how consistent the results obtained with the instruments are. Asika (2012) opines that a researcher who designs a research instrument should be more concerned about how consistent the results he obtains from the instruments are. It should be intended to ensure that the instruments give similar,

close or even the same results if the study to which the instrument was applied is taken all over again even by a different researcher under the same assumption and condition. Reliability is invariably the consistency between independent measurements of a phenomenon. It denotes the stability, dependability, predictability of the measuring instruments.

Test-retest Reliability. To establish the reliability of the instruments, the researcher employed the test-retest approach. According to Amin (2005), test-retest reliability refers to the degree to which the scores on the same test by the same individual are consistent over time. This is an indication that the result obtained at a given point will be the same or closer to the former scores if the test is administered again after some time. In this study, we administered the questionnaire to head teachers and teachers of some three private primary schools selected in Mfoundi division we administered the same tool to the same population and the results were analysed with the help of Cronbach's alpha and presented below.

In this study, the researcher employed Cronbach's alpha statistical tool. We used Cronbach alpha in this study in order to assess the reliability, or better still the internal consistency of a set of scale or test items used in this study. According to Salkind (2000), internal consistency examines the reliability within a particular set of items. Internal consistency is evaluated by correlating performance on each of the items in a test or scale with total performance on the test or scale that takes the form of a correlation coefficient. Correlations are expressed as a numerical value, represented by lowercase \mathbf{r} . for instance, the correlation test between test A and test B would be represented as $\mathbf{r}_{\text{test}A}$. $\mathbf{t}_{\text{est}B}$. In which case, the scores in test A and the scores in test B are correlated. The reliability coefficient or correlation coefficient ranges from -1.00 to +1.00. A value of 1.00 would be the most appropriate reliability, where there is no error in the measurement process.

Cronbach's Coefficient Alpha

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum \sigma^{\frac{2}{k}}}{\sigma^{2}} \right)$$

Where:

is the sum of the variances of the k parts which are the items of the test or instrument = standard deviation of the test or instrument.

Table 7: Reliability Statistics

| | Cronbach's Alpha Based | |
|------------------|------------------------|------------|
| Cronbach's Alpha | on Standardised Items | N of Items |
| ,756 | ,726 | 69 |

Source: *field data* (2021)

After two weeks we re-administered the instrument to the same group of people. The scores were computed to obtain a coefficient of stability index of 0.7. This coefficient stability is significant. This shows that the instrument had a good test retest reliability.

Reliability of the interview guide. As recommended by Cohen et al. (2007), the reliability of the interview data collection tool was ensured by careful fixing of interview schedules, training of interviewers, inter-rater reliability in the coding of the responses and the external use of close questions. The interview used is structured interview, with the same format, and sequence of words and questions for each respondent. Structure interviews are employed in this study because they enhance reliability of data collected by eliminating all the social complexity open-ended interviews could bring. After training of the interview team, the team set out for the data collection. They respected interviewee schedules.

Administration of the instruments. To administer the questionnaire and interview guides, the researcher presented the research authorisation (see appendix) to the various head teachers and divisional delegates with a research application. The head teachers and delegates gave us the access to meet the respondents on daily bases and have access to all databases upon presentation of the note to any personnel in charge. It took the researcher four months and two weeks to meet strictly the participants for them to answer the questionnaire and access the database of the schools and delegations. At the end some informants opted to fill the questionnaires on the spot while others decided to take them and fill them when they are free and promised to return them the next day or later in the afternoon, which sometimes returned two weeks after.

The interview was personally administered (face-to-face approach) to the head teachers following their schedules. Given that the interview guide was administered directly by the researcher and the team, the return rate was 95% and with limited stress. The main reason behind the utilisation of this research technique was to have an inside of head teachers and teachers grab relevant details surrounding the curriculum process and design.

Ethical Consideration. In contemporary education studies, all researchers are expected to apply, respect ethical principles and guidelines when research involves human subjects (international commission for world health organisation CIOMS 2002). This is because other researchers and those reviewing or supervising research would also find such helpful to themselves (Bailey, 1988). According to Gustafsson, Hermaren and Peterson (2005), areas

of ethical concerns are lack of informed consent, plague with inversion of privacy, deception and harm to participants. Ethical issues have to do with respect for lives, persons, human dignity, beneficence and justice. According to (Amin, 2005),

Ethics refers to well based standards of right and wrong that prescribe what humans ought to do usually in terms of rights, obligations, benefits to society, fairness, or specific virtues... ethical standards support the virtue of honesty, compassion and loyalty and include standards relating to rights such as the right to life, the right to freedom from injury and the right to privacy (p. 28) This takes place in four different stages of the research process; the choice of the topic, data collection, analysis, interpretation and thesis writing. In this study, we ensure ethics in these four parts; in the research topic, all cautionary motives were taken into consideration, in order to avoid stumbling on a topic that could harm or put both the primary education community and research participants in any inconveniences. In order to achieve this, an explorative study was conducted to test the suitability of the topic and to find out if it is sensitive to the scientific world and particularly to the primary education community or not.

At the level of data collection, the methodology, techniques and tools used were chosen with reasons, and further pretested during the explorative study before they are finally employed in the study. This was purposefully to avoid straying into research participant's privacy in one way or the other. While in the field, the main instrument that was used to give every informant their rights in the informed concerned form. This form was presented in two parts, part A presented the information about the research work and B presented information on participant's engagement on the whole exercise. The document was handed to participants and some verbal explanations were made after which they fixed the day and place for the interview according to their convenience. On data analysis, our tools did not give any gap for the participants to put their names, so all responses were unanimous.

Authentication of instruments. The validation process was done in two phases: the first phase sealed off the presentation of the questionnaires and the interview guide to the research supervisor. After a thorough inspection of this instrument, some corrections and modifications were introduced, before approval was given for them to be administered. The second phase consisted of carrying out the necessary corrections following the instructions

of the research supervisor. The instructions were fully executed before the measuring instruments were served to participants for the purpose for which they were intended.

Statistical Analysis Techniques

To attain the research objectives and answer the research questions correctly, to determine the validity of the conceptual model, and to achieve the best results, it was essential to efficiently analyse data obtained from the field. Our analysis was in two folds, the quantitative and qualitative analysis:

The Quantitative Analysis. In quantitative data analysis, the researcher was expected to turn raw numbers into meaningful data through the application of rational and critical thinking. Dudovsky (2018) opines that quantitative data analysis may include the calculation of frequencies of variables and differences between variables. A quantitative approach is usually associated with finding evidence to either support or reject hypotheses formulated at the earlier stages of the study. The quantitative data analysis followed the deductive model. The descriptive statistics were conducted to understand the data type, frequency and percentages for different questions asked from the respondents like region, name of school, gender, role play, longevity in service, highest certificate) and the second part was questions on variables (need assessment, design phase, curriculum evaluation, implementation phase)

Since this study applies the survey research design which describes the extent to which the variables are interrelated. With correlation studies, the data collected is used to verify if there is a relationship between two or more variables. According to Amin (2005, p.218), a correlation research attempts to determine whether, and to what degree, a relationship exists between two or more quantifiable variables. The relationship can now be used to make predictions. The Statistical Package for Social Sciences (SPSS) version 23.0 was used for data analysis. Both inferential and Descriptive statistics were used to analyse the data collected from the field with the use of questionnaires and interview guide. The descriptive data was applied using tables and chats. Concerning inferential statistics, the spearman correlation index was used to test research hypotheses. We used the statistics in order to ascertain the influence of head teacher's involvement on curriculum process. This description gave us the frequencies and the percentages while inferential data determined the nature of correlations and magnitudes of the relationship between the two variables.

Statistical Procedures Used. To measure the correlation between the two variables, the alpha and the standard error margin, the Spearman rank correlation index was used.

The formula is described as:

Spearman Correlation:

Where:

 $\Sigma = \text{sum}$

D is the difference between the ranks of X and the corresponding ranks of Y n= the number of paired ranks

Table 8: Correlation value and interpretation

| Correlation value | Interpretation |
|--------------------------|-----------------|
| 00 | No relationship |
| 0.01-0.19 | Very low |
| 0.2-0.39 | Low |
| 0.40-0.59 | Moderate |
| 0.6-0.79 | High |
| 0.8-0.99 | Very high |
| 1 | Perfect |

Source: Adapted from Chaffi Ivan, 2018

The variables of the study. A variable is a characteristic on which people differ from one another. The two main variables are the independent and dependent variables.

Independent variable

The independent variable of the study is the head teacher's involvement is the independent variable. The independent variable of a study is the presumed course of a phenomenon and also, it is known as the predictor. It is presumed that this variable has an effect on the dependent.

The dependent variable

Dependent variables are the characteristics that are being studied when statements of hypotheses are made. The dependent variable in this study is the curriculum process.

Table 9: The recapitulative table of the hypotheses, variables, indicators, modalities, measurement scale and statistical test

| The General Hypothesis | The Research Hypotheses | The indicators | The modalities | The Dependent Variable | The indicators | The Measurem ent scale | Statistical test |
|---|--|--------------------------|---|------------------------------|--|------------------------------|---------------------------------|
| Ha: Head teacher's effective involvement in the curriculum process in Cameroon primary schools. | Ha1: Head teacher's effective involvement in needs assessment of the curriculum process in Cameroon primary schools. | Needs assessment | Perceived needs Expressed needs Relative needs Problem identification | Curriculum process | Syllabus, subjects, Knowledge, skills, content, standard | 4-points Likert scale | Spearman rank correlation |
| | Ha:Heads teachers' involvement in the design stage influence the curriculum process in Cameroon primary schools. | Design stage | Empathise Define Ideate Prototyped and test | Curriculum process | Syllabus, subjects, Knowledge, skills, content, standard | 4-points Likert scale | Spearman rank correlation |
| H0: Head teachers' non effective involvement in the curriculum process in Cameroon | Ha3:Heads Teachers Involvement in the implementation phase of the curriculum process in Cameroon primary schools. | Implementatio n phase | Formative evaluation Summative evaluation Diagnostic evaluation | Curriculum process | Syllabus, subjects, Knowledge, skills, content, standard | 4-points Likert scale | Spearman rank correlation |
| primary schools | Ha4:Head teachers' involvement in the evaluation phase of the curriculum process in Cameroon primary schools. | evaluation phase | Project based learning Discovery learning CBA approach Peer assisted learning | Curriculum process | Syllabus, subjects, Knowledge, skills, content, standard | 4-points Likert scale | Spearman rank correlation |

Source: Researcher (2022).

Conclusion

This chapter examines the methodology as a procedural process that enables us to conduct this research with special attention on the design, the population, the instruments, validity and reliability, the administration, and the data analysis technique. In addition, the chapter also presented some criteria used for evaluation of the study and the structuring of the questionnaire and interview for head teachers, teachers and inspectors of basic education in Cameroon. The questionnaires were designed based on the objectives of the study. The data collected is presented in chapter four.

CHAPTER FOUR:

DATA ANALYSIS AND PRESENTATION OF FINDINGS

This chapter is devoted to presentation of data and findings resulting from the analysed data. To do this, both descriptive and inferential statistics were used. For descriptive statistics, frequencies, percentages, bar-charts and pie-charts were used to describe the results registered from the field. Thematic analyses were also used, where responses were categorised into major themes and sub-themes. For inferential statistics, the Pearson Product Moment Correlation Coefficient Value (r_{xy}) was used to test and verify the hypotheses. Presentation of findings were done in sections. Section A was devoted to analysing demographic information. Section B answered the research questions, while Section C was devoted to hypothesis testing. The Statistical Package for Social Sciences (SPSS) version 25 was employed for analyses.

Section A: Analyses of Demographic Data

Head teachers and Classroom Teachers

Table 10: Gender

| Gender | Frequency | Percentage |
|--------------|--------------|------------|
| Female | 188 | 62.5 |
| Male | 93 | 30.9 |
| Missing data | 20 | 6.6 |
| Total | ~ 301 | 100.0 |

Source: Field data (2022)

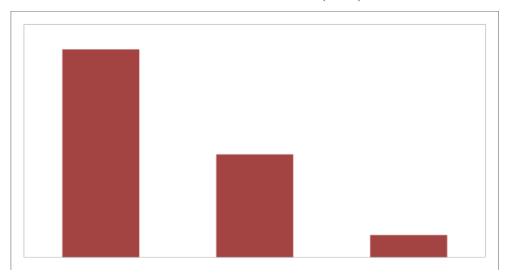


Figure 11: Bar-charts illustrating information on table 10

Results on table 4.1 and fig 4.1 show that the sample that responded to the questionnaire for head teachers and class teachers was dominated by females by 62.5%. Males constituted 30.9%. There was missing data of 6.6%.

Table 11: Role played in school

| Role played in school | Frequency | Percentage |
|------------------------|-----------|------------|
| Head teacher | 122 | 40.5 |
| Classroom teacher | 96 | 31.9 |
| Delegates / inspectors | 67 | 22.3 |
| Missing data | 16 | 5.3 |
| Total | 301 | 100.0 |

Source: Field data (2022)

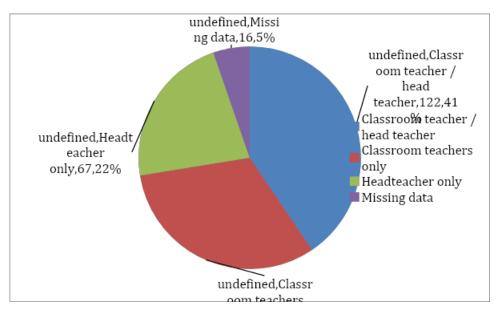


Figure 12: Pie-chart illustrating information on figure 2.

Source: Field data (2022)

Results on table 4.2 and fig 4.2 show that 40.5% of respondents in the primary schools played the role of classroom teacher / head teacher. 31.9% played the role of classroom teacher only, 22.3% played the role of head teachers only. There was a missing data of 5.3%.

Table 12: Longevity in the Teaching Profession

| Longevity | Frequency | Percentage |
|-------------|-----------|------------|
| 6 to 10yrs | 80 | 26.5 |
| 11 to 15yrs | 73 | 24.3 |
| 0 to 5yrs | 64 | 21.3 |
| 16 to 20yrs | 58 | 19.3 |
| 20yrs + | 26 | 8.6 |
| Total | 301 | 100.0 |

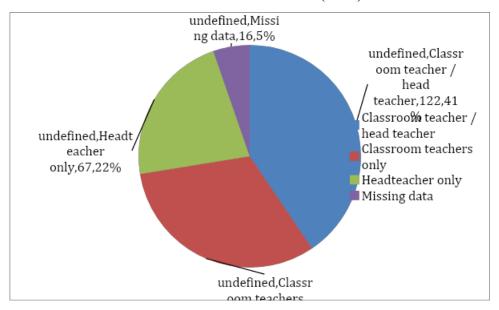


Figure 13: Bar-chart illustrating information on table 12

Source: field data (2022)

Results on table 4.3 and fig 4.3 show that, longevity in the teaching profession proved that, those who have spent 6 to 10yrs constitute 26.5%, 11 to 15yrs constituted 24.3%, 0 to 5yrs (21.3%), 16 to 20yrs (19.3%) and those who have taught for 20yrs and above constituted 8.6%.

Table 13: Highest Professional Qualification

| Highest | Professional | Frequency | Percentage |
|---------------|--------------|-----------|------------|
| Qualification | | | |
| Grade one | | 196 | 65.2 |
| B.Ed | | 79 | 26.2 |
| M.Ed | | 19 | 6.3 |
| HND | | 7 | 2.3 |
| Total | | 301 | 100.0 |

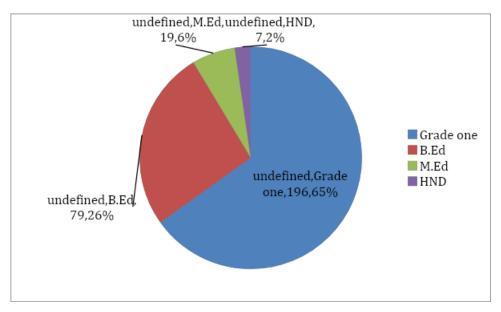


Figure 14: Pie-chart representing information on table 13

Results on table 4.4 and fig 4.4 show that the sample for headteachers and classroom teachers is well trained professionally. Holders of the Teacher Grade One certificate constituted 65.2%, B.Ed constituted 26.2%, M.Ed constituted 6.3% and HND in Education constituted 2.3%.

Table 14: Highest Academic Qualification

| Highest Qualification | Frequency | Percentage |
|------------------------|-----------|------------|
| Advanced Level | 123 | 40.9 |
| Ordinary level | 88 | 29.1 |
| B.Sc/B.A | 67 | 22.3 |
| M.A/M.Sc | 11 | 3.7 |
| Missing data | 9 | 3.0 |
| Others (not specified) | 3 | 1.0 |
| Total | 301 | 100.0 |

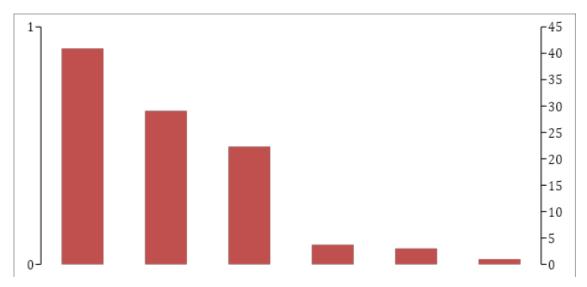


Figure 15: Bar-chart representing information on table 14

Results on table 4.5 and fig 4.5 show that the sample of teacher's / head teachers is highly qualified academically. 40.9% are holders of the Advanced Level certificate, 29.1% hold the Ordinary level certificate, 22.3% are either rholders of a B.Sc or B.A, 3.7% hold either an M.A or M.Sc degree. There was 1% for unspecified academic qualification and 3% of missing data.

