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CURRICULUM IMPLEMENTATION PRACTICES IN PRIMARY SCHOOLS AND SUSTAINABLE **EDUCATION IN YAOUNDE III AND VI**

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A DIPLOMA IN SCIENCE OF EDUCATION (DIPEN II)

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DEDICATION

- -To my parents Mr Sofa Joseph Meto of blessed memory and Mrs Anna Lem.
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ABBREVIATIONS

AFDECE Association Française D'education Comparee

CCE Connection of Education for Sustainability and Climate Change Education

CBA Competence Based Approach

CBE Competence Based Education

CEP CERTIFICAT D'ETUDES PRIMAIRE

DESD Decade of Education for Sustainable Development

ESD Education for Sustainable Development

EFA Education for All

GAP on EFS The Global Action Program on Education for Sustainability

GCED Global Citizenship Education.

IC INSTITUTEUR CONTRACTUEL

IEG Instituteur De L'enseignement général

MDG Millennium Development Goals

OBE Objective Based Education

PTA Parent Teachers Association

SE Sustainable Education

TVET Technical and Vocational Education and Training

UNESCO United Nations Educational Scientific and Cultural Organisation

WSSD World Summit on Sustainable Development

ZPD Zone of Proximal Development

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ABSTRACT

This study examines ''curriculum implementation processes in the primary school and sustainable education in Yaoundé III and VI subdivisions''. However, from the observations made, we realized that a great number of children go to school just because they want to perform and not because they want to have a mastery of the knowledge, skills, competences, values and behaviours which they can use in future to solve their daily life problems. Most of them do not envisage the curriculum implementation process to be sustainable even after when they have completed primary school. Law Number 98/004 of April 14th, 1998 of orientation on education in Cameroon article 4, states that children should be trained in such a way that they will be intellectually, morally, civically and socially upright to integrate well in the society. Article 5 states that, children should be trained in such a way that they will be deeply rooted into their culture but opened to the world. Despite all these, it was noticed that children don't still make a good use of it. The main question posed was 'how does curriculum implementation processes influence a sustainable education in primary schools? 'The above question was further divided into three sub questions and hypothesis were emitted to these research questions.

A review of literature was done on concepts like; (curriculum implementation practices, sustainable education, need analysis/curriculum design, curriculum implementation, curriculum evaluation); theories such as behaviourism, constructivism, socio-constructivism, experiential, motivation and the change and a review of other related literature. The research design used was the qualitative research design. The study area was the Yaoundé III and VI subdivisions, even though there was a wide of primary schools all over, the researcher chose just three schools to work with namely, Government Practicing Primary School Melen 1 group 1, Government English Primary School Group II Etoug-Ebe and Goelands Bilingual Nursery and Primary School Biyemassi Yaoundé. The population of the study was primary school teachers of the above-mentioned schools and the target population was made up of level three teachers. The methods used for the collection of data were observation and interview. The instruments used were the observation grid and the interview guide and the sampling technique was the non-probabilistic sampling technique and the sample was made up of eight (8) teachers out of ten (10). The results were analysed according to the different opinions of the teachers from the three selected primary schools. This was done following the sub themes of the work which were the planning/designing phase, the delivery phase and the evaluation phase.

After all the analysis basing on the three-hypothesis made, it was confirmed that curriculum implementation practices in primary school has an influence in sustainable education. To conclude we recommended that teachers should be well trained on the notion of sustainable education that is, more pedagogic seminars should be organised, schools should be well equipped with enough didactic materials to obtain a durable education.