Pedagogic Inspectors

Table 15: Description of Respondents in Relation to Functions

| Functions | Frequency | Percentage |
|-----------------------------|-----------|------------|
| Pedagogic Animators | 26 | 34.7 |
| Sub-Divisional | 17 | 22.7 |
| Pedagogic Advisers | 18 | 24.0 |
| Regional Pedagogic Advisers | 9 | 12.0 |
| Regional Pedagogic | 5 | 6 |
| Inspectors | | |
| Total | 75 | 100.0 |

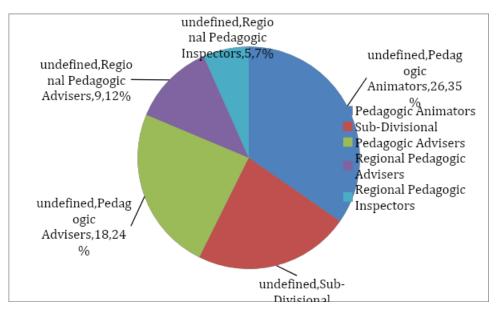
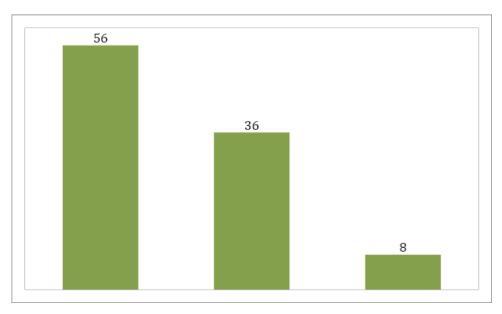


Figure 16 Pie-chart illustrating information on table 15 Source: Field data (2022)

Results on table 4.6 and fig 4.6 show the category of pedagogic inspectors/advisers/animators who responded to the questionnaire. They were constituted as follows: Pedagogic animators = 34.7%, Sub-Divisional Inspectors = 22.7%, Regional Pedagogic Inspectors 6.6%. This shows that many inspectors at the base than at the top responded to the questionnaire.

Table 16: Gender

| Gender | Frequency | Percentage |
|--------------|-----------|------------|
| Females | 42 | 56.0 |
| Males | 27 | 36.0 |
| Missing data | 6 | 8.0 |
| Total | 75 | 100.0 |



 $\label{thm:continuous} \textbf{Figure 17: Bar-chart illustrating information on table 16}$

Results on table 4.7 and fig 4.7 show that the sample for pedagogic inspectors was mostly composed of females (56.0%). Males constitute 36.0%. There was a missing data of 8.0%.

Table 17: Longevity in the Teaching Profession

| Longevity | Frequency | Percentage | Combined percentage |
|--------------|-----------|------------|---------------------|
| 16 to 20yrs | 41 | 54.7 | |
| 20yrs + | 20 | 26.7 | 96.0 |
| 11 to 15 yrs | 11 | 14.6 | |
| 6 to 10yrs | 3 | 4.0 | 4.0 |
| 0 to 5 yrs | | | |
| Total | 75 | 100.0 | |

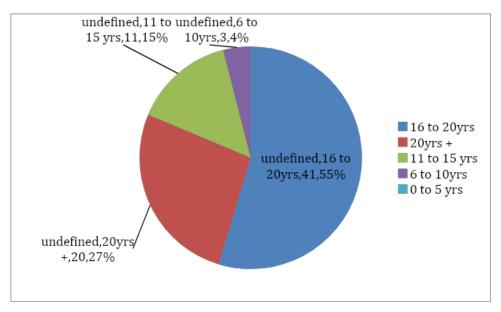


Figure 18: Pie-chart representing information on table 17

Results on table 4.8 and fig 4.8 show that, at least 96% of pedagogic inspectors at the Regional, Divisional and Sub-Divisional levels have been in the teaching profession for 11 years and above. This is broken as follows 16 to 20yrs (54.7%), 20yrs + (26.7%), 11 to 15yrs (14.6%). Those of longevity 6 to 10yrs constitute 4.0%. 0 to 5yrs registered 0%.

Table 18: Highest Professional Qualification

| Highest Professional | Frequency | Percentage |
|-----------------------------|-----------|------------|
| Qualification | | |
| DIPEN II/DIPES II | 30 | 40.0 |
| DIPEN I/DIPES I | 19 | 25.3 |
| B.Ed | 13 | 17.3 |
| Grade One Certificate | 11 | 14.7 |
| M.Ed | 2 | 2.7 |
| HND | | |
| Total | 75 | 100.0 |

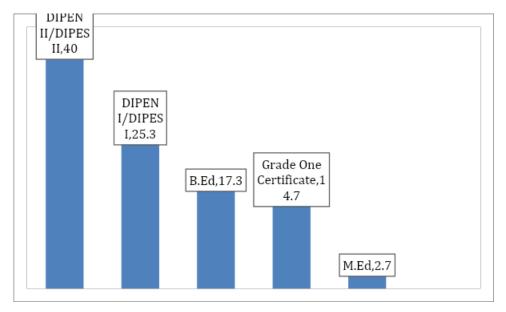


Figure 19: Bar-chart illustrating information on table 18

Result on table 4.9 and fig 4.9 shows that the respondents were properly trained professionally. 40.0% hold DIPEN I/DIPES I, 17.3% hold a B.Ed certificate. 14.7% are holders of the teacher grade one certificate, 2.7% hold the M.Ed degree.

Table 19: Highest Academic Qualification

| Highest Academic Qualification | Frequency | Percentage | | |
|-----------------------------------|-----------|------------|--|--|
| B.A /B.Sc. | 32 | 42.7 | | |
| A/L | 23 | 30.7 | | |
| O/L | 13 | 17.3 | | |
| M.A/M.Sc. | 7 | 9.3 | | |
| Others | | | | |
| Total | 75 | 100.0 | | |

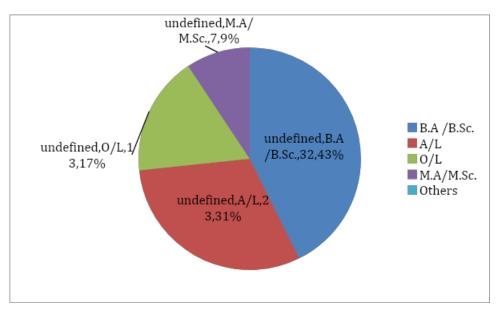


Figure 20: Pie-chart representing information on table 19

Results on table 4.10 show that the respondents had a rich academic profile. Holders of BA/B.Sc constituted 42.7%, A/L constituted 30.7%, O/L constituted 17.3% and M.A/M.Sc constituted 9.3%.

Section B: Response to Research Questions

Research Question One: Are school heads involved in need assessments during the curriculum process?

Table 20: Summary of SPSS Analyses Related to Response to Research Question One

| Variables of Interest | N | df | ∝- | Test | rxy | rxy | Maximum | Magnitude |
|-----------------------|---|---------|-------|-------------|-------|-------|---------|-----------|
| | | | level | statistics | comp | crit | value | |
| Need assessments | | 376 374 | 0.01 | Pearson | 0.093 | 0.103 | 1 | Low |
| The Involvement of | _ | | | Correlation | | | | |
| school heads | | | | (r) | | | | |

Source: Field data (2022)

Results on table 4.11 show that the computed Pearson Product Moment Correlation Coefficient Value (r_{xy}) was 0.093. The magnitude was determined by comparing this value to the maximum value 1.

Table 21: Determination of Magnitude of Influence of the Independent Variable on the Dependent Variable

| Range | Magnitude | Maximum Value |
|--------------|-----------|---------------|
| 0.68 to 1 | High | |
| 0.34 to 0.67 | Moderate | 1 |
| 0.00 to 0.33 | Low | |

Table 4.12 shows that within the computed value of range 0.68 to 1, the magnitude is high. From 0.34 to 0.67 the magnitude is moderate and from 0.00 to 0.33, it is low.

Table 22: Frequencies and Means in Relation to Items for Research Question One

| Statement | | onse O | ptions | | Missing data | Total Freq. | Mean |
|--|----|--------|--------|-----|-----------------|----------------|-------|
| | SA | A | D | SD | - | _ | |
| I was involved in determining and assessing the needs of the current curriculum. | 33 | 44 | 121 | 148 | 3.0 | 376 | 1.739 |
| The present curriculum of primary and nursery education effectively addresses the needs of potential learners. | 12 | 21 | 132 | 211 | | 376 | 1.558 |
| Needs analyses at the base were made prior to designing a new curriculum | 22 | 31 | 93 | 227 | 3 | 376 | 1.579 |
| Needs assessment in this curriculum resulted in identifying the gabs between what learners are able to do and what they need to be able to do. | 12 | 18 | 151 | 188 | 7 | 376 | 1.574 |
| This curriculum actually analysed the situation at ground level alongside its stakeholders before it was designed. | 4 | 3 | 90 | 269 | 10 | 376 | 1.268 |

The resources people at the grassroot possess 3 4 103 260 6 376 1.303 were considered before enacting the current curriculum.

OVERALL MEAN 1.504

Source: Field data (2022)

Results on table 4.13 show that, with a computed overall mean of 1.504 on a scale of 4, most respondents largely either disagreed or strongly disagreed to the items of need assessments during the curriculum process.

Response to Research Question One

Results on table 4.11 show that, at degree of freedom 374 and 0.01 alpha level of significance, r_{xy} -computed value of 0.093 gave a low magnitude when compared to the value 1. This is because 0.093 lies within 0.00 and 0.33. This shows that the extent to which school heads are involved in need assessment is very low. Also results on table 4.13 gave an overall computed mean of 1.509 on a scale of 4.0. This shows that a large portion of respondents either disagreed or strongly disagreed to the items relating to need assessments. Results on table 4.14 and 4.15 that follow show the hindrance to effective need assessments and proposals to policy makers respectively.

Table 23: Hindrances to effective Need Assessment before the design of a Curriculum in Cameroon.

| Major Theme | Sub-Theme |
|------------------------|---|
| *Centralisation of | -No consultation is done at the base with stake-holders to assess the needs |
| issues at the national | -Little consultation is done with classroom teachers to assess the needs. |
| headquarters | - Little research is done at the base with head teachers and teachers to come |
| | out with actual needs for the curriculum. |
| | -Teachers opinions are not consulted. |
| | -Those who are actually involved with the implementation process are not |
| | consulted during need assessments. |
| | -Rural areas are not involved in the assessment of needs for the curriculum. |

-Lack of transparency in dealing with issues of the curriculum *Poor governance -Swindling of funds meant to conduct effective need assessments. -Administrative bottlenecks in effective need assessments. *Little contact with the -Parents are not consulted and involved in need assessments. society -Lack of collaboration between the top and bottom to assess the needs -The society is not involved in assessing needs *Lack of professional -Lack of competence by those undertaking need assessment know-how -Lack of training by stakeholders -Lack of appropriate consultations between top and bottom. *Lack of resources -Limited finances to undertake effective need assessment -Lack of manuals to be used in accomplishing the tasks. -Lack of equipped human resources

Source: field data (2022)

Results on table 4.14 show that, when respondents were asked to state their opinions about hindrances to effective need assessments, several ideas were presented which classified under five major themes:

- Over centralisation
- Poor governance
- Little contacts with the society
- Lack of professional know-how
- Lack of resources.

Table 24: Proposals to Policy Makers for Effective Need Assessment in Cameroon

| Major Theme | Sub-Theme |
|------------------------|---|
| Broad based | -All stakeholders in education should be consulted irrespective of their |
| consultations | level of education |
| | -Questionnaires and other relevant instruments should be designed and |
| | administered at all levels to determine the needs. |
| | -Needs should be assessed in the rural areas. |
| Training | -Stakeholders involved in conducting need assessments should undergo some training. |
| | -Manuals for training should be made available and used during the training |
| | period. |
| | -Seminars should be organised so that the various facets of need |
| | assessments are known. |
| | |
| Provision of resources | -Sufficient funds should be made available for effective need assessment. |
| | -Manuals be made available |
| | -Trained personnel should be involved in the need assessment job. |
| Exercise of | -Professional ethics be practised during need assessments. |
| professional ethics | -Moral rectitude be observed by all involved. |
| | -High level of discipline |
| | |

Results on table 4.15 show that several proposals were recommended to policy makers in order to achieve effective need assessment. These are grouped under four major themes:

- Broad-based consultation
- Training
- Provision of resources and
- Exercise of professional ethics.

Research Question Two: Are school heads involved in the design phase of a curriculum during the curriculum process?

Table 25: Summary of SPSS Analyses Related to Response to Research Question Two

| Variables of Interest | N | df | ∝- | Test | rxy | rxy | Maximum | Magnitude |
|-----------------------|-----|-----|-------|------------------|-------|-------|---------|-----------|
| | | | level | statistics | comp | crit | value | |
| Design phase | 376 | 374 | 0.01 | Pearson | 0.016 | 0.103 | 1 | Low |
| The Involvement of | | | | Correlation (r) | | | | |
| school heads | | | | (I) | | | | |

Source: Field data (2022)

Results on table 4.16 show that the computed Pearson Product Moment Correlation Coefficient Value () was 0.016. The magnitude was determined by comparing this value to the maximum value 1. Since 0.016 lies within 0.00 and 0.33, the magnitude is low.

Table 26: Frequencies and Means in Relation to the Items for Research Question Two

| Statement | Re | espons | se Opti | ons | Missing | Total | Mean | |
|--|----|--------|---------|-----|---------|-------|-------|--|
| | SA | A | D | SD | data | Freq. | | |
| I took part during the design phase of the current curriculum from primary to nursery education. | 45 | 53 | 121 | 151 | 6 | 376 | 1.951 | |
| The organisation or arrangement of intended learning outcomes are easily exploited during my classroom teaching. | | 48 | 161 | 138 | 5 | 376 | 1.861 | |
| Attainable goals, based on societal needs were properly selected and designed in the current curriculum | 12 | 40 | 88 | 236 | 7 | 376 | 1.542 | |
| Learning experiences at the base were considered and selected to be used in attaining objectives | 4 | 28 | 108 | 228 | 8 | 376 | 1.447 | |
| Development of lesson plans within the framework of the current curriculum is feasible. | 13 | 21 | 111 | 221 | 10 | 376 | 1.484 | |

| The curriculum becomes more realistic if the | 14 | 7 | 121 | 231 | 3 | 376 | 1.463 |
|--|----|---|-----|-----|---|-----|-------|
| class teacher does not participate in its design | | | | | | | |
| phase | | | | | | | |
| OVERALL MEAN | | | | | | | 1.624 |

Results on table 4.17 show that, with a computed overall mean of 1.624 on a scale of 4, most respondents largely either disagreed or strongly disagreed to the items on the design phase during the curriculum process.

Response to Research Question Two

Results on table 4.16 show that, at degree of freedom 374 and at 0.01 alpha level of significance, r_{xy} -computed value of 0.016 gave a low magnitude when compared to the value 1. This shows that, the extent to which school heads are involved in the design phase of the curriculum is very low. Also, results on table 4.17 gave an overall computed mean of 1.624. This shows that, to large portion either disagreed or strongly disagreed to the items relating to the involvement of school heads in the design phase of the curriculum. Results on table 4.18 and 4.19 that follow show the hindrances to effective design of the curriculum and proposals to policy makers respectively.

Table 27: Hindrances to Effective Design of the Curriculum before the Implementation Phase in Cameroon

| Major Theme | Sub-Themes |
|-----------------------------|---|
| Non respect of realities at | -School heads are not involved in the design phase |
| the base | -Classroom teachers are not consulted during the design phase |
| | -Those involved in the implementation are not associated with |
| | the design process. |
| | -Lack of collaboration between experts at the top and |
| | implementers at the base. |
| | -Contextual realities are not taken into account. |
| | |
| • Difficulties envisaged in | -Many localities pose enormous problems for consultations to be |
| certain zones. | made during the design phase. |

Dictatorship by policy makers

- -Lack of a good will to involve those at the base during the design phase.
- -Little or no dialogue between politicians and teachers at the base for harmonious work of conceiving a curriculum.
- -Concentration of powers at the top with little consideration for views at the base.
- -Principal actors are kept aside during the design phase.
- -Problems inherent in the two subsystems of education where one system may be preferred by policy makers than the other.
- Lack of sufficient resources to meet the needs of the design phase.
- -Human resources are not adequate, as the principal actors are kept aside during the design phase.
- -Financial resources are needed for an effective design of the curriculum. This takes into account motivation at all levels.
- -Sufficient manuals are not available for consultations at all levels before the design phase.
- -Seminars and teachings are not sufficiently carried out to equip the designers with knowledge on the design process.

Source: Field data (2022)

Results on table 4.18 show the hindrances for effective design of the curriculum. Several hindrances were presented which were classified first under sub-themes. The sub-themes were grouped under group major themes, which are:

- Non respect of realities at the base
- Difficulties envisaged in certain zones
- Dictatorship by policy makers
- Lack of sufficient resources to meet the needs of the design phase.

Table 28: Proposals to Policy Makers for an Effective Design During the Curriculum Process

| Major Theme | Sub-Themes |
|------------------------------|--|
| • Involvement of | -Classroom teachers should be involved during the design phase |
| stakeholders at the base | since they are actively involved in implementation. |
| during the design phase | -Headteachers should be involved during the design phase since |
| | they are actively involved in implementation |
| | -Other stakeholders in the society like parents, PTAs, School |
| | Management board should be involved. |
| | |
| • Local realities should be | -Societal needs should be considered during the design phase. |
| considered during the | -Local realities in the suburbs should be considered |
| design phase | -The multicultural nature of the country should be considered |
| | during the design phase. |
| | -Consultations at the base should be done before a veritable |
| | design is put in place. |
| | |
| • Politicians should be kept | -Issues of education should be handled by educationists and not |
| aside | politicians. |
| | -The two subsystems of education should each be intact and |
| | devolved separately. |
| | |
| • Timeframe for the design | -Ample time should be according to design and pilot testing of |
| should be appropriate | the curriculum before it is put into use. |
| | -Things should not be done in a rush and sent to the teacher for |
| | implementation. |
| T | |
| • Increase in the scope of | |
| pilot schools to testing. | to cover the entire ten regions. |
| | -Pilot testing should be considered after the design phase of a |
| | curriculum before actual implementation. |

• Provision of adequate resources

- adequate -Human resources required for the design phase should be sufficient and adequately trained for the job.
 - -Manuals and documents needed for the design phase should be sufficiently made available.
 - -Financial resources should adequately be made available for all involved from the top to the bottom.
- Training before the design phase
- -Every actor to be incorporated in the design phase should have sufficient training on all the basis and core issues involved in designs
- -Seminars and workshops are needed for capacity building of all involved.

Source: Field data (2022)

Results on table 4.19 show that several proposals were made which were grouped in sub-themes. These sub-themes were further grouped into major themes such as:

- Involvement of stakeholders at the base during the design phase
- Local realities should be considered during the design phase
- Politicians should be kept aside
- Timeframe for the design should be appropriate
- Increase in the scope of pilot schools for testing
- Provision of adequate resources
- Training before the design phase.

It is hoped that if these proposals are put in place, there will be improvement in the design phase of the curriculum.

Research Question Three: How are school heads involve in the implementation phase during the curriculum process?

Table 29: Summary of SPSS Analyses Related to Response to Research Question 3

| Variables of Interest | N | Df | ∝- | Test | r _{xy} | r _{xy} | Maximum | Magnitude |
|-----------------------|----|-------|-------|-------------|-----------------|-----------------|---------|-----------|
| | | | level | statistics | comp | crit | value | |
| Implementation phase | | | | Pearson | 0.693 | 0.10 | na 1 | |
| The Involvement of | 37 | 6 374 | 0.01 | Correlation | 0.055 | 0.10 | ,5 1 | High |
| school heads | | | | (r) | | | | |

Source: Field data (2022)

Results on table 4.20 show that the computed Pearson Product Moment Correlation Coefficient value (r) was 0.693. The magnitude was determined by comparing it to the value 1. Since 0.693 lies within 0.68 and 1, the magnitude was determined to be high.

Table 30: Frequencies and means in Relation to Items for Research Question Three

| Statement | | Respo | nse Op | tions | | Missing | Total | Mean X |
|---|----------------|-------|--------|-------|----|---------|-------|--------|
| | - | SA | A | D | SD | data | Freq. | |
| Class Teachers contribute to disseminate the structured learning experiences in the curriculum of primary and nursery education | | 181 | 171 | 10 | 7 | 7 | 76 | 3.617 |
| The implementation of this new curresponsibility of the class teacher | riculum is the | 167 | 189 | 12 | 2 | 6 | 76 | 3.353 |
| Teachers deliver lessons on the new curri practical modalities considered. | culum based on | 83 | 109 | 139 | 34 | 11 | 76 | 2.673 |
| Preparation of instructional material curriculum and their use is done by teach | | 161 | 171 | 20 | 12 | 12 | 76 | 3.215 |
| Effective implementation of the curric teachers achieves a balanced focus affective and psycho-motor domains. | · | 147 | 183 | 17 | 20 | 9 | 76 | 3.167 |

The implementation of character education and 179 181 4 4 8 76 3.593 awareness of living together as found in the new curriculum are easy and attainable.

OVERALL MEAN

3.269

Source: Field data (2022)

Response to Research Question Three

Results on table 4.20 show that, at degree of freedom 374 and 0.01 alpha level of significance, the rxy-computed value of 0.693 gave a high magnitude when compared to the value 1. This shows that, the extent to which school heads and class teachers' involvement in implementation of the curriculum is high. Also, results on table 4.21 gave an overall computed mean () of 3.269 on a scale of 4.0. This shows that a large portion of respondents either strongly agreed or agreed to the items relating to the implementation of the curriculum by teachers. Tables 4.22 and 4.23 that follow present the hindrances for effective implementation and proposals to policy makers.

Table 31: Hindrances to Effective Implementation of the Curriculum in Cameroon

| Major Theme | Sub-Themes | | | | | |
|---|---|--|--|--|--|--|
| • Little knowledge on the | -Lack of mastery of the new curriculum | | | | | |
| implementation of the new curriculum | -Lack of training to effectively implement the new curriculum -No seminars or few seminars in some areas were held before the curriculum was set up to be used in schools | | | | | |
| • Cumbersome nature of the new curriculum | -The new curriculum needs enough time for adaptation to ensure effective implementation -Some objectives are considered as high order objectives to the level of some classesToo many subjects on the curriculum -The writing of lesson notes is cumbersome -Some aspects which have to deal with affective and psycho-motor learning are difficult to implement. | | | | | |

| • Large class size causing difficulties | -Difficulties in implementing project pedagogy |
|---|--|
| for effective implementation | -Teachers need refresher courses on handling large class |
| | sizes in the implementation of this new curriculum |
| | |
| • Lack of technical know-how | -Lack of technical know-how on transmitting knowledge |
| | -Lack of knowledge on appropriate questioning techniques |
| | -Lack of knowledge to fill the new report cards |
| • | |
| • Increase in workload | -Teachers have more work now than ever before |
| | -Many problems exist in teaching more than ever before |
| | |
| • Lack of sufficient resources | -The teaching allowance of 5000 frs is not commensurate |
| | to the job of effective implementation |
| | -Lack of manuals in schools to effectively implement the |
| | new curriculum |
| | Lack of sufficient personnel in schools. Some teachers |
| | teach three classes. |

Results on table 4.22 show the hindrances to effective implementation of the new curriculum. Several hindrances were grouped under sub-themes. These sub-themes were grouped into major themes which are;

- Little knowledge on the implementation of the new curriculum.
- Cumbersome nature of the new curriculum.
- Large class-size causing difficulties for effective implementation.
- Lack of technical know-how.
- Increase in workload.
- Lack of sufficient resources.

Table 32: Proposals to Policy Makers on Improvement of Implementation Phase of the Curriculum

| M: Th | |
|--|--|
| Major Theme | Sub-Themes |
| Training of teachers | -Training of teachers on strategies for effective implementation. |
| | -Several seminars will be organised at all levels for capacity building |
| | on the implementation of the curriculum. |
| | -Only trained teachers should be involved in implementing the new |
| | curriculum. |
| | -Refresher courses are organised regularly for old and new teachers. |
| • Implementation should | -Implementation should be gradual but surely. It should move from |
| be steady, gradual and not | one level to another. |
| in a rush. | -Teaching and learning to be based on things around with very few |
| | lessons being abstract. |
| | -Implementation should be gradual, and it should take into account the |
| | propositions of teachers. |
| | -Graduals and policy makers should listen to the views of teachers and |
| | work with them. |
| | -Total application is impossible. It should be progressive. |
| • The necessary | -Put at the disposal of teachers the necessary documents adapted to |
| resources should be made | teaching in specific environments. |
| available. | -Effective adaptation of books to the new curriculum. |
| avanaoic. | -Internet broad based bands be made reachable for all. |
| | -Course books will be made available. |
| | -Provision of technical resources for effective implementation. |
| | -Didactic materials should be made available in schools |
| | -Didactic materials should be made available in schools |
| Provision of adequate | -Adequate infrastructure needed for implementation be made |
| school infrastructure | available. |
| | -School libraries be equipped with the necessary manuals to ease |
| | implementation. |
| | -Large class sizes be split into smaller units and placed into different |
| | |

classrooms to ease implementation.

• Pre-testing of -The curriculum would have been pre-tested to discover the difficulties the curriculum is necessary and amendments made before implementation. before implementation -The scope of pilot testing should be widened to a large sample.

man-power.

• Provision of sufficient -More trained teachers should be recruited to take charge of the evergrowing school population.

> -Vacant places should be filled as far as required man-power is concerned.

Source: Field data (2022)

Results on table 4.23 show that several proposals were made which were grouped under subthemes. These sub-themes were further grouped under major themes are follows:

- Training of teachers is needed to effect the proper implementation.
- Implementation should be steady, gradual and not in a rush.
- The necessary resources should be made available.
- Adequate school infrastructure should be made available.
- Pre-testing of the curriculum is necessary before implementation.
- Provision of sufficient man-power is needed.

Research Question Four: Are school heads involved in the evaluation phase during the curriculum process?

Table 33: Summary of SPSS Analyses Related to Response to Research Question **Four**

| Variables of Interest | N | D | ∝- | Test | r _{xy} | rxy | Maximum | Magnitude |
|--|---|-----|-------|----------------------------|-----------------|-------|---------|--------------|
| | | f | level | statistics | comp | crit | value | |
| Evaluation phase The Involvement of school heads | | 374 | 0.01 | Pearson Correlation (r >) | 0.251 | 0.103 | 1 | Moderat e |

Results on table 4.24 show that, the computed Pearson Product Moment Correlation Coefficient Value (r_{xy}) was 0.251. Since 0.251 lies within 0.000 and 0.33, the magnitude was determined to be low.

Table 34: Frequencies and Means in Relation to Response to Research Question Four

| Statement | Resp | onse (| Options | | Missing | Total | Mean |
|---|------|--------|---------|-----|---------|-------|-------|
| | SA | A | D | SD | data | Freq. | X |
| 1 School heads are involved in evaluating the current curriculum | 24 | 37 | 101 | 209 | 5 | 376 | 1.644 |
| 2 School heads participate in monitoring and measuring learning achievement using this current curriculum. | 53 | 44 | 102 | 170 | 7 | 376 | 1.909 |
| 3 Feedbacks are sent to policy makers after my evaluation | 43 | 24 | 106 | 191 | 12 | 376 | 1.721 |
| 4 Feedbacks from school heads to policy makers after evaluation are used to upgrade the quality of the curriculum. | 17 | 23 | 111 | 216 | 9 | 376 | 1.529 |
| 5 Different aspects of the curriculum such as its relevance, content and ability to implement are regularly evaluated at the school level | 31 | 20 | 104 | 213 | 8 | 376 | 1.609 |
| 6 Classroom teachers are involved in the summative evaluation of the curriculum | 66 | 89 | 90 | 124 | 7 | 376 | 2.220 |
| OVERALL MEAN | | | | | | | 1.531 |

Source: Field data (2022)

Results on table 4.25 show that, with a computed overall mean of 1.531 on a scale of 4.0, most respondents either disagree or strongly disagree to the items relating to research question four.

Response to Research Question Four

Results on table 4.24 show that, at degree of freedom 374 and alpha level of significance of 0.01 r_{xy}-computed value of 0.251 gave a low magnitude when compared to the value 1. This shows that, the extent to which school heads are involved in the evaluation of the curriculum is low. Also results on table 4.25 gave an overall computed mean of 1.531 on a scale of 4.0. This shows that a large proportion of respondents either disagreed or strongly disagreed to the items relating to evaluation of the curriculum by school heads. Results on table 4.26 and 4.27 that follow show respectively the hindrances to effective evaluation by school heads and proposals made to policy makers to enhance evaluation of the curriculum.

Table 35: Hindrances to Effective Evaluation of the Curriculum by School Heads

| Major Theme | Sub-Themes |
|--------------------------------------|--|
| Non involvement of school heads in | -School heads and classroom teachers are not involved in |
| all the phases of the curriculum | evaluating all the stages of the curriculum. |
| process. | -School heads and teachers are only involved at the micro |
| | level of evaluating the learners. |
| | -Their feedback at the micro level have no effect on policy |
| | making. |
| | |
| • Evaluation has never taken into | -Realities at the base are never considered during |
| consideration realities at the base. | evaluation. |
| | -Whether the curriculum is evaluated or not, the school |
| | head only evaluates his pupils in school. |
| | |
| • Too much interference by | -All the issues of the curriculum process including |
| politicians on matters of education. | evaluation are not in the hands of personnel of the teaching |
| | profession. |
| | -All the stages of the curriculum process including |
| | evaluation skip those implementing at the base for no |
| | reason. |

Lack of techniques by evaluators

 Those evaluating the curriculum seem to lack the technical know-how.
 The curriculum is not being evaluated except at the class level.
 Basics about evaluation are not being applied in all the stages.

Source: Field data (2022)

Results on table 4.26 show several hindrances to effective evaluation grouped first under sub-themes, then to major themes. The major themes are:

- The non-involvement of school heads in all the stages of the curriculum process.
- Evaluation has never taken into consideration realities at the base.
- Too much interference by politicians on matters of education.
- Lack of techniques by evaluators.

Table 36: Proposals to Policy Makers on Improvement on the Evaluation of the Curriculum

| Curriculum | |
|-----------------------------|---|
| Major Theme | Sub-Themes |
| • Involvement of classroom | -School heads should be involved at all stages of evaluating the |
| teachers and school heads | curriculum. |
| | -Classroom teachers should be included in the evaluation of the |
| | entire curriculum starting from need assessment. |
| | |
| • Matters of the curriculum | -Politicians should not interfere with issues regarding the |
| should be handled only by | curriculum process. |
| teachers. | -Trained teachers should be empowered to do the work they have |
| | been trained for. |
| | -Bottle-necks between politicians and teachers should not surface |
| | on issues regarding the curriculum |
| | |
| | -Seminars should be organised to equip all those involved in the |
| | evaluation phase of the curriculum. |
| | |

• Organisation of training seminars for all actors involved in the evaluation phase.

-Refresher courses are needed for classroom teachers annually to equip them with recent and innovative approaches to evaluation

• Training in teacher training colleges should be intensive on developing the curriculum

-The curriculum in all levels of teacher training colleges should be revamped to ensure effective training takes place on issues of the curriculum process.

-Practice on issues of curriculum development should be encouraged by all teachers in active service.

Source: Field data (2022)

Results on table 4.27 show that several proposals on effective evaluation of the curriculum were made, grouped under sub-themes which were equally grouped under the following major themes:

- Classroom teachers and school heads should be involved in all the stages of the curriculum process.
 - Matters of the curriculum process shall be handled only by teachers.
- Seminars should be organised to equip the capacity of all actors involved in the curriculum process before embarking on any stage.
- Training at all levels of the teacher training college should be intensive on issues relating to the development of the curriculum.

Results of the Observation Checklist for Fifty Observations Made Table 37: Availability of the Curriculum with Head teachers

| Response Options | Freq. (f) | % |
|-------------------------|-----------|-------|
| Available | 42 | 84.0 |
| Not available | 8 | 16.0 |
| Total | 50 | 100.0 |

Source: Field data (2022)

Out of 50 observations made, 84% of head teachers availed themselves with copies of the curriculum, while 16% did not.

Table 38: Possession of Copies by Class Teachers

| Response Options | Freq. (f) | % |
|-------------------------|-----------|-------|
| Some had | 25 | 50.0 |
| All had | 12 | 24.0 |
| 1 teacher had | 10 | 20.0 |
| No teacher had | 3 | 6.0 |
| Total | 50 | 100.0 |

Out of 50 schools observed in 50% of the schools, some teachers had copies of the curriculum, in 24% of the schools, all teachers were in possession of it, in 20% of schools only one teacher had a copy and in 6% of schools, no teacher had a copy.

Table 39: Possession by Headteachers of schemes of work for each class in school and subject discipline

| Response Options | Freq. (f) | 0/0 |
|------------------------------------|-----------|------|
| Schemes present for all classes | 28 | 56.0 |
| Schemes present for some classes | 12 | 24.0 |
| Schemes present for only one class | 5 | 10.0 |
| Schemes not present | 5 | 10.0 |
| All subjects had schemes | 41 | 82.0 |
| Some subjects had schemes | 4 | 8.0 |

Source: Field data (2022)

Out of 50 schools observed, in 56% of them schemes were present for all classes, in 24% of them, some classes were in possession of them, in 10% of the schemes were present only in one class, and 10% of schools did not have schemes.

For subject disciplines, 82% of schools had schemes in all subjects, 10% had it in some subjects while 8% had no scheme at all.

Table 40: Possession by Class Teachers of Developed Schemes of Work for their classes and for each subject being taught

| Response Options | Freq. (f) | % |
|-------------------------|-----------|------|
| All had | 36 | 72.0 |
| Some had | 10 | 20.0 |
| Only one had | 3 | 6.0 |
| None had | 1 | 2.0 |
| All subjects had | 23 | 46.0 |
| Some subjects had | 15 | 30.0 |
| Only one subject had | 7 | 14.0 |
| No subject had | 5 | 10.0 |

Out of 50 schools observed, in 72% of schools, all class teachers were in possession of developed schemes of work, in 20% some had copies in 6% only one had a copy and in 2% none had copies. Out of 50 schools observed, in 46% of them, all subjects had developed schemes, in 30% of schools, some subjects had it, in 14% of schools only one subject had it and in 10% of schools no subject had developed schemes.

Table 41: Development of Lesson Notes from Schemes of Work

| Response Options | Freq. (f) | % |
|-------------------------|-----------|-------|
| Yes | 35 | 70.0 |
| No | 15 | 30.0 |
| Total | 50 | 100.0 |

Source: Field data (2022)

Out of 50 schools observed, in 70% of them teachers developed lesson notes from schemes while in 30% of them, no lesson notes were developed.

Table 42: Observations on Lesson Notes

| Statement | \mathbf{S}_{A} | 4 | A | 1 | D |) | S | D | To | tal |
|------------------------------|------------------|------|----|------|----|------|---|------|----|-------|
| _ | f | % | f | % | f | % | f | % | f | % |
| The lesson notes produced | 13 | 26.0 | 25 | 50.0 | 3 | 6.0 | 9 | 18.0 | 50 | 100.0 |
| . had properly designed | | | | | | | | | | |
| preamble | | | | | | | | | | |
| The objectives of the | 6 | 12.0 | 11 | 22.0 | 30 | 60.0 | 3 | 6.0 | 50 | 100.0 |
| . lesson notes were properly | | | | | | | | | | |
| stated as intended in the | | | | | | | | | | |
| new curriculum | | | | | | | | | | |
| The body of the lesson | 9 | 18.0 | 15 | 30.0 | 24 | 48.0 | 2 | 4.0 | 50 | 100.0 |
| . notes was designed in line | | | | | | | | | | |
| with the prescriptions of | | | | | | | | | | |
| the new curriculum | | | | | | | | | | |
| The content of the | 10 | 20.0 | 8 | 16.0 | 29 | 58.0 | 3 | 6.0 | 50 | 100.0 |
| . material taught affected | | | | | | | | | | |
| cognitive, affective and | | | | | | | | | | |
| psychomotor learning | | | | | | | | | | |
| Lesson delivery as | 3 | 6.0 | 16 | 32.0 | 22 | 44.0 | 7 | 14.0 | 50 | 100.0 |
| . observed was systematic | | | | | | | | | | |
| and accomplished the very | | | | | | | | | | |
| purpose for which the new | | | | | | | | | | |
| curriculum was designed | | | | | | | | | | |
| Evaluation was properly | 3 | 6.0 | 6 | 12.0 | 35 | 70.0 | 6 | 12.0 | 50 | 100.0 |
| . done as prescribed in the | | | | | | | | | | |
| new curriculum | | | | | | | | | | |

Results on table above show that, combined frequencies and percentages for observations made proved that: -

- 76% of respondents either strongly agreed or agreed that the preamble was well designed.