RESUME

Cette étude examine "curriculum implementation processes in the primary school and sustainable education in Yaoundé III and VI subdivisions." A parti des observations faites, nous avons constaté que la plupart des élevés fréquentent seulement pour être performant pendant les compos et non parce qu'ils veulent avoir une maitrise du savoir, des compétences, des valeurs, des attitudes et des comportements qui pourrons les être utiles dans leurs vies quotidiennes. La plupart ne prévoit pas que l'implémentation du processus du curriculum pourrait être durable même après avoir finir avec les études primaires. La loi numéro 98/004 du 14 avril 1998 d'orientation sur l'éducation au Cameroun article 4 stipule que les enfants devront être former pour devenir des intellectuels possédants des bonnes morales dans le but de bien s'intégrer dans leurs communautés respectives 'article 5 de cette même loi ci haut stipule que la formation des élevés devrait englober leurs cultures et en même temp n'oubliant pas la culture de l'autre. Malgré les demandes de cette loi, il a été constaté que les élevés ne font pas usage de cette dernière. A ce fait, la question qui se pose est celle de savoir 'comment est-ce que le processus de l'implémentation du curriculum influencent -il une éducation durable au cycle primaire'. Cette question ce dessus est subdivisée en trois parties.

Dans la revue de littérature, nous avons revu les concepts tels que ; implémentation des pratiques curriculum, l'éducation durable, l'implémentation du curriculum, l'évaluation du curriculum. Les théories telles que le behaviorisme, le constructivisme, le socioconstructivisme, la motivation et la théorie d'changement étaient utiles dans l'analyse de ce travail. Nous nous sommes servies du plan de recherche qualitatif vu que le chercheur était intéressé à savoir comment les pratiques de l'implémentation du curriculum dans le cycle primaire influence une éducation durable. Nous avons choisi les arrondissements de Yaoundé IIIème et VIème comme domaines d'études et précisément les établissements ; école publique d'application Melen 1 group 1, Gouvernement English Primary school group 2 Etoug-Ebe et Le Groupe scolaire Bilingues Geolands Biyem-Assi Yaoundé. La population d'étude était les enseignants de l'école primaire de Yaoundé IIIème et VIème et la population cible était composer des enseignants du niveau trois des dites établissements. Les méthodes d'études que nous avons utilisées pour collecter les données étaient l'observation et l'interview. Les résultats de nos analyses sont basés sur les différentes opinions des enseignants.

Après tous les analyses basant sur les hypothèses émues, nous avons conclus que les processus d'implémentation du curriculum au cycle primaire influencent une éducation durable; c'est-à-dire, organiser les séminaires pédagogiques à plusieurs reprises, équiper les établissements avec des matériels didactiques afin d'obtenir une éducation durable.

GENERAL INTRODUCTION

Education in Cameroon schools is guided by laws like the orientation law number 98/004 of April 14th on education which precise the organisation of the country's educational system and it is reinforced by the strategic documents for the growth and employment of all what has been described as its objectives for example, one of Cameroon's educational visions is to train a citizen who will acquire long-life learning skills, competences and creativity skills that will help him or her in resolving his own daily life problems, which corresponds to each level of training according to a précised plan of action. Some of these objectives included:

The amelioration of the effectiveness and quality of training (for example the educational system of Cameroon aims at having a society that is made up of citizens who have acquired knowledge, competences, skills attitude/ behaviours and values which can make them to be useful citizens in the society in which they find themselves.

They also aim at ameliorating education in such a way that everyone has access to education and there should be an equality in education. This supports one of the objectives of the Education for All (EFA) which took place in Thailand in 1995.

They also aimed at developing an effective partnership with all the parties that take part in the teaching or training process of children.

The world forum on education held in Thailand had as one of its main preoccupations, the acquisition of a long-life learning which states that each person at each stage in his life should have the possibility of acquiring learning skills that will be durable after having acquired the necessary knowledge, competences, skills, values and behaviours which will help them realise their aspirations. Therefore, the primary school is seen as one of the first scholar institutions through which children are supervised and followed up to prepare them for their entrance into real life activities for it is in the primary school that the child gets initiated in the learning of basic notions such as behaviours, values, skills, competences and why not useful knowledge which is not supposed to end only at the level of the classroom but it has to be taken right to the extent of resolving problems met by the learners in their present and future life.