- 34% of respondents either strongly agreed or agreed that the objectives of the lesson notes were properly stated.
- 48% of observations made either strongly agreed or agreed that the body of the lesson notes was well designed.
- 36% of observations either strongly agreed or agreed that, the content of the material taught affected cognitive, affective and psychomotor learning.
- 38% of observations either strongly agreed or agreed that, lesson delivery was systematic and met the purpose for which the new curriculum was designed.
- 18% of observations either strongly agreed or agreed that evaluation was properly done.

Results on the Focus Group Discussion

Table 43: The Role Head teachers played in Assessing the Needs of the Current Curriculum of Primary and Nursery Schools

| Major theme | Sub-theme |
|-------------------------|--|
| No role | -We were never contacted to be part of the need assessment team |
| | -We did not even know there was any assessment of needs done |
| | for new curriculum |
| | -We did not part-take in any assessment, if we were contacted, our |
| | impact would have been considered. |
| The grassroot was never | -We only heard that new curriculum was being prepared |
| consulted | -The needs were assessed by experts and we were not consulted. |
| | -The approach of need assessment was the top-bottom approach. |
| | -We were surprise to have the new curriculum in circulation |
| Some concerns raised | -I was told to be part of the team but no role was defined. |
| | -My concerns were never taken into consideration |
| | -I thought we would have been taught issues on assessing needs |
| | before embarking on assessing the needs of a curriculum |

Results on table 4.34 show that, in a focus group discussion, many responses grouped under sub-themes revealed that headteachers did not play any role in assessing the needs of the new curriculum of primary and nursery schools. One respondent stated that he was invited to be part of the team with no defined terms of operations. In so doing, only experts in the top-bottom approach took part in the exercise.

Table 44: The Role Headteachers think, they would have played, if they took part in Assessing the Needs of the Current Curriculum

| Major theme | Sub-theme |
|--------------------------|---|
| Involvement of | -Classroom teachers who face realities in the field would have been invited |
| | |
| classroom teachers as | to incorporate their ideas |
| actors in the field | -Classroom teachers would have connected the needs of the society, and |
| | the child's learning in the new curriculum |
| | -In collaboration with other headteachers and class teachers, we would |
| | have incorporated the nature of the community as an aspect to be |
| | considered in assessing the needs of a curriculum. |
| | - The aspects of the classroom and school environment would have been |
| | assessed and incorporated in the new curriculum. |
| Incorporation of a | -Aspects of knowledge development and skills which have been |
| range of experiences | determined in the classroom for the development of the child would have |
| needed for the | been incorporated. |
| development of a child | -Aspects of aspirations on gender development noticed in the classroom |
| | would have been incorporated. |
| Incorporation of special | -Aspects of inclusive education noticed in the classroom would have been |
| needs education at the | incorporated. |
| base | -Learning needs of all would have been incorporated in the curriculum. |
| Grouping of some | -Several subjects on the curriculum with almost similar objectives would |
| subjects into major | have been grouped into fewer disciplines. |
| , , | |
| disciplines | -Related learning activities would have been grouped in major learning |
| | activities. |

| | -Teachers' flexibility in the choice of learning activities and field of operation would have been considered. |
|---------------------|--|
| Challenges faced by | -Several challenges faced by learners in their different environments would |
| learners in their | have been taken care of e.g. lack of electricity, lack of pipe-borne water, |
| environments | lack of good health services, lack of good road networks, lack of internet |
| | facilities etc. |

Results on table 4.35 show that, if head teachers took part in the need assessment of the curriculum much would have been incorporated into it to each teaching and learning. These were grouped into five major themes, notably;

- Involvement of classroom teachers as actors in the field.
- Incorporation of a range of experiences needed for the development of the child.
- Incorporation of aspects of special needs education at the base.
- Groupings of similar subjects into major disciplines
- Challenges faced by learners in their environments.

Table 45: The Role Head teachers played in the Design Phase of the Curriculum

| Major theme | Sub-theme |
|---------------------------------------|--|
| We were not involved during the | -We were not involved |
| design phase of the new curriculum | -It was imposed on us |
| at the macro-level | -We do not know how it came about |
| We are involved in designing at the | -We have received tracing on how to design the new |
| micro level, i.e. at designing lesson | curriculum at the micro level |
| plans | -We supervise teachers' design of lesson plans |
| | -We produce model lesson designs and teach other |
| | teachers though with many shortcomings |
| | We participate in the design of lesson notes |
| The design of the new curriculum | -It was designed by experts and imposed on us. |
| followed the top-bottom approach. | -The grassroots who we represent were not involved. |
| | -Classroom teachers did not take part in the exercise. |

Results on table 4.36 show that, head teachers were presented under three major themes. Exploiting them showed that,

- Head teachers were not involved in the design phase of the new curriculum at the macro level.
- Head teachers were involved only at the micro level of design, that is at the design of lesson plans.
 - The design followed the top-bottom approach.

Table 46: What Head Teachers Think They Would Have Done Given That They Were Involved in the Design Phase

| Major theme | Sub-theme |
|---------------------------------------|---|
| | |
| Philosophical considerations of | -Issues on the design which affect cognitive learning |
| intended objectives to be considered | would have been considered. |
| | -Issues which affect affective learning would have |
| | been considered and taken care of. |
| | -Issues which affected psychomotor learning would |
| | have been incorporated in the design phase. |
| | |
| Teaching and learning approaches | -Aspects which encourage effective teaching and |
| would have been tailored with the | learning in the cognitive, affective and psychomotor |
| philosophical drive in the curriculum | domain would have been incorporated in the new |
| | curriculum. |
| | -Concrete approaches to effective teaching and |
| | learning geared towards attaining the objective of each |
| | topic in the curricular would have been attained. |
| | topic in the curricular would have been attained. |
| Considerations of local needs in the | -Incorporation of community issues at the base in the |
| design | design |
| S | -Local realities of teaching and learning be |
| | incorporated in the design. |
| | incorporated in the design. |
| Special needs education would have | -Issues of inclusive education at the community level |
| been incorporated in the design | would have been included in the design. |

-The policy of education for all would have been considered in the design. Integrated -The content would have been rich with local realities learning across the curriculum to effectively implement integrated learning across the curriculum Content would have been richer -Elements of the curriculum such as the objectives, anticipated learning outcomes, advice on teaching and assessment from the base would have rendered the curriculum richer. -The breadth and depth of the content that is achievable within the time allocation in the framework would have been more realistic.

Source: Field data (2022)

Results on table 4.37 show that head teachers would have done several things at the design phase to make it more realistic. These were grouped into six major themes which were:

- Philosophical considerations of intended objectives would have been considered and incorporated in the design.
- Teaching and learning approaches would have been tailored to match with the philosophical drive of the curriculum.
 - Considerations would have been given to incorporate local needs in the design.
 - Special needs education would have been incorporated in the design.
 - Integrated learning across the curriculum would have been more realistic.
 - Content on the curriculum would have been richer.

Table 47: The Role Played by Head teachers in the Implementation Phase of the Curriculum

| Major theme | Sub-theme | | | | | |
|---------------------------|---|--|--|--|--|--|
| Actively involved in its | -We supervise individual lesson notes writing. | | | | | |
| implementation | -We supervise general plans designs. | | | | | |
| | -We monitor teaching and learning. | | | | | |
| | -We teach in the classroom to ensure that content is well | | | | | |
| | disseminated. | | | | | |
| | -We deliver model lessons to teachers who have to teach in | | | | | |
| | their classes. | | | | | |
| | -We mark lesson notes to ensure that the objectives of the | | | | | |
| | lesson are well exploited to the evaluation phase. | | | | | |
| | | | | | | |
| Partially involved in its | -I do not teach my role in the school is to see that teachers | | | | | |
| implementation | are in the classroom to do their job. | | | | | |
| | -I delegate powers to others to see into it that work in the | | | | | |
| | classroom is properly done. | | | | | |
| | -I am concerned only with administrative work. | | | | | |

Source: Field data (2022)

Results on table 4.38 show that head teachers are actively involved in the implementation of the new curriculum. There are a few cases whose responses were made. This researcher thinks that they are only partially involved in its implementation.

Table 48: What Head teachers think could be further considerations in the Implementation Process by them

| Sub-theme |
|---|
| -Implement value-based education that provides |
| students a dynamic compass at school and throughout |
| their lives. |
| I will ensure that implementation results attain a |
| sound educational program which is holistic. |
| |

| -The objectives designed and content being |
|---|
| implemented should match with the philosophy of the |
| curriculum. |
| Strategies for implementation should logically and |
| morally follow the objectives. |
| |

Source: Field data (2022)

Results on table 4.39 portray what headteachers think could be further considerations by them in the implementation process. These were categorised into two major themes:

- Implementation should be value based education.
- Objectives should be matched to the philosophy of the curriculum.

Table 49: Results show the areas where head teachers are involved in the evaluation of the curriculum or not

| Major theme | Sub-theme |
|--------------------------------------|--|
| Evaluation is done only at the micro | -We are involved in evaluating the curriculum at the |
| level | classroom level. |
| | -We evaluate lessons taught |
| | -We evaluate pupils' attainment of the objectives of |
| | the lesson. |
| Not involved in evaluating other | -We are not involved in evaluating the needs |
| stages of the curriculum. | assessment. |
| | -We are not involved in evaluating the design phase. |
| | -We are only evaluating what we implement in the |
| | classroom. |
| | -No one has ever invited us to evaluate the curriculum |
| | as a whole. |
| Top-bottom approach | -It is likely that curriculum experts are using other |
| | parameters to evaluate it. |
| | -The grass root users of the curriculum have no say |
| | on its evaluation. |
| Top-bottom approach | as a whole. -It is likely that curriculum experts are using other parameters to evaluate it. -The grass root users of the curriculum have no say |

Source: Field data (2022)

Results on table 4.40 show the areas where head teachers are involved in the evaluation of the curriculum or not. These have been categorised in three major themes which are:

- Evaluation is done only at the micro level.
- Head teachers are not involved in the evaluation of other stages of the curriculum.
 - Evaluation follows the top-bottom approach.

Table 50: What Head teachers could do, given the opportunity to be involved in the evaluation phase of the curriculum

| Major theme | Sub-theme |
|---------------------------------------|--|
| Recommend for a revision of the | -We will point out the short-comings of the |
| curriculum | curriculum and call for a revised version. |
| | -We will recommend where necessary a revision for |
| | the needs assessment. |
| | -We will recommend a revision for the design phase |
| | to make it more realistic. |
| | We will recommend a revision of the implementation |
| | phase to cause the objectives to be attainable |
| Ensure a more realistic curriculum is | -The short-comings of the curriculum will be |
| put in place. | redressed for a more realistic one. |
| | -Current trends in pedagogy will be redressed and |
| | make it more realistic. |

Source: Field data (2022)

Given the opportunity to part-take in evaluating all the phases of the curriculum, head teachers' contributions would have been enormous. These have been addressed on table 4.41 in two major headings which are:

- They will recommend a revision of the curriculum.
- They will ensure that a more realistic curriculum is put in place.

When Head teachers were asked the major difficulties they face in the use of the current curriculum, their answers cut across the following states:

- The current curriculum is more abstract to use. This could be because the results of this study show that they were not effectively involved in producing this document.
 - Much time is needed to master the current curriculum.
 - Implementation of the current curriculum is problematic.

Section C: Hypotheses Testing

Hypothesis 1

Null Hypothesis (Ho): School heads are not involved in need assessments during the curriculum process.

Alternative hypothesis (Ha): School heads are involved in need assessments during the curriculum process.

Table 51: Summary of Pearson Product Moment Correlation from SPSS Analyses, Version 25 on Need Assessment during the Curriculum Process and the Involvement of School Heads

| Variables of Interest | N | Df | $\sum \mathbf{x}$ | $\sum x^2$ | $\sum xy$ | r _{xy} -comp | r _{xy} -crit |
|---------------------------|-------|-----|-------------------|------------|-----------|-----------------------|-----------------------|
| | | | $\sum \mathbf{y}$ | $\sum y^2$ | | | |
| Need assessments during | | | 5834 | 70119 | | | |
| the curriculum process | | | | | | | 0.400 |
| The Involvement of school | - 3/0 | 6 3 | 3/4 | | 43680 | 0.093 | 0.103 |
| heads | | | | 1496 | 270 | 73 | |

Source: Field data (2022)

P=0.01, r_{xy} is not significant.

Verification of hypothesis 1

At an alpha level of significance of 0.01 with degree of freedom 374, the computed Pearson Correlation Value (r_{xy} -comp.) = 0.093 while its corresponding critical value (r_{xy} -crit) was 0.103. Since r_{xy} -critical value is greater than r_{xy} -computed value, (r_{xy} -crit $>r_{xy}$ -comp) we retain the null hypothesis and reject the alternative form. Inference made led to the conclusion that, school heads are not effectively involved in need assessments during the curriculum process.

Hypothesis 2

Null hypothesis (**Ho**): School heads are not involved in the design phase during the curriculum process.

Alternative hypothesis (**Ha**): School heads are involved in the design phase during the curriculum process.

Table 52: Summary of Pearson Product Moment Correlation from SPSS Analyses, Version 25 on Need Assessments during the Curriculum Process and the Involvement of School Heads

| Variables of Interest | N d | $\mathbf{f} \sum \mathbf{x}$ | $\sum x^2$ | $\sum xy$ | r _{xy} -comp | r _{xy} -crit |
|---------------------------|-----|------------------------------|------------|-----------|-----------------------|-----------------------|
| | | \sum y | $\sum y^2$ | _ | | |
| Design phase, during the | | 4038 | 50193 | | | |
| curriculum process | 376 | 374 | | 36802 | 0.016 | 0.103 |
| The Involvement of school | _ | | | | | |
| heads | | | 1496 | 2707 | 3 | |

Source: Field data (2022)

P=0.01, r_{xy} is not significant

Verification of Hypothesis 2

At an alpha level of significance of 0.01 with degree of freedom 374, the computed Pearson Correlation Coefficient Value was 0.016 while its corresponding critical value (r_{xy} -crit) was 0.103. Since (r_{xy} -crit) value (0.103) was greater than r_{xy} -comp (0.016) we retain the null hypothesis and reject the alternative form. Inference made, led to the conclusion that, school heads are not effectively involved in the design phase during the curriculum process.

Hypothesis 3

Null hypothesis (Ho): School heads are not involved in the implementation phase during the curriculum process.

Alternative hypothesis (Ha): School heads are effectively involved in the implementation phase during the curriculum process.

Table 53: Summary of Pearson Product Moment Correlation From SPSS Analyses, Version 25 on the Implementation Phase of the Curriculum and the Involvement of School Heads

| Variables of Interest | | N | df | $\sum \mathbf{X}$ | $\sum x^2$ | $\sum xy$ | r _{xy} -comp | r _{xy} -crit |
|-------------------------|-----|----|----|-------------------|------------|-----------|-----------------------|-----------------------|
| | | | | \sum y | $\sum y^2$ | _ | | |
| Implementation of | the | | | 8894 | 90318 | | | |
| curriculum | | 37 | 76 | 374 | | 6081 | 2 0.693 | 0.103 |
| The Involvement of sche | ool | • | | | | | | |
| heads | | | | | 1496 | 270 | 73 | |

P=0.01, r_{xy} is significant.

Source: Field data (2022)

Verification of Hypothesis 3

At alpha level of significance of 0.01 with degree of freedom 374, the computed Pearson Product Moment Correlation Coefficient Value $(r_{xy}$ -comp) was 0.693 while its critical value $(r_{xy}$ -crit) was 0.103 since r_{xy} -comp (0.693) was greater than r_{xy} -crit (0.103), we reject the null hypothesis and retain the alternative form. Inference made, led to the conclusion that school heads are effectively involved in the implementation phase during the curriculum process.

Hypothesis 4

Null hypothesis (Ho): School heads are not involved in the evaluation phase during the curriculum process.

Alternative hypothesis (Ha): School heads are effectively involved in the evaluation phase during the curriculum process.

Table 54: Summary of Pearson Product Moment Correlation From SPSS Analyses Version 25 on Evaluation Phase of the Curriculum and the Involvement of School Heads

| Variables of Interest | N | df | $\sum \mathbf{x}$ | $\sum x^2$ | $\sum xy$ | r _{xy} -comp | r _{xy} -crit |
|---------------------------------|-----|-----|-------------------|------------|-----------|-----------------------|-----------------------|
| | | - | \sum y | $\sum y^2$ | - | | |
| Evaluation phase | 376 | 374 | 6688 | 79908 | 60430 | 0.251 | 0.103 |
| The Involvement of school heads | _ | | | 1496 | 2707 | 73 | |

P=0.01, r_{xy} is significant.

Source: Field data (2022)

Verification of Hypothesis 4

At alpha level of significance of 0.01 with degree of freedom 374, the computed r_{xy} -value was 0.251 while its critical r_{xy} -crit value was 0.103. Since r_{xy} -comp (0.251) was greater than r_{xy} -crit (0.103) we reject the null hypothesis and retain the alternative form. Inference made, led to the conclusion that school heads are effectively involved in the evaluation phase during the curriculum process.

Table 55: Summary of Findings for the Analysed Data

| Hypothesis | N | df | α-level | r _{xy} -comp | r _{xy} -crit | Division | conclusion |
|------------|-----|-----|---------|-----------------------|-----------------------|------------------------|-------------------|
| 1 | 376 | 374 | 0.01 | | 0.103 | r _{xy} -comp | School heads are |
| | | | | | | <r<sub>xy-crit</r<sub> | not effectively |
| | | | | | | Reject Ha | involved in need |
| | | | | | | Retain Ho | assessment during |
| | | | | | | | the curriculum |
| | | | | | | | process |
| | | | | | | | |
| 2 | 376 | 374 | 0.01 | | 0.103 | r _{xy} -comp | School heads are |
| | | | | | | <r<sub>xy-crit</r<sub> | not effectively |
| | | | | | | Reject Ha | involved in the |
| | | | | | | Retain Ho | design phase |
| | | | | | | | during the |

| | | | | | | curriculum |
|---|-----|-----|------|-------|------------------------|------------------|
| | | | | | | process |
| | | | | | | |
| 3 | 376 | 374 | 0.01 | 0.103 | r _{xy} -comp | School heads are |
| | | | | | >r _{xy} -crit | effectively |
| | | | | | Reject Ho | involved in the |
| | | | | | Retain Ha | implementation |
| | | | | | | phase during the |
| | | | | | | curriculum |
| | | | | | | process |
| | | | | | | |
| 4 | 376 | 374 | 0.01 | 0.103 | r _{xy} -comp | School heads are |
| | | | | | >r _{xy} -crit | effectively |
| | | | | | Reject Ho | involved in the |
| | | | | | Retain Ha | evaluation phase |
| | | | | | | during the |
| | | | | | | curriculum |
| | | | | | | process |

Source: Field data (2022)

Results on table 4.31 show that, out of the four hypotheses tested, two had their null hypothesis retained and two had their alternative forms retained. This implies that as far as the curriculum process is concerned, school heads are not effectively involved during the need assessment and design phases. On the other hand, they are effectively involved in the implementation and evaluation phases. The results leading to responses to the research questions showed that, the extent to which school heads are involved in the implementation phase is high, while at the evaluation phase, it is low.