Lev Vygotsky (1978), in his socio constructivism theory which is considered as one of the foundations of constructivism asserts that children through the Zone of Proximal Development (ZPD), have the ability to perform certain tasks with the help of their elder ones such as their parents, their peers and even their teachers; such as their ability to solve problems independently with the help of the mobilised resources acquired in school based on their past experiences gotten from their interactions with those in their society. Jacques Tardif (1999), in his theory of transfer of knowledge asserts that, children should be allowed to use the knowledge which they have acquired in school in the society or back at home to resolve their daily life problems. Despite all what these laws, theorists and objectives of forumn states, concerning children and the future use of the acquired resources, there is still a problem as it was noticed that children after completing primary school, some of them who do not have money to push through with their education, they roam the streets and quarters doing nothing, some still portray poor behaviours in the society which is not in conformity with what the curriculum aims and what the educational policies and laws on education expects from the citizens. Because of this, it caused the researcher to carry out a research on the topic curriculum implementation practices in primary schools and sustainable education in Yaoundé III and VI subdivisions. The aim of the research work was to find out how curriculum implementation practices influence sustainable education in primary schools. The work was further structured in to five (5) chapters for a better presentation.

- Chapter one which consists of the problem of the study.
- Chapter two which is the review of literature which is further divided into the conceptual framework, (such as sustainable education and curriculum implementation processes, need analysis, curriculum design, curriculum implementation and curriculum evaluation), empirical frame work or theoretical framework (behaviourism, constructivism, socio-constructivism, motivational learning theory, experiential theory, transfer of learning theory and theory of change) and some other related literature.
- Chapter three consists of research methodology
- Chapter four which consists of data presentation of results aimed at verifying the objectives of the research.
- Chapter five is reserved for the analysis, interpretation of the results, limitations and recommendations.

CHAPTER I PROBLEM OF THE STUDY

1.0.Introduction

There has been a progressive move from one approach to another like it has been the case from the traditional approach of resolving problems to the modern ways of solving these same problems. This approach simply proves that there is a need for improvement in education when planning the curriculum, designers should take in to consideration all the needs or things that will make the education obtained by these children sustainable. That is, they should look at the needs of the school such as the availability of learning materials. This is education that concerns key sustainable issues for development into teaching and learning for example climate change, their behaviours and their actions taken for sustainable development. Consequently, this education promotes competences like critical thinking, imagining future scenario and decision making in a collaborative way. Thus, this education requires far reaching changes in the way education is often practiced these days. This education can be realised only if when programming the curriculum, it takes into consideration certain dispositions like the needs of the learners who form part of the society. That is, need analysis should be like knowing the following questions like what should be programmed, to whom should it be taught? who is going to teach it? where is it going to be done? and how is this going to take place? These are some of the questions that guide state and stakeholders when designing the curriculum, implementing it and evaluating it. (Curriculum implementation practice) is the name given to all these.

Some of the reasons that showed that the education given in Cameroon schools is not sustainable and it could be diagnosed includes the following

-Content of the curriculum: Here, it simply means that the policies and laws made by the state to provide quality and life skills knowledge are not really put into practice during implementation. That is, what is planned in the curriculum is not what is realised in the field. Learning is only cognitively oriented as earlier mentioned above. Also, it could be that when planning, learners' need such as age is not considered. This means that the children learn but they fail to apply what they learn from school in their daily life situations

-Teachers: Here, the problem will be on the skills of the teacher that is, trained or untrained. The teacher's teaching methods and techniques might not be the best. For instance, a teacher who uses lecture method in an arts and craft lesson instead of demonstration method is obviously not doing a good job. He rather is misleading and killing the learners' competences and skills. With this, they will be unable to use the lesson taught in class in their daily lives.

-Pupils: On the part of the learners, some of their ages do not suit the right school going age and as a result, they face difficulties in storing the knowledge acquired. It can also emanate from the inattentiveness of learners during lessons and they are adamant to change. When these children learn in class, it only ends in class and they do not have the initiative of using it in the society—even after they complete school there by, creating an impact in the communities where they live. For example, if children learn a lesson in class on the topic pollution in geography—and environmental science and still go about littering dirt everywhere, it only means that education acquired is not sustainable and something needs to be done.