Conclusion

The fourth chapter of this study entitled, Data analysis and presentation of findings is orderly presented starting with the demographic inventory, the findings from the indicators and finally the results from a protracted quantitative(questionnaire) and qualitative (focus group discussion) in a summary of the findings with the help of charts histograms and table.

Summary of chapter four

Chapter four which was on the presentation of findings focused on the data obtained with the help of the different instruments employed by the researcher in chapter three. In this chapter, the questionnaire was analysed and the different hypotheses tested with a harmonised table showing all hypotheses and the results obtained. Qualitative data from the guided interview was also analysed and the process employed clearly stated and a summary of the findings presented.

CHAPTER FIVE:

Discussions, Implications, Limitations, Conclusion, Recommendations and Suggestions for Future Research

This chapter discusses the results presented and interpreted in chapter four above. In this chapter, we answer the research questions and discuss the hypotheses. The study further substantiate with the views of other authors with relevant theories used in the work to bring out the meaning, importance and relevance of the findings.

Discussion According to the responses from the Demographic information

This research work makes use of demographic information as presented in table 4.2. This information was carefully gathered following its relevance to the research objectives. Demographic information provides data regarding research participants and it is necessary for the determination of whether the individuals in a particular study are a representative sample of the target population for generalisation purposes (Salkind, 2010). The characteristics of the respondents used here were gender, age range, longevity in service, and mastery of curriculum status. These gave the required information needed to qualify as a participant.

On Gender, the participants were made up of male (93) and female (188). This research involved both sex in order to ensure gender participation as the two main categories of people that make up the population of Cameroon. They have been involved in primary school activities in one way or the other. According to Arensbergen et al, (2012), the differences in gender among primary school head teachers and teachers is not balanced. In most cases there are more females than male even though the effective participation of both sexes was highly needed. Moreover, according to Millennium Development Goal five (Gender Equality), regardless of where you live, gender equality has become a fundamental human right.

Advancing gender equality is critical to all areas of a life, from reducing poverty to promoting health, education, protection and the well-being of the society, thus they become vital participants in a research study. The study had a reduced disparity between the number of men and the number of women, with women (188) because women were more open and ready to sacrifice time during the research, but most men were probably too busy with job and do home work that could not permit many to sacrifice time. However, the number that

presented is acceptable as it gave the required sample. In this study, the participants' ages range from 20 to 51 years. A range that enables all-inclusive participation of stakeholders. This provided an avenue for gathering all the information needed.

On the role played in school by the participants, different roles were identified for the head teachers in primary schools. This shows that 40.5% of respondents in the primary schools played the role of classroom teacher / head teacher. 31.9% played the role of classroom teacher only, 22.3% played the role of head teachers only. Moreover, 4.4 shows that the sample for head teachers and classroom teachers is well trained professionally. Holders of the Teacher Grade One certificate constituted 65.2%, B.Ed constituted 26.2%, M.Ed constituted 6.3% and HND in Education constituted 2.3%.

Discussion of Findings According to Research Hypotheses and Research Questions Research Question One:

To what extent are Head teachers involved in need assessments during the curriculum process?

Hypothesis One:

Null Hypothesis (Ho): School heads are not involved in need assessments during the curriculum process.

Alternative hypothesis (Ha): School heads are involved in need assessments during the curriculum process.

Based on the findings thus: at alpha level of significance of 0.01 with degree of freedom 374, the computed Pearson Correlation Value $(r_{xy}\text{-comp.}) = 0.093$ while its corresponding critical value $(r_{xy}\text{-crit})$ was 0.103. Since r_{xy} -critical value is greater than r_{xy} -computed value, $(r_{xy}\text{-crit})$ - r_{xy} -comp) we retain the null hypothesis and reject the alternative form. Inference made led to the conclusion that school heads are not effectively involved in need assessments during the curriculum process. We therefore agree or affirm to the research questions that the rate at which head teachers are not involved in the curriculum process is high.

These findings portraying this sad reality in this context are not different from the findings from earlier researchers in related fields and in different geographical locations. For instance, in a study conducted by Lin et al. (2012), with focus on describing a process of determining the right training needs assessment method for seven primary stakeholders with the objective of defining a two-year education fellowship in emergency medicine (EM). In the findings, the authors showed a common pitfall in conducting needs assessment of over-

reliance on a single assessment expert and approach or a limited population sample. To him as well as to the findings of this study, the process of need assessment needs to include many different actors in the field and even assessment approach. These practices are absent in our system, making head teachers and teachers feel detached from the system where they belong. In the same light, when we compare the present findings to that of Alsubaie (2016) where she opines that in order for curriculum development to be effective and schools to be successful, head teachers and teachers must be involved in the development process. Her view comes in to strengthen the aspect of involvement which has been examined in this study, the both affirm the need of this involvement yet our study takes an urge over hers as it goes further to test if these important stakeholders are actually involved in the process. The findings have proven that they are actually relegated to the background and this answers our research questions and determines our objective.

The theory that explains the concept of need assessment in the curriculum process is theory of Need Analysis by Jack (2002). According to this theory curriculum process should be viewed as a process by which meeting learners' needs leads to improvement of learners' learning. Therefore, curriculum developers should gather as much information as possible towards the learners' needs. This procedure used to collect information about the learners' need is called this needs analysis. Deriving inspiration from Hilda Taba (1962) model, Jack (2002) states that situational analysis is the systematic process of analysing the situation before the curriculum is developed effectively. Taba (1962) describes situational analysis as a diagnosis of needs. This explains the need to need assessment as a precondition to start the curriculum process. the needs analysis for a curriculum cannot be overemphasized till this level. We look at who is expected to assess the need, which of course are the actors in the field.

Given the explicit nature and importance of needs analysis in the curriculum process as viewed in Jack's theory, it is viewed that there is no effective needs analysis put in place to ensure the curriculum process. the students are not consulted; the higher offices simply assume are take decisions. The head teachers who could accompany them with documented information about their schools are also left out. Therefore, our study does not agree with the acceptable theory of need analysis thereby making unacceptable curriculum process for Cameroon primary schools. We are therefore worried about the evolution of curriculum process in the Cameroon primary schools. This has far aching negative repercussions on the heat teachers, teachers, pupils and the entire community. In this situation, we find primary school teachers in Cameroon schools struggling to implement the new curriculum because

of lack of knowledge of conception and the gap that exists between what is given to them and what they live on daily bases. The teachers fail to interpret and relate the curriculum to the reality of the community, this makes it difficult for the teacher to harmonise the skills in the curriculum and the teaching methods to impact the pupils. Moreover, since the head teachers are also absent in the process. When they are absent, there is no authority to present the school population and the teaching-learning process will be hampered by overcrowded classrooms. This keeps the teachers struggling to implement the strange curriculum because of overcrowded classrooms and a lack of resources.

Due to the absence of head teachers and teachers in the curriculum process, the curricle is not well implemented. In this case the pupils turn to go through the educational system with learning any skill that can help them solve problems in their environment. The teachers turn to help pupils in most lessons to show that they have been teaching. The pupils get promoted to the next class and once in college, they would be found wanting, they lack reading, speaking and writing skills. It is based on this weak background in education that many students have challenges in colleges.

Research Question Two

To what extent are school heads involved in the design phase of the curriculum process in Cameroon primary schools?

Hypothesis Two

Null hypothesis (Ho): School heads are not involved in the design phase during the curriculum process.

Alternative hypothesis (Ha): School heads are involved in the design phase during the curriculum process.

Looking at the findings, we are able to comprehend that at an alpha level of significance of 0.01 with degree of freedom 374, the computed Pearson Correlation Coefficient Value was 0.016 while its corresponding critical value (r_{xy} -crit) was 0.103. Since (r_{xy} -crit) value (0.103) was greater than r_{xy} -comp (0.016) we retain the null hypothesis and reject the alternative form. Inference made, led to the conclusion that school heads are not effectively involved in the design phase during the curriculum process. Based on the above findings, we conveniently affirm the research question that head teachers are not included in the design phase of curriculum process in Cameroon primary school.

This findings representing this melancholic reality in this context is not different from the findings from earlier researchers in related field though in different geographical locations. For instance, in a study conducted by Hizinga et al (2014). According to this study, head teachers involvement in curriculum design has a long tradition. However, although it fosters implementation of curriculum reforms, teachers encounter various problems while designing related to conditions set for the design process, and lack the knowledge and skills needed to enact collaborative design processes. After the study, Hizinga's findings signpost three gaps in head teachers and teachers' design expertise related to three domains (1) curriculum design expertise, (2) pedagogical content knowledge and (3) curricular consistency expertise. The outcomes of this study illustrate the importance of supporting teacher designers during the design process and enhancing teachers' design expertise. By offering (tailored) support to teachers, the enacted design process and the quality of the design materials are expected to improve. Looking at the findings from Hizinga and that of our present study, it is clear that there is unanimous or union in the ideologies as both profess the need of heat teachers and teacher's involvement in the design process. Hizinga, goes further to examine that inasmuch as the process need the involvement of these stakeholders, many teachers lack the skills to affective design a curriculum, so the system need to empower them in that light. Of course there is a need to train the head teachers and teachers on what to be done in order to enable them do it right.

Moreover, looking at Mugisha (2013) whose study examined the Educational Practices, Curriculum Design and Implementation at the MLT Diploma Program in Uganda. They observed that Contemporary curriculum design and implementation require the use of appropriate educational practices to enhance positive teaching and learning outcomes. Their study discussed the study of educational practices and related curriculum antecedents applied during the design and implementation of the Medical Laboratory Technology (MLT) at Mulago Paramedical Schools in Uganda. The revealed that the curriculum designers and educators hardly complied with important curriculum antecedents in its design and implementation process and it's clear that teachers and student-centred approaches were not effectively employed. Furthermore, practicum training and strategies used could not orientate the teachers and students to basic practical clinical skills and competencies. The use of a variety of educational stakeholders and practices during curriculum design made the teaching and learning process more friendly and interesting. It was concluded that considerable utilisation of appropriate educational practices during curriculum development was critical. Mugisha's study shares a close relationship with the findings of the present

study. Both have the same point of contention, the negligence of the main actors in the domain and the poor methods used in the designed phase. This affects many educational systems in Africa due to the system of centralization that most states still maintain. The decisions are all taken by minority individuals in high offices. These decisions are transferred to the users via policy documents, decrees and packages. The curriculum which these few individuals conceive from the curriculum of other European countries is sent to the head teachers and teachers to implement with proper training on the implementation style. The actors struggle with it and get what they can at their convenience and the rest if abandoned. This jeopardises the teaching – learning process in primary schools.

The theory that expatriates the design process and the place of the head teachers and teachers in this study is Curriculum Design Theory by Johnson (1967). Johnson's Theory of Curriculum design is centred on three notions which he situates as: An arrangement of selected or ordered learning outcomes intended to be achieved through instructions, an arrangement of selected and ordered learning experiences to be provided in an instructional situation, and A scheme for planning and providing learning experiences. Elaborating on these notions, he stated that there are two fundamental dimensions of curriculum designs in this theory: the total substance, the elements and the arrangement of the document. The theory of designing curriculum requires that it should be sequenced or arranged in ordered intended learning outcomes. This requires the input of many stakeholders in the educational milieu. The model in figure of the dynamic cycle of schooling places the head teacher as a veritable implementer of the designed curriculum. His effective presence and contribution during the design phase will ease implementation at the base, where the curriculum is being exploited, that is, in the school. We decipher here that the theory joins the ideology of having different stakeholders like teachers and head teachers involved in the curriculum process.

Based on the findings of the second hypothesis, we have found out that the way curriculum is processed and implemented in Cameroon primary schools does not tie with the scientific acceptance based on the design theory. This is concretized by the absence of the three notions thus: An arrangement of selected or ordered learning outcomes intended to be achieved through instructions, an arrangement of selected and ordered learning experiences to be provided in an instructional situation, and A scheme for planning and providing learning experiences. These notions are farfetched in the whole process of curriculum conception in Cameroon primary school curriculum. This increases in wearisomeness of the researchers in the domain of curriculum as to how will the Cameroon primary school curriculum keep on taking a different and somewhat unacceptable direction. Could this be

the cause of numerous failures, repetition, dropouts and general fall in the quality of primary education in the nation?

The gap that the governing system in the ministry of basic education imposes on the curriculum process has unbending challenges on the primary education of this country. The teachers, head teachers and the pupils are the most important actors of every education system. Most African countries — Cameroon inclusive have the deleterious tendency of neglecting them on issues that concern them. If the head teachers fail to take part in the design of the primary school curriculum, there will be extensive challenges on the quality and kind of didactic material needed by both teachers and learners, the infrastructure may not be designed to fit the new curriculum. This obviously leads to imbalance and inappropriateness in the process, the teachers may not have the didactic material and the working classrooms may not be adapted to the taste of the modified curriculum. This distorts the pedagogic process in schools. In this case, the pupils' quantity and quality of knowledge, syllabus and lessons may not be conveniently ditched to them. They remain with limited knowledge and incomplete lessons, hence building a very problematic future for the leaders of tomorrow.

Teachers in most Cameroonian primary schools get confused, some pedagogic inspectors make a lot of mistakes especially with the adopted curriculum from other countries. When the teachers are unskilled or found wanting in a particular curriculum, pupils suffer. If the curriculum is not familiar to them and their environment, most teachers simply go with what they know. This has controversial opinions in the pupil's educational programs. That's why when you follow pupils from two different schools in Cameroon, you discover that they have different lessons, different approaches and different homework from different teachers. This disparity implants another confusion in the minds of the learners, they don't think and reason the same, they see the emptiness of the system through their teachers.

Research question three

Are Heads teachers involved in the implementation phase of the curriculum process in Cameroon primary schools?

Hypothesis 3

Null hypothesis (Ho): Heads teachers are not involved in the implementation phase during the curriculum process.

Alternative hypothesis (Ha): Heads teachers are involved in the implementation phase during the curriculum process.

Verification of Hypothesis 3

Judging from the findings presented, it indicates that at alpha level of significance of 0.01 with degree of freedom 374, the computed Pearson Product Moment Correlation Coefficient Value (r_{xy} -comp) was 0.693 while its critical value (r_{xy} -crit) was 0.103 since r_{xy} -comp (0.693) was greater than r_{xy} -crit (0.103), we reject the null hypothesis and retain the alternative form. Inference made, led to the conclusion that school heads are effectively involved in the implementation phase during the curriculum process. This finding permits us to affirm the research question; Yes, school heads are indispensable in the implementation phase of curriculum in every primary school.

This finding representing this reality in this context is not different from the findings from earlier researchers in related fields though in different geographical locations. For instance, in a study conducted by Kartika, (2014) carried out a study involving two primary schools in Indonesia to investigate the view of school leaders on the implementation of the new curriculum. He made the following inputs: In 2013, the new curriculum was tried out in several school models. Then, in 2014, the curriculum was implemented in Grades I, II, IV, and V of elementary schools, Grades VII and VIII of middle secondary, and Grades X and XI of higher secondary schools. The findings revealed that head teachers and teachers in both schools agreed that the new curriculum is not different from the old one in terms of student-centred learning. However, they found that the new curriculum had a more balanced focus on cognitive, affective, and psychomotor domains than the old one. Another important aspect of the new curriculum is its emphasis on character education that has to be embedded in every lesson. The study and its finding goes in line with our present study. its examines the role of head teachers in the curriculum implementation process. The findings show head teachers confirming the relationship and disparity between the former and the later curriculum. Their ability to give concrete opinions on the two curriculum shows that they are deeply involved in its implementation which is the same finding we have from the present study; therefore, our findings are not out of place nor standing alone in this field of knowledge.

The theory that explains the process of curriculum implementation is the Bottom-up Theories of Curriculum Implementation by Barrett and Fudge (1981). In this study, the Bottom-up approaches see implementation as a process of interaction and negotiation, taking

place over time, between those seeking to put policy into effect and those upon whom action depends" (Barrett and Fudge, 1981). The main contribution of bottom-up approaches to public policy implementation is their normative stand: what matters is not how policy makers at the top get their will executed but the reactions of those on the ground at the end of the line whose reactions shape the implementation process, and the policy itself (Lipsky, 2010). The theory relating to this study shows that a curriculum is a policy document which needs implementation. When policy makers at the top impose a curriculum on the ground and get their will to be executed by those on the ground (head teachers), there are bound to be problems particularly if these actors at the ground level were not involved at the level of policy formulation and training. The theory emphasises the importance of the Bottom up process in the curriculum process. this is opposed to the top –bottom that is being practised in Cameroon basic education. The system does not consider the teachers and head teachers as trained experts who can contribute to the curriculum process of the country, this plunges the whole system into a fiasco as there are challenges in the implementation phase.

Upon close examination of the theory of implementation, we see that the findings on our third hypothesis does not agree (does not follow) the scientific agreement as stated in the implementation theory. The place of the pupils and teachers are not given in the Cameroon primary school curriculum process. Whereas Barrett and Fudge insist that pupils and teachers at the basic level of implementation are expected to be considered, their views are highly required in the implementation stage. But on the contrary, what is considered in Cameroon primary school curriculum process in the state policies, these therefore places the curriculum on dangling bar where the final beneficiaries (learners) have very little or nothing to learn from it.