-Institutions (Schools): This can be a problem when the institutions do not really match with the needs of the learners. For instance, if they are not well—equipped with the necessary logistics such as electricity, toilets, canteens, infirmaries and you can name the rest, it is obvious that teaching and learning process will be wanting. It will be absurd to think that an ICT lesson is taught in a school which has gotten no computer laboratory. It is for this reason we say education becomes unsustainable

1.1 Contextual justification of the study

The educational law number 98/004 of April 14th, 1998, laid down some general guidelines for education in Cameroon. These laws, based on orienting the education of Cameroon was also said to be applicable in both the nursery, primary and secondary, grammar, vocational and technical education as well as to the teacher training. It covers three basic aspects of education in Cameroon, namely, the general goal of education in Cameroon, formulation and implementation of educational policies and financing of education and the organisation, evaluation of the educational system and research in education. (Tambo, 2003. P 121 to 122). These laws laid guidelines for education in Cameroon some of which contributed to this piece of research work such as the article 4 and article 5.

Article 4: The general goal of education, according to Tambo (2003, p. 281) is to train children for their intellectual, physical, civic and moral development and their smooth

integration into the society bearing in mind prevailing economic, socio-cultural, political and moral factors.

Article 5: Based on the general purpose defined in article 4 above, the objectives of education shall be;

- 1) Train citizens firmly rooted into their culture, but opened to the world and respectful of the interest and the common will.
- 2) Inculcate the major ethical values which are dignity and honour, honesty and integrity as well as a sense of disciplines into the pupils and the students.
- 3) Promote family life.
- 4) Promote national languages.
- 5) Introduce the democratic, culture and practice, respect for human rights, freedom, justice and tolerance, the fight against all forms of human discrimination, the love of peace and dialogue, civic responsibility and the promotion of regional and subregional integration.
- 6) Cultivate love of effort and work well done, the quest for excellence and team spirit.
- 7) Develop creativity a sense of initiative and enterprise.
- 8) Provide physical, sports, artistic and training for the child.
- 9) Promote hygiene and health education.

Thus, with these objectives of the laws, we noticed that it has a link with the country's vision of a sustainable education which is all about training and educating citizens who will be morally, civically, intellectually upright and are deeply rooted into their culture and are opened to the world and to train citizens who will develop creative skills that they can be used in resolving their daily problems encountered in life. Hence, from the pre-research visit made round some of the government and private primary schools in the Yaoundé III and VI municipalities, brings to limelight the fact that despite the appreciable and considerable efforts put in place by the Cameroon government and its partners UNESCO to improve on the implementation of curriculum practices of the educational system of the country so as to render it sustainable(long lasting) despite the reforms in this sector beginning with the 1998 laws of orientation on education, laying down the guidelines for education in Cameroon, a lot is still to be done so as to meet with the challenges of the economic, social, environmental, cultural and intercultural growth of the country. The National Report of Cameroon on environment and sustainable development RIO 10, the Millennium Development Goals, the

growth and employment strategy paper ,the vision 2035 of the emerging Cameroon , the presence of various ministries including specialised ministries in sustainable development such as the Ministry of Water and Energy Mines and Technological Development are a few of the numerous efforts the government puts in place to ensure that education is sustainable .

Furthermore, Cameroon just like one of the numerous countries in the world, has made a lot of innovations in its educational system in other words to derive methods of achieving a durable education in a sustainable developed country. In philosophy of education in the official curriculum of ENIEG, MINSEC, training program ENIEG- BAC,pg56, holds that sustainable education should have as objective providing education which is aimed at making the individuals or learners to develop competences, knowledge, skills and attitudes which will be long lasting and permits them to take and make clear responsible decisions to themselves and even to others ,today in the future and to translate or to interprete these decisions in actions UNESCO,2012. Thus it is therefore rather unfortunate a question to conceive and to elaborate the curriculum and its practices to be that which will resolve all the contemporary socio-economic, environmental, cultural, psychological and intercultural problems.(Sauvé 1999p11). Despite the missions assigned to educational system through law number 98/004 of April 14th 1998 in which the educated child has to be trained in such a way that he develops skills and competences that has to make him or her be useful to himself or herself in the society, despite the effective presence of school authorities infrastructures, new pedagogic methods reinforced with the presence of national pedagogic inspector, as well as policies and strategies put in place by various stakeholders, the social, economic, cultural and intercultural environment in which the learners study, still live much to desire and needs to be addressed and redressed as soon as possible by the powers that have to save lives of the present and future generation.

Also, looking at some of the lessons prepared by the teachers in the various schools visited by the researcher, brings out the fact that very few teachers (those who prepare lessons) do implement what was programmed by the state. According to Nkeng and Mambeh (2007), teachers also have to make use of the natural environment in the teaching and learning process. Extra-curricular activities such as field trips, excursions, games, music and drama are simply accidentaly undertaken by very few hard working and motivated teachers and subjects such as manual labour, which were completely absent in some schools for example in airtight schools of storey buildings. The use of semi-concrete pedagogic materials during lessons to enhance the teaching and learning process, it is sometimes not present. A common excuse

given from the school authorities among others is that there is a lack of sufficient funds to carryout infrastructural improvement, pedagogic and administrative motivation of personnel but the question remains as to when these funds will be discussed upon by holders as being sufficient to motivated stakeholders in the educational change. There is also the absence of canteens in most schools, learners (pupils or students) struggle to get what to eat from poorly dressed vendors and sometimes unhygienic ones from all corners selling chewable to them and this sometimes lead to health problems which causes them to rush to their head teacher for first aid. Health wise, all the sick learners rely on the head teacher for first aid treatment who has never been trained.

The December 20th, 2002 general assembly of the UN at Johannesburg, the 15/254 declaration to the DEDD, followed by the knowledge of parties taken on the fact that education was and is a priority. It was said that it was to be designed as an international issue in 2012 thus the operations of the reforms of all the educational systems of the world will be stimulated and the curriculum will be oriented towards the promotion of sustainable development. Also, the DEDD has also as ultimate objective to orient the individual and communities towards the pertinent learning in all his life; thereby preparing the society towards the modes of life which are more sustainable (UNESCO). All the same, it's going to promote international cooperation in sustainable education, encourage the parties involved into taking into consideration all the socio-cultural horizons, share the values and to fix objectives for a sustainable future (UNESCO,2005)

Sauvé and Lucie, in the same logical sense said that ''It is a necessity to ameliorate the educational system and the conception of learning programs of sustainable development after having made well understood to all how to promote and realise sustainable development (UNESCO,2012, P.34). Equally a conference was put in place in Bonn in 2009, which will examine the progress and will define the great priorities of the second parts of the conference (decenie). Here it was recalled at the different government to elaborate the policies and guides of the EDD guaranteeing a quality education for all and to sensibiliser to the problem of sustainability.

Historical perspective of sustainable education

Sustainability is the capacity to endure ecologically, the word describes how biological systems remain diverse and productive over time. Sustainability is said to be the potential for long term maintenance of wellbeing which has ecological, economic, political, cultural and

intercultural dimensions. The history of sustainability traces human dominated ecological systems from the earliest civilisation to present.

1987. Our common future

The term sustainable development came to prominence through the United Nations Brundtland Commission. The commission report (our common future) defines sustainable development as 'the development which meets the needs of the present without compromising the ability of future generations to meet their own needs' echoing values and traditions of many cultural and geographical minorities worldwide.

1992. Rio conference

The concept received further attention at the United Nations Conference on environment and development in Rio de Janero in 1992, the first international attempt to develop strategies for a more sustainable pattern of development. At the summit, government around the world committed to sustainable development, the UK government was the first to produce its national strategy in 1994. The World Summit on Sustainable Development (WSSD) took place in Johannesburg from 26th August to September 4th, 2002.