The absence of head teachers and teachers in the curriculum process crumbles the primary education system in most African countries, Cameroon inclusive. Personal observation as an educator is that teachers are still using the traditional method of teaching, where a teacher is regarded as the only source of information and the learners as the vessels that need to be filled with knowledge or learning material. The system is accused in this situation because they sight line them during the curriculum process. In the normal circumstance, teachers are involved, trained and even motivated in order to be willing to apply the new approach and must be able to articulate their ideas so as to make a meaningful contribution to the new curriculum process and the implementation phase. Morris (2002, p. 15) indicates that for educators to be self-motivated and committed to their objectives, the mutual relationship between teachers should be promoted, all stakeholders should be

involved in the curriculum process, and there should be opportunities for growth and more innovative and effective teaching methods. What becomes clear is the need for teacher education and for educators to grasp the challenges and opportunities to assert their power over shaping the curriculum process that will produce competent, confident teachers. In the absence of this, the pupils suffer the consequence.

The development of school curriculum in many countries is still very centralised. The National Primary School Curriculum as a program of learning is a highly sensitive document as it contains the aspiration of the nation, preparing its citizens to face future challenges. It is a document of hope. However, it is glaring that much of the excitement during the adoption of the curriculum documents has diminished and has been replaced by disappointment in the implementation stage, as there are gaps between the aspiration and the actual implementation. These gaps are inevitable as teachers and head teachers are found wanting in the new curriculum in Cameroon primary schools. They think that the curriculum is not perfect for the pupil and their environment, giving an impression that Cameroon primary education system still adapts the curriculum from the colonialist, an opinion yet to be investigated.

This in a bit explains why recently, there is high literacy crises among ages between 12 and 14 years in primary schools and also in form one. Considering the fact that pupils and student's population is constantly increasing, while the teaching methods are not improving anyway, it implants considerable worry in the minds of both teachers and parents about what shall become of the pupils. Despite rising enrollment rates, early illiteracy among primary schools is widespread in the developing world and Cameroon is not left out. According to the most recent World Development Report, the average low-income country enrols pupils at almost the same rate as the average high-income country. However, millions of pupils that have completed primary school in low-income countries lack even the most basic literacy skills (World Bank 2017, 5). This is mostly blamed on the gap created between the head teacher and teachers and the school curriculum. This illiteracy prevents millions of children from taking advantage of the extensive benefits of education. Because childhood is the ideal time to learn to read, and because reading is a prerequisite for writing, advanced cognitive skills, and the ability to progress through school systems, these children are unable to take advantage of the high private returns to education and increasing demands from labour markets for advanced skills.

Research question four

To what extent are school heads involved in the evaluation phase of the curriculum process in Cameroon primary schools?

Research hypotheses four

Ha4: School heads involvement in the evaluation phase influences the curriculum process in Cameroon primary schools.

H04: School heads involvement in the evaluation phase does not influence the curriculum process in Cameroon primary schools.

A close examination of the finding unveils that at alpha level of significance of 0.01 with degree of freedom 374, the computed r_{xy} -value was 0.251 while its critical r_{xy} -crit value was 0.103. Since r_{xy} -comp (0.251) was greater than r_{xy} -crit (0.103) we reject the null hypothesis and retain the alternative form. Inference made, led to the conclusion that school heads are effectively involved in the evaluation phase during the curriculum process. based on this finding, we conclude and answer the research question that school heads are undeniable actors in curriculum assessment in all schools.

This finding representing this reality in this context is not different from the findings from earlier researchers in related fields though in different geographical locations. For instance, in a study conducted by Somalrot, (2009) tiled an evaluation of the curriculum of Clinical Psychology. The findings show that the working committee and teachers could conduct the course successfully. The educational resources were available to serve the teaching and learning process. However, some of the resources were not adequate. With regard to the process evaluation, the operation instruction and evaluation process were very good. Product evaluation suggests that graduates have achieved the general and specific competencies as mentioned in the curriculum objectives. This study gives an opposite of the findings we acquired in our study, meanwhile in the context of the later study, they curriculum was well evaluated, with every participant actively present but on the contrary, no evaluation has been made and the actors have not been into any such activity.

Furthermore, Radhwa et al. (2016), evaluated the internship curriculum in improving learner's skills and marketability among Arabic language pupils in International Islamic school Malaysia. The General findings from this study showed that internship training curriculum had essentially improved their soft skills and increased their work-place literacy and well-being. The assessment of curriculum as a huge way of improving both teachers and learners.

Again, Pieto (2020) verified if a broad curriculum evaluation enhances the skills of the learner. The results of these estimates showed that evaluating abroad curriculum has a relatively large and statistically meaningful effect on the probability of being skillful some years after graduation. This effect is mainly driven by the impact that studies abroad programmes have on the skillful prospects of primary leavers from disadvantaged (but not very disadvantaged) backgrounds, though positive but imprecise effects are also found for learners from advantaged backgrounds. These findings we get from earlier researchers are not different from what we have. We therefore exploit their findings to demonstrate that our research is not an not alone. It works in concomitance with other researcher's views.

The theory that explains the process of evaluation in the context of this study is Stake's Responsive Theory of Curriculum Evaluation (1975) Stake (1975) made a major contribution to curriculum evaluation in his development of the responsive evaluation theory. The responsive theory is based explicitly on the assumption that the concerns of the stakeholders – those for whom the evaluation is done-should be paramount in determining the evaluation issues. To emphasise evaluation issues that are important for each particular curriculum, most educationists recommend the responsive evaluation approach. It is an approach that trades off some measurement precision in order to increase the usefulness of the finding to persons in and around the program.

Upon close examination of the theory and hypothesis four of this study, we see that the curriculum process in Cameroon primary school does not follow or recognize the scientifically accepted procedure of stakes in his theory. The system does not take ample time to assess the curriculum and its stakeholders beforehand. The evaluators are in the ministries (if there really exist) and occasionally pass around the schools and collect dad from enrolments, syllabus coverage, teachers assiduity and discipline and combine to form reports that guide them in new curriculum process. moreover, the evaluator do not meets with clients, staff, and audiences to gain a sense of their perspectives on and intentions regarding the evaluation.

The process of curriculum development is not completed until it reaches the evaluation stage. For effective evaluation to take place, the main actors in the field of implementation (the head-teachers) must be involved. As recommended by stake, the evaluator observes the curriculum closely, to get a sense of its operation and notes any unintended deviation from announced intentions. This calls for the effective involvement of the head-teacher in all the different stages of the curriculum development process very

crucial. The head teacher observe the curriculum closely, to get a sense of how its executed from intended objectives and notes any deviations during the evaluation phase.

Curriculum evaluation being understood principally as the assessment of programs, processes, and curricular products that are resources, not people (Oliva, 2009) are an essential stage in the curriculum process. In the Cameroon primary schools, the inability to involve teachers and their heads in such activities thwarts this last stage of the curriculum. Thus, making the system to use the same curriculum over decades irrespective of this fast evolving world. This practice keeps the youths aback as compared to youth from other countries. Moreover, with the understanding that there are two parts to the evaluation of the curriculum instruction process, with the first being the evaluation of students (most often in meeting the standards) which are expected to take place before, during, and after instruction. The question is, have the objectives been met? Teachers' principal role is supposed to be to analyse pupil's assessment data to see how many students have met or not met the objectives, and at what level of performance and evaluation of the effectiveness of the guides and resources, and the instructor or teacher. This is often done in groups, and over a period of time. This is done in order to ascertain the type of curriculum, how valid, the quality and to take important decisions either to keep it, modify or change the curriculum. But once the system fails to involve the right persons into this activities, there is bound to be an existing gap that constantly keeps the curriculum and its users backward.

Moreover, the advantages of evaluating the primary school curriculum cannot be over emphasis. Among the diverse advantages, we agree with Doll (1992) that it helps to establish the worth of a program and make decisions on whether to continue, stop, or modify the project. The various tools for collecting data and the sources of the data is also discussed. The fact that head teachers are kept abreast of such important educational activity, there is bound to be limited or inappropriate data which is expected to be used in effective evaluation. According to (Shiundu & Omulando, 1992), sometime the system out of frustration turn to extrapolate, forgetting that the disparity between the different schools is not just the number of teachers and pupils but there is also the quality culture, the environment among others that makes measuring the teachers and pupils output on the same scale difficult.

In Cameroon, curriculum process involves a variety of management development experiences, which inculcates as school leaders' teacher training experience, on-the-job instructional learning programmes for both aspiring heads and head teachers, mentoring and coaching of aspiring heads in various aspects of educational management and administration (Akoulouze, 1999).

It ought to be emphasised nevertheless, that the simple reality that the curriculum process in Cameroon as in many African countries is conceived, developed, sent to the field for implementation, evaluation, the mode of operation seems to be different as obtained in developed countries. This approach seems to be less effective in preparing successful school leavers. It may be that within the broader social and economic context prevailing in Cameroon structured programmes could be more effective, or at least a more efficient use of scarce resources, than in developed countries.

According to Tambi (2016), Education in Cameroon has come under serious criticisms, for failing to deliver in accordance with its premises as stipulated in the education law. Planning a curriculum involves making choices as to the learning experiences which are appropriate and desirable for the learners in each society. In part II section 11 of law No 98/004 of 14 April 1998 the president of the republic stipulates that "the state shall ensure the constant adaptation of the educational system to the national and socio-cultural realities, and also to the international environment, especially through the promotion of bilingualism and the teaching of national languages". Curriculum planners have therefore set themselves a task of achieving this and other tasks that are enshrined in the policy statements made in that law since it came to being in 1998.

Many schools or college subjects now tilt towards their relation to their utilitarian aspect of the curriculum. One therefore must bear in mind the utilitarian aspect of the curriculum before examining the curriculum structure and the Cameroonian Labour and Industrial market as a contemporary education crisis in Cameroon in the 21st century.

Cookey Gam (1980) outlines the pre-requisites of a good utilitarian curriculum as:

- Development of the moral and spiritual growth of the learner.
- Development of skills and tools of education.
- Development of clear thinking.
- Development of civic responsibility.
- Development of appreciation of cultural heritage.
- Preparation for earning a living.
- Development of worthwhile leisure pursuits and of creative expression.

The law laying down guidelines for education in Cameroon states among others in part 1 section 4 that the general purpose of education shall be to train children for their intellectual, physical, civic and moral development and their smooth integration into society bearing in mind prevailing economic, socio-cultural and moral factors. One of the means to attain this as stipulated in section 5 article 7 is that the learner should be able to develop

creativity, a sense of initiative and the spirit of enterprise. The quality of instruction should therefore be oriented towards attaining this objective at all levels of the educational system.

Designing a curriculum according to Tambo (2003) should take into consideration the relevant needs which have been assessed for learning to take place. In this respect, the learners' needs are in line with societal demands as identified in the community, and the global village which the world has become should not be ignored during the design phase of the curriculum. This makes the role of the head teacher, (who is active in the rural/urban setting in terms of relationship with the community) very primordial in the design phase of the curriculum. It should be noted that many parts of Cameroon are rural. Schools are spread to cover the entire territory. Conceiving and designing the curriculum to include the learner's needs makes the involvements of the head teacher very fundamental, according to this researcher.

According to Ngundam and Tanyi (2002), the National Employment Fund (NEF) and some major employers like the Cameroon Public service, Cameroon Development Corporation (CDC) and the National Oil Refinery (SONARA), were contacted to find out the availability of jobs in the Cameroonians labour and industrial market. Record from the Ministry of Employment and Vocational Training (2010) revealed that the Ministry of Public Service and Administrative Reforms in Cameroon is the biggest employer. They carry out employment and organise vocational training through competitive examinations (concours). Thousands of graduates from the primary, secondary and tertiary institutions as job seekers, write these competitive examinations to look for jobs or training in various disciplines, their areas of specialisation notwithstanding. The other employers do direct recruitment but most of the time the vacancies are advertised at short-notice and recruitments done impromptu. This is also the case with the other smaller employers.

The content of a curriculum can address issues of professionalisation and render the curriculum document very useful to the teacher, the learner and the company recruiting, the school learners. The cry for lack of professional training by school learners as it is recurrent becomes a thing of the past, particularly if the content in a properly designed curriculum is implemented, corrected by the teacher. Schools and colleges do train for local consumption. More attention has apparently not been given to training. According to Ngundam and Tanyi (2000) this attention however is more on questions about adequacy in terms of numbers than quality and relevance of the system of training to our economic needs and restructuring and funding that are needed.

The emphasise that without the class teachers taking part in planning and designing a curriculum which considers all socio-cultural needs of Cameroon, its implementation will be a shadow in addressing the aspirations of the Head of State to build a competent based and inclusive nursery and primary school, by engaging all learners in a more active and creative learning process in a bid to develop their real potentials. Tambo (1995) opined that one can change the curriculum, make it more realistic to evolutionary trends, refurbish the physical environment, lengthen the school day, but without good teachers to implement its content, change will not produce the designed effect. Although a global consensus appears to exist, regarding the key role the teacher plays in national education systems, there is no such consensus when it comes to the models and practices for effective implementation of a curriculum. However, if the head teacher and classroom teacher are involved from the planning to the design phases of a curriculum, this researcher thinks that implementing its content is likely to be more feasible. Through our school improvement review process, Tambo (2003) sees evaluation as a critical aspect to enhance performance.

Through evaluation, gabs are identified and corrections implemented for improved performance. This assertion also applies to a curriculum document. It was through evaluation that Nju (2018) reported that President Paul Biya saw the obsolete of the former curriculum and gave instructions for a new curriculum for nursery and primary education in Cameroon to be put in place and used in our schools. This evaluation revealed the deficiencies in the former curriculum for not providing competence to the primary school learner. Accordingly, the subjects in the current curricular will be able to provide the child opportunities to realise a number of competencies, to build little projects under the teachers' guidance. Also, there are twenty activities in nursery one with the exclusion of painting, information and community development. The curriculum development process needs to be dynamic and inclusive in all its facets. The importance of the curriculum document in the education and training of our child is paramount to the growth and development of any people, thus the need for expertise at all levels of the curriculum development process. Peter (1982) intimated that to make the curriculum process complete the curriculum planners should include actors from a wide range of personalities with diverse experiences, skills. These stakeholders should come from all works of life, and opinion. Thus in developing the curriculum, the planners should go beyond their immediate environment, i.e. their nation, regions, states, districts, schools, classrooms. They should bring all and sundry while being conscious of the globality of the world.

A well thought selection of stakeholders, selected from all facets of the community for which the curriculum is being developed, will result in the production of a proper and well-structured curriculum document that could be translated into well prepare lessons in our classrooms. However, an evaluation of the curriculum document must be done at the micro as well as the macro for the best exploitation of this document for the good of the learners and the school system as whole.

PROPOSALS FOR FURTHER STUDIES

Another study could be conducted by comparing the curriculum implementation practices by Cameroon primary school teachers in the two subsystems.

Another study could be carried out focused on the government policies on education, examining its stipulations on the role of the head teachers in the curriculum process.

Another study could be conducted to examine the consequences of a distorted curriculum process on the pupil, their future and performances in early secondary schools.

Difficulties Encounter

During the period of this study, the ultimate challenge the researcher encountered was the access to the documents. Getting documents for this study was a nightmare. Many officers were defensive and suspicious each time the researcher explained the research problem. Some had to keep me on promises for several months which never worked.

Another area of difficulty was collection of data. The sociopolitical unrest that the country is going through constituted a huge stumbling block to the advancement of this study. the few weeks of calmness we got were highly utilised to acquire the data from the population. The teachers and head teachers on their part were difficult to find since they were at one point targeted by the crisis. So they were mostly in hiding and (or) disguise and sometimes rejected their job for safety. The covid-19 was another challenge. Many primary schools were not very accessible until some conditions were put into place to protect the pupils and even the researcher too.

GENERAL CONCLUSION

The Cameroon education law N° 98/004 PG 14 April 1998, states that education is a national priority and must be taken care of by the state. In its article, 5 it clearly defines the objectives and missions of the Cameroon education system, which includes amongst other, to train citizens who should be versed in their culture and the culture of other societies, to train citizens who would have respect for the general good and welfare of others, to inculcate important values such as dignity, honour, honesty and the welfare of others, including integrity, to promote national languages, to promote family life education, to inculcate the culture and practice of peace, justice, tolerance, democracy, respect for human rights and the fight against all forms of discrimination. These lofty policies could only be brought to life by the right actors which are the head teachers and teachers.

In an educational system, it does not simply suffice to stipulate the ideas or the articles in the document, but it entails a lot more like considering who is expected or at the right place to do what, when, how and with what resources. Once this is understood and implemented, the head teachers and teachers are given the chance to do what they know right, their pupil and the whole system will be satisfied. Moreover, the environment will have the right human capital that understands and solves all problems in their environment. But unfortunately, we keep having a broken system, where every government activity is centralising, mediocrity is applauded and few individuals who probably have never been to a classroom, with the perpetual practice of copy and paste keep copying other countries curriculum and imposing on the users in the 21st century.

In the context of this study, we see that the Cameroon governments' input and the hunt for quality education is constantly on the rise. The state is fully a signatory to many international organisations like UNESCO, World Bank, United Nations Organisations especially with matters concerning education and again at the basic level. By this the government hopes to be able to combine external forces and tap new knowledge and techniques on the latest curriculum from world class institutions. Moreover, the state is constantly increasing the budget for education with the objective to enable the leaders to perform their duty appropriately. By increasingly building new schools, extending into the villages around the country shows that the state is determined to improve on the education at the primary level. This is a way of fulfilling the Education for All (EA) agreement by UNESCO. However, these schools are still handicap with limited teachers and the few

present are denied the right to participate in the curriculum process. This act alone creates a huge gap in the chain that is causing more harm than good to the society.

From this study, we could ascertain that the head teacher's role does not only limit the administration of the institution, the head teacher, the teaching staff, the community, the ministries are expected to be involved in the curriculum process. Curriculum process involves the different stages of constructing a curriculum and putting it into use. This plan or proposal is designed to help societies meet some educational needs or goals through the agency of their schools. It therefore passes through the stages of construction (planning) where choices are made as to what to include; it is then developed, implemented and evaluated to determine the extent to which it has effectively met the needs it was set to satisfy (Leister, 2021). Moreover, the curriculum development process systematically organises what will be taught, who will be taught, and how it will be taught. Each component affects and interacts with other components. For example, what will be taught is affected by who is being taught like their stage of development in age, maturity, and education. Methods of how content is taught are affected by who is being taught, their characteristics, and the setting.