The summit delivered three outcomes: The political declaration, the Johannesburg plan of implementation and the establishment of numerous partnership initiative. Key commitment covered sustainable consumptions and productions, water and sanitation and energy. The outcomes complemented, the Millennium Development Goals (MDGs) reinforced, Doha and Monterrey Agreements and set challenging global goals and targets on accessing water, sanitation and modern energy services; increasing energy efficiency and use of renewable energy sustainable fisheries and forest. In the 1992 Rio de Janero Earth Summit, it was for the first time that the discussion of sustainable development paid specific attention to the educational system. Chapter 36 of the agenda 21 of the Rio Declaration directly addresses issues of education in relation to sustainable development in four main areas.

- 1- Improve basic education
- 2- Reorient existing education to address sustainable development
- 3- Develop public understanding and awareness
- 4- Training (McKeown et al, 2002)
- 5- Responding to the political call to implement education for sustainable development.

In 1994, the Earth Charter was formed to reorient educational goals with respect to chapter 36 of the agenda 21. As a result, many organisations, educators and individuals began to refine the original goals of the agenda 21 into their own practices. Education for sustainability promises to make the world more liveable now and in future generations. It calls for giving people knowledge and skills for lifelong learning that will help them find new solutions to their environmental, economic, social, cultural and intercultural issues. Education for sustainability is based on the idea that communities and educational systems within the communities need to double their sustainability efforts, they need to develop sustainability goals, local educational systems that can modify existing curriculum practices to reinforce these goals. It becomes apparent that most communities must develop sustainability goals or plan actions on which to base educational change. As Suzan Padua quoted by Fritz puts it; The world in 2020 should be a world that is conscious of what it uses and what it lives behind, a world where people have knowledge and values that include respect, solidarity and empathy for all living species, a world where individuals are educated with skills that reflect concerns for an equitable society, viable economic and sustainable environments (Fritz Hesselink, 2002). Education for sustainability was formed out of the recognition that there is a distinct difference between education about sustainable development and education for sustainable development. The former was seen to be used as a tool to achieve sustainability (McKeown 2002).

1995. The Cloud Institute for sustainability education.

It was founded in 1995 as a program of the American Forum for Global Education known as Sustainability Education Centre. From its conception, the Cloud institute has been a pioneer of education for sustainability. Jaimie P. Cloud, founder and president of this institution over 30 years decided that:

- A shared understanding be developed that schools have a responsibility to contribute to our individual and collective potentials and to that of the living systems upon which all life depends.
- Schools should be transformed into learning organisations.
- Unleashing the potentials of having all our children in schools with their teachers and mentors during the most favourable time for learning and to honouring them with transformative learning experiences that prepare them to participate in, and to live with us, the shift towards a sustainable future.

1.2 Formulation of the Problem of study.

Frenay cited by Tardif (1999) in his theory of transfer of learning states that all learners should be able to use the knowledge they acquire in class to resolve new situations. This will be done by mobilising all the resources such as knowledge, competences, skills, attitudes and behaviours plus values which are being acquired within difficult situations to solve the problems which they come across in their daily lives. The Cameroon government through the April 14th, 1998 laws of orientation on education, law number 98/004 laid down some guidelines which could be used in governing education in Cameroon. Article 4 and 5 of these laws can best testify what kind of citizen we are to have in the society of today and in future. In article 4, it states that teachers should train citizens who will be morally, culturally, civically, socially, intellectually and physically upright and be able to integrate well in the society and article 5 which states that teachers should train citizens who will be deeply rooted into their culture but are opened to the world. Private, individuals, national, international bodies like (UNESCO) and parents have also been pulling a lot of financial, material, and human resources into the education of citizens especially in children. Despite the teachers' teaching and these laws that govern the educational system of Cameroon, children still portray some behaviours that show that even with the knowledge, competences, attitudes, skills and values acquired in school, education is still not sustainable or long lasting (durable). Thus, research has shown that curriculum implementation practices in primary schools such as need analyses/curriculum design, curriculum implementation and curriculum evaluation greatly contribute to sustainability in education. That is, when we say that someone is educated, the value should be seen today and tomorrow it should not be an issue of memorisation. What is prepared in the curriculum should be able to help kids acquire life skills, competences, values, behaviours and attitudes that will make or help them to be independent or autonomous. At each level, education should have value and substance. Education should not be temporal, that is, what the children study in school should help them have something doing. With all these, it has motivated the researcher to work on the topic curriculum implementation practices and sustainable education.