Finally, in the context of this study, we examine the involvement of head teachers in the curriculum process. The curriculum used in the Cameroon primary school is expected to depict the type of youths the country expects to see in the near future. This five-chapter research work makes use of the latest scientific approaches in the course of the study. The first chapter is the background to the study, the second chapter is the related literature review and theoretical framework, the third chapter is the research methodology, the fourth chapter is data analysis and presentation of findings while the fifth chapter is discussion, recommendation and suggestions for further studies. Adopting this five-chapter presentation strategy, we are open to the enlarge possibility of examining the various chapters, concepts and theories from the first to the last chapter. This goes a long way to enforce the findings we have and the possibility of applying the results to practical society.

RECOMMENDATIONS

With the results it is clear that the objective has been attended, based on this, the following recommendations were made';

The two sub-system of the Cameroon primary educational system should do well to always and permanently include head teachers not forgetting teachers and even students in the needs assessment phase of the curriculum process in Cameroon primary schools.

The curriculum need assessment phase should be given a broad base advantage (bottom-up) so that the various stakeholders are able to extrapolate what the pupil should learn based on the reality of the changes in the environment.

The parents, industries have to determine what they need from young people, the system has to determine if there is a need for a new curriculum. Such activities cannot be done by a few individuals from the comforts of an office. Therefore, they should use the right people to achieve this.

Moreover, we recommend that the French and English primary education sub-system should always get the head teachers involved in the design phase of the curriculum process in Cameroon primary schools. This is very essential as it gives the head teachers the latitude to determine what type of didactic material, the infrastructure and the environment which is needed to prepare appropriate grounds for implementation. It is also important to include the teachers in the design process so that they will find themselves involved and easily identify the direction to take when it comes to the class work with the learners.

Furthermore, with teachers incredible position in curriculum implementation phase, based on this findings, the English sub-system is called upon to provide all the needs such as didactic material, the pupil's wellness and a conducive environment to implement the curriculum. In addition, the system needs to constantly empower the teachers via seminars, conferences and also motivate them to bear the cross of constant curriculum changes. It is not enough to just be a natural part of a process but also being armed with the right skills and tools makes the teacher a better fit in the implementation process.

Finally, we see from the findings that the head teachers and teachers and irreplaceable actors in the evaluation phase of the curriculum process. Based on this finding, we recommend that the English sub-system should do well to always include them in the evaluation phase of the curriculum process in Cameroon primary school. Moreover, they need to be constantly equipped with the evaluation techniques, tools and the mindset that provides the right information no matter how bad. Moreover, they are the right providers of data from the pupils, therefore without them the data may be biassed or unavailable. Therefore, they should be given the pride of place.

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APPENDIXES:

Appendix 1.

QUESTIONNAIRE FOR HEADTEACHERS AND CLASSROOM TEACHERS Dear Respondent,

This questionnaire is designed for research purpose on the topic, "The Effective Involvement of School Heads in the Curriculum Process." Your frank responses to the items on this questionnaire will go a long way into achieving the purpose for which it was designed. Rest assured that confidentiality to your responses is guaranteed. No response will be preferred to another.

Instructions: Read through each item on the questionnaire, tick the correct answer or fill the blank spaces.

SECTION A: DEMOGRAPHIC DATA

| 1. Region |
|--|
| 2. Name of School |
| 3. Gender: Male Female |
| 4. Role played in school a) Head teacher |
| c) Classroom teacher/Head teacher |
| 5) If classroom teacher, class taught |
| 6) Longevity in the teaching profession: a) 0-5yrs b) 6-10yrs |
| ☐ c) 11-15 yrs. ☐ 6-20yrs e) 20yrs+ ☐ ☐ |
| 7) Highest professional qualification: a) Gd.1 certificate b_ND |
| c) B.Ed |
| 8) Highest Academic Qualification: a) O/L b) 🖵 |
| c) B.Sc/B.A |
| Key: Strongly Agree = SA, Agree = A, Disagree = D, Strongly Disagree=SD |

SECTION B: NEED ASSESSMENTS DURING THE CURRICULUM PROCESS

| | STATEMENT | RESPONSE OPTIONS | | | | |
|-----|--|---|-------------------|----------|----------|--|
| | | SA | A | D | SD | |
| | I was involved in determining and assessing the needs | | | | | |
| | of the current curriculum | | | | | |
| | The present curriculum of primary and nursery | | | | | |
| | education effectively addresses the needs of potential | | | | | |
| | learners | | | | | |
| | Needs analyses at the base were made prior to designing | | | | | |
| | a new curriculum | | | | | |
| | Needs assessment in this curriculum resulted in | | | | | |
| | identifying the gabs between what learners are able to | | | | | |
| | do and what they need to be able to do. | | | | | |
| | This curriculum actually analysed the situation at | | | | | |
| | ground level alongside its stakeholders before it was | | | | | |
| | designed | | | | | |
| | The resources people at the grassroot possess were | | | | | |
| | considered before enacting the current curriculum. | | | | | |
| In | your opinion, what hinders effective need assessment be | fore des | ign of | a curric | ulum in | |
| Ca | meroon? | | | | | |
| | | | | | | |
| | | • | | | | |
| | | | | •••• | | |
| | | | | | | |
| W | hat proposals do you make to policy makers as far as nee | ds asses | ssments | are co | ncerned, | |
| be | fore designing a curriculum? | | | | | |
| | | | | | | |
| | | | | | | |
| ••• | | | • • • • • • • • • | •••• | | |
| | *************************************** | • | • | | | |

SECTION C: DESIGN PHASE OF THE CURRICULUM PROCESS

| STATEMENT | RESPONSE OPTIONS | | | ONS |
|---|------------------|---|---|-----|
| | SA | A | D | SD |
| I took part during the design phase of the current | | | | |
| curriculum from primary to nursery education | | | | |
| The organisation or arrangement of intended learning | | | | |
| outcomes are easily exploited during my classroom | | | | |
| teaching. | | | | |
| Attainable goals, based on societal needs were properly | | | | |
| selected and designed in the current curriculum. | | | | |
| Learning experiences at the base were considered and | | | | |
| selected to be used in attaining objectives. | | | | |
| Development of lesson plans within the framework of | | | | |
| the current curriculum is feasible. | | | | |
| The curriculum becomes more realistic if the class | | | | |
| teacher participates in its design phase | | | | |

| In your opinion, what are the difficulties involved for an effective design of a curriculum i |
|---|
| Cameroon? |
| |
| |
| |
| |
| |
| What proposals do you make to policy makers when designing a curriculum in Cameroon? |
| |
| |
| |
| |
| |

SECTION D: IMPLEMENTATION PHASE OF THE CURRICULUM

| STATEMENT | RESPONSE OPTIONS | | | |
|---|------------------|---|---|----|
| | SA | A | D | SD |
| I was consulted at the base on how to disseminate the | | | | |
| structured learning experiences in the curriculum of | | | | |
| primary and nursery education | | | | |
| Prior to implementation of this new curriculum I took | | | | |
| part in a professional development programmed for it. | | | | |
| Lesson delivery on the new curriculum is easy since the | | | | |
| practical modalities were considered. | | | | |
| Preparation of instructional material from this new | | | | |
| curriculum and their use is attainable by teachers, since | | | | |
| they contributed ideas during the conception of the | | | | |
| curriculum document. | | | | |
| Teachers effectively implement the view curriculum to | | | | |
| achieve a balanced focus on cognitive, affective and | | | | |
| psycho-motor domains. | | | | |
| The implementation of character education and | | | | |
| awareness of living together as found in the new | | | | |
| curriculum are easy and attainable. | | | | |

| In your opinion as far the implementation of the new curriculum of primary and nursery |
|--|
| education is concerned what difficulties do you find? |
| |
| |
| |
| |
| |
| What proposals do you make to policy makers as far as curriculum implementation is |
| |
| concerned? |
| concerned? |
| concerned? |
| |
| |

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SECTION E: EVALUATION PHASE OF THE CURRICULUM

| STATEMENT | RESPONSE OPTIONS | | | |
|---|------------------|---|---|----|
| | SA | A | D | SD |
| I am involved in evaluating the current curriculum. | | | | |
| I participate in monitoring and measuring learning achievement using this current curriculum. | | | | |
| Feedbacks are sent to policy makers after my evaluation | | | | |
| My feedbacks to policy makers after evaluation are used to upgrade the quality of the curriculum | | | | |
| Different aspects of the curriculum such as its relevance, content and ability to implement are regularly evaluated at the school level | | | | |
| Classroom teachers are involved in the summative evaluation of the curriculum | | | | |

APPENDIX 11:

QUESTIONNAIRE FOR PEDAGOGIC INSPECTORS

Dear Respondent,

This questionnaire is designed for research purpose on the topic, "The Effective Involvement of School Heads in the Curriculum Process." Your frank responses to the items on this questionnaire will go a long way into achieving the purpose for which it was designed. Rest assured that confidentiality to your responses is guaranteed. No response will be preferred to another.

Instructions: Read through each item on the questionnaire, tick the correct answer or fill the blank spaces.

SECTION A: DEMOGRAPHIC DATA

| 1. Region |
|---|
| 2. Name of School. |
| 3. Gender: Male Female |
| 4. Functions: a) Regional Ped. Inspector |
| c) Divisional Ped. Adviser d) Sub-Divisional Inspector |
| e) Pedagogic Animator |
| 5) Longevity in the teaching profession: a) 0-5yrs |
| c) 11-15 yrs |
| 6) Highest professional qualification: a) Grade 1 certificate b) HND |
| c) B.Ed |
| 7) Highest Academic Qualification: a) O/L b) A/L b |
| c) B.Sc/B.A |

Key: Strongly Agree = SA, Agree = A, Disagree = D, Strongly Disagree=SD

SECTION B: NEED ASSESSMENTS DURING THE CURRICULUM PROCESS

| STATEMENT | RESPONSE OPTIONS | | | |
|--|------------------|---|---|----|
| | SA | A | D | SD |
| I was involved in determining and assessing the needs of the current curriculum | | | | |
| The present curriculum of primary and nursery education effectively addresses the needs of potential learners | | | | |
| Needs analyses at the base were made prior to designing a new curriculum | | | | |
| Needs assessment in this curriculum resulted in identifying the gabs between what learners are able to do and what they need to be able to do. | | | | |
| This curriculum actually analysed the situation at ground level alongside its stakeholders before it was designed | | | | |
| The resource people at the grassroot possess were considered before enacting the current curricular. | | | | |

| In your opinion, what hinders effective need assessment before design of a curriculum in |
|--|
| Cameroon? |
| |
| |
| |
| What proposals do you make to policy makers as far as needs assessments are concerned |
| before designing a curriculum? |
| |
| |
| |
| |

SECTION C: DESIGN PHASE OF THE CURRICULUM PROCESS

| | STATEMENT | RESPONSE OPTIONS | | | |
|-----|--|---|---------|----------|----------|
| | | SA | A | D | SD |
| | I took part during the design phase of the current | | | | |
| | curriculum from primary to nursery education | | | | |
| | The organisation or arrangement of intended learning | | | | |
| | outcomes are easily exploited during my classroom | | | | |
| | teaching. | | | | |
| | Attainable goals, based on societal needs were properly | | | | |
| | selected and designed in the current curriculum. | | | | |
| | Learning experiences at the base were considered and | | | | |
| | selected to be used in attaining objectives. | | | | |
| | Development of lesson plans within the framework of | | | | |
| | the current curriculum is feasible. | | | | |
| | The curriculum becomes more realistic if the class | | | | |
| | teacher participates in its design phase | | | | |
| In | your opinion, what are the difficulties involved for an effective of the second of the | ective de | sign of | a currio | cular in |
| Ca | meroon? | | | | |
| | | | | | |
| ••• | | • • • • • • • • • • • | ••••• | ••• | |
| ••• | | • | ••••• | ••• | |
| ••• | | • • • • • • • • • • • • | ••••• | ••• | |
| *** | hat managala da yayı mala ta maliay malyana yıkan dasismin | | | : Co | |
| VVI | hat proposals do you make to policy makers when designing | ig a curri | culum | ın Cam | eroon? |
| | | | | | |
| | | | | | |
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| | | | | | |

SECTION D: IMPLEMENTATION PHASE OF THE CURRICULUM

| STATEMENT | RESPONSE OPTIONS | | | NS |
|---|------------------|---|---|----|
| | SA | A | D | SD |
| I was consulted at the base on how to disseminate the | | | | |
| structured learning experiences in the curriculum of | | | | |
| primary and nursery education | | | | |
| Prior to implementation of this new curriculum I took | | | | |
| part in a professional development programme for it. | | | | |
| Lesson delivery on the new curriculum is easy since the | | | | |
| practical modalities were considered. | | | | |
| Preparation of instructional material from this new | | | | |
| curriculum and their use is attainable by teachers, since | | | | |
| they contributed ideas during the conception of the | | | | |
| curriculum document. | | | | |
| Teachers effectively implement the view curriculum to | | | | |
| achieve a balance focus on cognitive, affective and | | | | |
| psycho-motor domains. | | | | |
| The implementation of character education and | | | | |
| awareness of living together as found in the new | | | | |
| curriculum are easy and attainable. | | | | |

| In your opinion as far the implementation of the new curriculum of primary and nursery |
|---|
| education is concerned what difficulties do you find? |
| |
| |
| |
| |
| |
| What proposals do you make to policy makers as far as curriculum implementation is concerned? |
| |
| |
| |

SECTION E: EVALUATION PHASE OF THE CURRICULUM

| STATEMENT | RESPONSE OPTIONS | | | | | |
|--|------------------|---|---|----|--|--|
| | SA | A | D | SD | | |
| I am involved in evaluating the current curriculum. | | | | | | |
| I participate in monitoring and measuring learning | | | | | | |
| achievement using this current curriculum. | | | | | | |
| Feedbacks are sent to policy makers after my evaluation | | | | | | |
| My feedbacks to policy makers after evaluation are used | | | | | | |
| to upgrade the quality of the curriculum | | | | | | |
| Different aspects of the curriculum such as its relevance, | | | | | | |
| content and ability to implement are regularly evaluated | | | | | | |
| at the school level | | | | | | |
| Classroom teachers are involved in the summative | | | | | | |
| evaluation of the curriculum | | | | | | |

APPENDIX 111:

OBSERVATION CHECKLIST

| 1) The head teacher had a copy of the curriculum |
|--|
| a) Available |
| 2) Class teachers had their own copies for class use. |
| a) All had |
| 3) The head teacher had schemes of work developed for each class in the school. |
| a) Schemes present for all classes |
| b) Schemes present for some classes |
| c) Schemes present for only one class |
| d) Schemes not present |
| 4) The head teacher had schemes of work developed for subject disciplines. |
| a) All subjects had schemes b) Some subjects had schemes |
| c) No subject had schemes |
| 5) The class teachers had schemes of work developed for their classes. |
| a) All had b) Some had c) Only one had d) None had |
| 6) The class teachers each had schemes of work developed for each subject being taught in the class. |
| a) All subjects had |
| c) Only one subject had schemes |
| 7) Lesson notes were developed from the schemes. |
| a) Yes b) No |

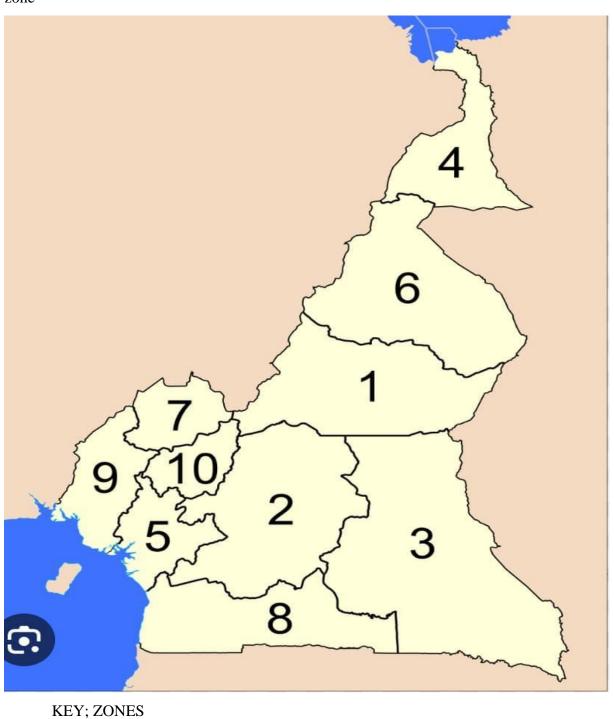
Key: Strongly Agree = SA, agree = A, Disagree = D, Strongly Disagree = SD

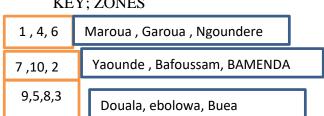
| S/N | Statement | Respo | onse op | tions | |
|-----|---|-------|---------|-------|----|
| | | SA | A | D | SD |
| 8) | The lesson notes produced had properly designed preambles. | | | | |
| 9) | The objectives of the lesson notes were properly stated as intended in the new curriculum. | | | | |
| 10) | The body of the lesson notes were designed in line with the prescriptions of the new curriculum. | | | | |
| 11) | The content of the materials taught affected cognitive, affective and psychomotor learning. | | | | |
| 12) | Lesson delivery as observed was systematic and accomplished the very purpose for which the new curriculum was designed. | | | | |
| 13) | Evaluation was properly done as prescribed in the new curriculum. | | | | |

APPENDIX IV:

Map of Cameroon Showing the different zones of the study.

461 stand for northern zone, 2710 stand for the centre zone and 3859 stand for the southern zone





Appendix V

THE IMPLEMENTATION OF THE NEW PRIMARY SCHOOL CURRICULUM 2018 FOR LEVEL THREE

Sample individual lesson plan on mathematics for Tuesday 5th April 2022

TOPIC: The different components of mathematics.

LESSON: Remediation on mathematics paper 1.

SPECIFIC OBJECTIVES: From a problem situation, through giving questions by the end of the lesson pupils should be able to solve problems in mathematics paper 1 that they did not understand.

ENTRY BEHAVIOUR: Pupils can identify and give the learning of the four mathematical rules $(+, -, x, \div)$.

RESOURCES: Text, Symbol cards.

REFERENCE: Cameroon Primary School Curriculum.

| STAGES | CONTENT/MATTER | FACILITATOR'S ACTIVITIES | LEARNERS' ACTIVITIES | TEACHING/LEAR NING |
|---------------|-------------------------------|-----------------------------|-----------------------|-----------------------|
| INTRODUC | Look at the following | - Put pupils in | - Work in teams | - Chalkboard |
| | mathematical signs, say their | teams | - Answer questions | - Pieces of paper |
| TION 5MINS | name and give their meaning. | - Asks questions | - Present answer | - Exercise book |
| SIVIINS | +, -, x, ÷ | - Corrects answers | | |
| | Problem situation | - Presents | - Read problem as | - Chalkboard |
| | Read the problem and | problems | instructed | - Exercise book |
| | attempt answers to the | - Asks questions | - Answer questions | |
| PRESENTA | questions that follows. | - Explains | as instructed | |
| TION | | - Corrects where | - Work with teacher | |
| 30MINS | See attached page | necessary | to provide answers to | |
| JUMINS | | | questions | |
| | | | - Copy correct | |
| | | | answers in exercise | |
| | | | book | |
| | In your exercise book, solve | - Assigns pupils to | - Solve exercise in | |
| | G.C.E 2020 examination | do exercise from | exercise book | |
| EVALUATI | from number 1 to 10. | Ngasu | - Present answer for | |
| ON | (Ngasu mathematics) | Mathematics | correction | |
| 10MINS | | - Moves round, | | |
| | | corrects and assists | | |
| | | slow learners | | |

Appendix V1.

PROBLEM SITUATION

Mr. Tanyi is an Internally Displaced Person (IDP) who left the North West region for the centre region. In the centre region he decided to do livestock farming in order to keep life going. He weighed his chickens in kilogram (kg) before selling them. He feeds his pigs, goats and sheep in fraction. He always takes stock of his live stocks in numbers. To treat his animals, he uses a decimal graduated syringe. Tom, a class 6 boy, decides to assist his uncle in his business but had difficulties answering the following questions.

- 1) Mr. Peter sold chicken for 382,450F cfa and asked Tom to write this amount in words. Help him.
- 2) Tom was asked to count the number of chicken in the poultry and he told his uncle they represent one fourth of the livestock. What is this in decimal notation?
- 3) The goats eat 4025 grams of food every day. What quantity of food will they eat for one week?
- 4) Tom's uncle has 938 piglets and decides to divide them in 7pigsty, how many piglets will each sty hold?
- 5) The vitamin syringe for the animals is graduated as 0.2mm, 0.25mm, 0.252mm, 1.0mm and 1.10mm arrange them in descending order.
- 6) Our school wants to buy 34 chickens for the end of year and graduation ceremony. How much money will Mr. Tanyi receive if he sold a chicken for 2875F cfa?
 - 7) Give the total number of animals for each tally.

| Animal | Tally | Total |
|--------|---------|-------|
| Goals | ####### | |
| Pigs | #### | |
| Sheep | ###### | |

- 8) From Mr. Tanyi's livestock farm to the market, a cyclist covers 25 km in 30 minutes. How far does the cyclist go in 90 minutes?
- 9) Mr. Tanyi's poultry measures 12m long by 9m wide. Calculate the area that it occupies.
- 10) In cleaning the surrounding of the poultry, Tom went round it 3 times what distance did he cover altogether.

Appendix V11.

PEDAGOGIC PROJECT PLAN

PROBLEM SITUATION: The water that flows from the school tap is always dirty and makes the children to be sick and miss classes. To solve the problem we want to filter our water to make fit for drinking.

PERIOD: $2^{nd} - 30^{th}$ November.

ITL: The school.

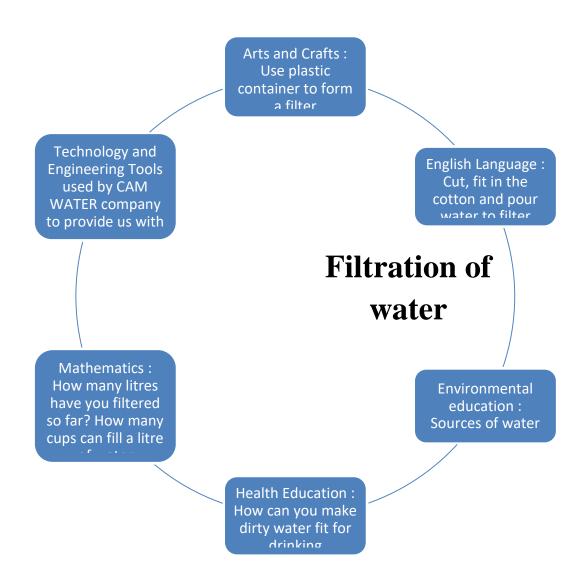
PROJECT ENVISAGED: Making water fit for drinking by filtering.

TYPE: Problem solving (Short term).

| STAGES WEEK | PEDAGOGICAL LEVEL | DOMAIN | SUBJECTS TO BE INTEGRATED | EXPECTED LEARNING OUTCOME | RESOURCES | STAKE HOLDERS | EVALUATION |
|----------------|--|--|--|--|--|--|--|
| 1 | Identification choice and preparation | - Basic knowledge in communal life | English LanguageMathematicsTechnology andEngineeringHealth Education | Identification skillsLearning skills | - Mineral water bottles - A pair of scissors or knife- cotton - Tap water - Glasses/Cups | - Parents - Pupils - Teachers | Diagnostic Evaluation Teacher/pupils check and validate materials gathered |
| 2 | Monitoring progress - Selection of the materials - Cutting - Installing cotton in the funnel-like part - Placing it on the bottom-like part of the bottle and pouring water from the tap | - Communal life and national integration - Basic knowledge - Vocational skills | EnglishMathematicsS/TechnologyArts and Crafts | Selecting materialsCuttingFittingFiltering | - Bottles - Cotton - Scissors - Knife - Tap water - Glasses/Cups | Teacher and pupils | Formative evaluation Asking guide question like name some of the things we are using Teacher demonstrates Pupils work in groups to filter water |
| 3 | - Culmination - Presentation - Evaluation | - Basic knowledge in communal life and national integration | - English Language - Science / Technology | Exposition skills Presentation by explaining how the water was filtered Pupils collaborate | - Plastic bottle - Glasses/Cups | ParentsTeachersPupilsAdministrators | - Summative evaluation - Pose a general question involving all 3 stages |

Appendix V111.

INTEGRATION OF ACTIVITIES WITH PROJECT



APPENDIX 1X:

FICHE QUOTIDIEN DU FRENCH POUR 3 JANVIER 2022

CENTRE D'INTERET: Occupation.

<u>DISCIPLINE</u>: Education critique et morale.

SOUS DISCIPLINE: Education morale.

TITRE: Les adjectifs possessifs.

OPR: Le curriculum de l'enseignement premier anglophone Camerounais.

OPO: A partir de la présentation d'image et d'une situation problème, après analyse et exploitation, au terme de la leçon, chaque apprenant devra être capable de : - lire les adjectifs possessifs et souligner les adjectifs appropriés dans les phrases.

<u>REVISION</u>: L'enseignant propose une chanson qui est en rapport avec la notion de la leçon.

| | ETAPES | CONTENANT | ACTIVITÉS DE LA MAÎTRESSE | ACTIVITI ES D'ELEVE | MATERIEL DIDACTIC |
|---|--|---|--|--|----------------------|
| $O_{\mathcal{E}(\Omega_{\mathcal{L}})}$ | 3MWSRTE | - Qu'es ce qu'il y a dans mon sac? Un ballon non non non Présente un support visuel Monsieur Muna avec son sac. Il est le | - Entonne la chanson - Présente l'image | - Chantent avec la maîtresse - Observant | - |
| | | maître de class 3. Qu'est-ce qu'il dit à ses élèves en leur montrant son sac? Voici mon sac. C'est le mien. | problème | - Répondent oralement | |
| | WESE | Voici le sac d'Amina C'est (ma, son) sac. Voici mon, sa) cahier. C'est le mien. | - Propose un exercice avec les adjectifs possessifs | - Donnent les réponses oralement | - Le tableau |
| 0, | TOT | Si quelque chose m'appartient, on dit (mon) Comme à mon cahier. Si çaappartient à Amina ou Paul, on dit (son) Comme à son sac. | - Ressortir la règle - Ecriture de la règle au tableau | - Écoutent attentiveme nt - Observent la règle | - Le tableau |
| S. C. | A COMPANY OF THE PROPERTY OF T | LES ADJECTIFS POSSESSIFS Ce sont les mots qui expriment la propriété. Les mots sont : | - Consolider le nouvel apprentissage | - Écoutent attentiveme nt | - Le tableau |

| | Mon Notre Ton Votre Son Leur | | | |
|---|--|--|--|--|
| O STANDARD OF THE PARTY OF THE | Lit les adjectifs possessifs Soulignez les adjectifs possessifs qui conviennent (1) Muna, voici (mon/ton) sac ? (2) Où est (son/ton) sac ? (3) Voilà (leur/sa) banc. (4) Voici (notre/ma) maître. | - Demande aux élèves de lire en groupe - Demande aux élèves de faire l'exercice dans leurs cahiers d'exercices | - Lisent en groupe - Travaillent dans leurs cahiers d'exercices | Les cahiersLe tableau |

APPENDIX X:

| | PRESENTATION OF DATA SHEET | | | | | | | | |
|-----|----------------------------|-----------------------------------|--------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------|-----------------------------------|--|
| S/N | NEED ASSESS MENT | SCHOOL HEAD INVOLVE MENT | CURRICU LUM DESIGN | SCHOOL HEAD INVOLVE MENT | IMPL EMEN TATI ON | SCHOOL HEAD INVOLV EMENT | EVALU ATION | SCHOOL HEAD INVOLVE MENT | |
| 1 | 13 | 10 | 11 | 10 | 8 | 10 | 11 | 10 | |
| 2 | 20 | 14 | 12 | 14 | 13 | 14 | 12 | 14 | |
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| 4 | 14 | 11 | 10 | 11 | 12 | 11 | 10 | 11 | |
| 5 | 6 | 6 | 9 | 6 | 11 | 6 | 0 | 6 | |
| 6 | 16 | 15 | 13 | 15 | 13 | 15 | 20 | 15 | |
| 7 | 12 | 14 | 17 | 14 | 12 | 14 | 17 | 14 | |
| 8 | 14 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | |
| 9 | 20 | 15 | 17 | 15 | 8 | 15 | 7 | 15 | |
| 10 | 12 | 11 | 12 | 11 | 10 | 11 | 10 | 11 | |
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| 14 | 11 | 14 | 18 | 14 | 13 | 14 | 14 | 14 | |
| 15 | 16 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | |
| 16 | 18 | 17 | 18 | 17 | 13 | 17 | 18 | 17 | |
| 17 | 7 | 11 | 10 | 11 | 13 | 11 | 15 | 11 | |
| 18 | 14 | 15 | 15 | 15 | 14 | 15 | 18 | 15 | |
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| 21 | 14 | 11 | 14 | 11 | 9 | 11 | 8 | 11 | |
| 22 | 13 | 13 | 13 | 13 | 17 | 13 | 11 | 13 | |
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| 24 | 15 | 13 | 14 | 13 | 11 | 13 | 13 | 13 | |
| 25 | 14 | 12 | 17 | 12 | 07 | 12 | 11 | 12 | |
| 26 | 18 | 13 | 12 | 13 | 07 | 13 | 15 | 13 | |
| 27 | 14 | 12 | 13 | 12 | 10 | 12 | 12 | 12 | |
| 28 | 17 | 12 | 13 | 12 | 07 | 12 | 12 | 12 | |
| 29 | 6 | 10 | 16 | 10 | 12 | 10 | 09 | 10 | |
| 30 | 12 | 12 | 11 | 12 | 06 | 12 | 19 | 12 | |
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| 33 | 5 | 06 | 10 | 06 | 05 | 06 | 05 | 06 |
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| ## | 08 | 08 | 06 | 08 | 09 | 08 | 10 | 08 |
| ## | 06 | 10 | 12 | 10 | 08 | 10 | 15 | 10 |
| ## | 06 | 10 | 12 | 10 | 08 | 10 | 15 | 10 |
| ## | 10 | 13 | 17 | 13 | 08 | 13 | 15 | 13 |
| ## | 13 | 13 | 17 | 13 | 08 | 13 | 15 | 13 |
| ## | 13 | 09 | 11 | 09 | 07 | 09 | 05 | 09 |
| ## | 11 | 13 | 10 | 13 | 10 | 13 | 16 | 13 |
| ## | 11 | 04 | 00 | 04 | 03 | 04 | 00 | 04 |
| ## | 12 | 13 | 13 | 13 | 10 | 13 | 16 | 13 |
| ## | 15 | 04 | 00 | 04 | 00 | 04 | 00 | 04 |
| ## | 13 | 13 | 12 | 13 | 12 | 13 | 15 | 13 |
| ## | 11 | 13 | 14 | 13 | 13 | 13 | 13 | 13 |
| ## | 08 | 12 | 12 | 12 | 12 | 12 | 15 | 12 |
| ## | 15 | 15 | 18 | 15 | 18 | 15 | 17 | 15 |
| ## | 08 | 15 | 20 | 15 | 18 | 15 | 13 | 15 |
| ## | 17 | 18 | 18 | 18 | 19 | 18 | 17 | 18 |
| ## | 14 | 14 | 17 | 14 | 11 | 14 | 13 | 14 |
| ## | 09 | 07 | 10 | 07 | 09 | 07 | 00 | 07 |
| ## | 16 | 16 | 16 | 16 | 14 | 16 | 17 | 16 |
| ## | 15 | 15 | 12 | 15 | 15 | 15 | 16 | 15 |
| ## | 13 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |

| ## | 12 | 14 | 13 | 14 | 11 | 14 | 20 | 14 |
|----|----|----|----|----|----|----|----|----|
| ## | 16 | 18 | 19 | 18 | 18 | 18 | 17 | 18 |
| ## | 11 | 11 | 12 | 11 | 11 | 11 | 10 | 11 |
| ## | 16 | 14 | 16 | 14 | 12 | 14 | 12 | 14 |
| ## | 11 | 11 | 11 | 11 | 10 | 11 | 11 | 11 |
| ## | 11 | 14 | 14 | 14 | 14 | 14 | 18 | 14 |
| ## | 15 | 14 | 10 | 14 | 12 | 14 | 18 | 14 |
| ## | 07 | 08 | 09 | 08 | 07 | 08 | 10 | 08 |
| ## | 15 | 16 | 17 | 16 | 17 | 16 | 16 | 16 |
| ## | 16 | 20 | 17 | 20 | 17 | 20 | 19 | 20 |
| ## | 07 | 07 | 09 | 07 | 12 | 07 | 00 | 07 |
| ## | 13 | 11 | 09 | 11 | 07 | 11 | 16 | 11 |
| ## | 18 | 12 | 00 | 12 | 16 | 12 | 15 | 12 |
| ## | 12 | 13 | 11 | 13 | 15 | 13 | 15 | 13 |
| ## | 13 | 11 | 00 | 11 | 12 | 11 | 20 | 11 |
| ## | 18 | 12 | 00 | 12 | 10 | 12 | 18 | 12 |
| ## | 19 | 10 | 16 | 10 | 04 | 10 | 00 | 10 |
| ## | 12 | 13 | 12 | 13 | 15 | 13 | 12 | 13 |
| ## | 08 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| ## | 16 | 16 | 13 | 16 | 17 | 16 | 17 | 16 |
| ## | 12 | 11 | 12 | 11 | 11 | 11 | 10 | 11 |
| ## | 08 | 10 | 12 | 10 | 11 | 10 | 09 | 10 |
| ## | 13 | 10 | 11 | 10 | 8 | 10 | 11 | 10 |
| ## | 20 | 14 | 12 | 14 | 13 | 14 | 12 | 14 |
| ## | 16 | 14 | 14 | 14 | 13 | 14 | 15 | 14 |
| ## | 14 | 11 | 10 | 11 | 12 | 11 | 10 | 11 |
| ## | 6 | 6 | 9 | 6 | 11 | 6 | 0 | 6 |
| ## | 16 | 15 | 13 | 15 | 13 | 15 | 20 | 15 |
| ## | 12 | 14 | 17 | 14 | 12 | 14 | 17 | 14 |
| ## | 14 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| ## | 20 | 15 | 17 | 15 | 8 | 15 | 7 | 15 |
| ## | 12 | 11 | 12 | 11 | 10 | 11 | 10 | 11 |
| ## | 12 | 12 | 14 | 12 | 11 | 12 | 12 | 12 |
| ## | 16 | 13 | 14 | 13 | 12 | 13 | 13 | 13 |
| ## | 12 | 12 | 13 | 12 | 10 | 12 | 16 | 12 |
| ## | 11 | 14 | 18 | 14 | 13 | 14 | 14 | 14 |
| ## | 16 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |

| ## | 18 | 17 | 18 | 17 | 13 | 17 | 18 | 17 |
|----|----|----|----|----|----|----|----|----|
| ## | 7 | 11 | 10 | 11 | 13 | 11 | 15 | 11 |
| ## | 14 | 15 | 15 | 15 | 14 | 15 | 18 | 15 |
| ## | 16 | 11 | 15 | 11 | 8 | 11 | 8 | 11 |
| ## | 15 | 13 | 14 | 13 | 13 | 13 | 10 | 13 |
| ## | 14 | 11 | 14 | 11 | 9 | 11 | 8 | 11 |
| ## | 13 | 13 | 13 | 13 | 17 | 13 | 11 | 13 |
| ## | 11 | 12 | 13 | 12 | 12 | 12 | 12 | 12 |
| ## | 15 | 13 | 14 | 13 | 11 | 13 | 13 | 13 |
| ## | 14 | 12 | 17 | 12 | 07 | 12 | 11 | 12 |
| ## | 18 | 13 | 12 | 13 | 07 | 13 | 15 | 13 |

APPENDIX X1 :
Sample Size (S) required for the given population size (N)

| N | S | N | S | N | S | N | S | N | S |
|----|----|-----|-----|-----|-----|------|-----|--------|-------|
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 256 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 34625 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500 | 354 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 191 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 170 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 40 | 44 | 180 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 190 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 200 | 132 | 460 | 210 | 1600 | 310 | 10000 | 370 |
| 65 | 56 | 210 | 136 | 480 | 211 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 220 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 230 | 144 | 550 | 226 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 240 | 148 | 600 | 234 | 2000 | 322 | 10000 | 380 |
| 85 | 70 | 250 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 260 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 254 | 2600 | 335 | 100000 | 384 |

Source: From R.V Krejcie and D.W. Morgan (1970). Determining Sample Size for Research Activities, Educational and Psychological measurement. 30,608, Sage Publications.