Nkeng and Mambeh (2007), believe that, learning in education is incomplete when learners after having been taught, do not acquire certain life skills that tie with the 21st century knowledge, competences that can help them resolve their daily problems encountered, be able to get jobs, values and attitudes that will boost their civic, moral, intellectual, social, economic, cultural and intercultural uprightness wherein they can be able to integrate and fit

well into their societies as responsible citizens. Nowadays, most educators such as Bipoupout (2011) through the use of a pedagogic approach such as the Competence Based Approach by teachers, believes that, these learners can develop all these competences, skills, values, attitudes and behaviours which will help them to at least arrive the attainment of the aims, goals and objectives of curriculum implementation practices such as need analysis/curriculum designing, curriculum implementation and curriculum evaluation which is aimed at rendering education sustainable. Thus, for this reason, the government has decided that the teaching and learning process should be made in a way that, during the designing, development, implementation and evaluation of the curriculum, children should develop life learning skills, competences, values and behaviours that will not only end in the classroom, but it should be used throughout their lifetime (sustainable education). This is the more reason why the researcher decided to conduct a research on finding how curriculum practices (curriculum designing, development, implementation and evaluation) render education sustainable.

1.3 Research Questions

1.3.1 General Research Question

How can curriculum implementation practices influence sustainable education in primary schools?

1.3.2 Specific research questions

- How can need analysis and curriculum design/planning influence sustainable education in primary schools?
- How can curriculum implementation contribute to sustainable education in primary schools?
- How can curriculum evaluation enhance sustainable education in primary schools?

1.4 Research Hypothesis

1.4.1 General research hypothesis

Curriculum implementation practices in primary schools has an influence on sustainable education.

1.4.2 Specific hypothesis

H1) Need analyses / curriculum planning has an influence on sustainability in education in primary schools.

- H2) Curriculum implementation contributes to sustainable education in primary schools.
- H3) Curriculum evaluation enhances sustainable education in primary schools.

1.5. Research objectives

The reason for writing on this topic curriculum implementation practices and sustainable education is to find out whether curriculum implementation practices influence sustainable education. Also, during writing this piece of work the researcher proposes some remedies to be taken into consideration with regards to other works and an attempt to discard from and also to propose ways and means by which the sustainability in education can be enhanced. It is a tool for addressing objectives that are interlinked such as:

Society; whose objective here is to increase understanding of social institutions and their role in change and development, to promote social justice, gender equality, human rights, democratic and participatory systems and health care (including HIV/AIDS)

Environment; whose aim is to increase awareness of the resources and fragility of physical environment, the effects of human activity on the environment, climate change.

1.5.1 General research objectives

The general objective of this study is to verify how curriculum implementation practices in primary school (curriculum designing, implementation and evaluation) influences sustainable education.

1.5.2 Specific research objectives

- To find out how Need assessment / designing in primary school, influences sustainable education.
- To examine how curriculum implementation in primary schools, contributes to sustainable education.
- To verify how curriculum evaluation in primary schools enhances sustainable education.

1.6. The scope of the study or delimitation

1.6.1Thematic delimitation.

This study is concerned with finding out how certain terms or concepts such as curriculum implementation practices in the primary school, influences and enhances a sustainable

education with the help of teachers. Also, sustainability is at various levels or domains say economic, environmental, developmental, but this study will be based on sustainability in education in general that is both national and international level. Other aspects as attitudes, competences and perceptions of teachers will be taken into consideration. Also, sustainability in education occurs at various levels: family, community, school and society. This study will also be based on curriculum implementation practices in primary schools such as need analysis and curriculum designing / planning, curriculum implementation and curriculum evaluation.

1.6.2. Theoretical delimitation

This research work will also be based on some theories that will help to substantiate the fact that education today should be of good quality and durable. We used some theories such as the behaviourism theory, constructivism, socio constructivism, motivational, experiential and change theories as far as education is concerned.

1.6.3 Spatial delimitation

It will also be examining the geographical delimitation which is going to be the Yaoundé III and VI sub divisions precisely in the centre region. The targeted population will be teachers in the following primary schools precisely the Government Practicing Primary School of Melen 1, Les Goelands of Biyemassi and Government English Primary School Group II Etoug- Ebe Yaoundé. This piece of research work was aimed at finding out what these learners can do after they must have completed school. Thus, making sure that they can resolve their problems encountered in their daily lives with the help of the competences, skills, knowledge and behaviours acquired in primary school.

1.7. Interest of the study.

To bring out the interest of a given piece of work, it is the place of the researcher to show the importance of the work, its uses and its originality. According to Fonkeng and Chaffi (2012) the interest of a study is that which seeks to explain to the readers, the importance of the study based on the theoretical framework, thematic and what are the goals (the importance of the research work on some individuals and organisations. The researcher bases his interest on curriculum practices in primary schools and sustainable education in the Yaoundé III and VI sub divisions. It is for this reason that the researcher decided to discuss this in two sub headings.

1.7.1. Pedagogic interest

Our study is interested in the pedagogical methods used by teachers during the curriculum implementation processes which enhances a sustainable education while taking into consideration the acquisition of knowledge, skills, attitudes, values and behaviours in all the different disciplines that are taught in primary schools.

1.7.2 Socio political interest.

Sustainable education is to be actualised during international communities and in this effect, it aims at permitting each country to adjust its educational policies especially that of Cameroon so that, it matches with the norms of international education whose ultimate goal is to render education durable and of good quality which can be used in the resolution of the problems faced by the young citizen today and in future. Hence, the researcher wishes to understand why despite all the competences, values, attitudes, skills and knowledge gotten through education in primary schools, it is only cognitively based meaning that these attributes are not used to solve daily problems and to render education long lasting in the society which one finds himself.

CHAPTER II: LITERATURE REVIEW

2.0 Introduction

This chapter is going to deal with the available literature on curriculum implementation practices in primary schools and sustainable education. It aims at examining the conceptual and theoretical consideration that experts hold in relation to curriculum implementation practices and sustainable education in the Yaoundé III and VI subdivisions. By the same token, the reveal should help us identify some of the missing links in the study that will provide justification for this study. Thus, this chapter seeks to highlight the different views of other writers on the topic under consideration. That is, treat literature review based on the variables of interest on the study, what some other writers have earlier said in relation to the problem of curriculum Implementation practices and sustainable education. These views are centred on teachers and how they render education sustainable.

2 Conceptual frameworks (Definition of concepts)

2.1 Sustainable education

Since UNESCO is an authoritative organisation working on education for sustainable development, we would like to use their definition ''education for sustainability empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity''. It can also be defined as ''the acquisition of knowledge, competences, skills, values and attitudes that are necessary to shape a long -lasting future''. Schnack.K. (1996, P.11.) defines Education for sustainability as a lifelong learning process that leads to an informed and involved citizenry having the creative problem-solving skills, scientific and social literacy, and commitment to engage in responsible individuals and co-operative actions. These actions will help ensure an environmentally sound and economically prosperous future. Education for sustainability has the potentials to serve as a tool for building stronger bridges between the classroom and business, and between schools and communities.

2.2 Curriculum implementation practices

According to Nkeng and Mambeh (2004), curriculum implementation practices are those integrated practices during teaching and learning in the primary school in which the needs of children are taken into consideration, the planning of what is to be taught as content in the different subjects and evaluating it to know the extent to which the expected objectives have been attained. This exists in institutions or companies with the convention of learning experiences under the guidance of a school. These curriculum implementation practices in the primary school include elements like;

- Need analysis and Curriculum design/planning.
- Curriculum implementation.
- Curriculum Evaluation

See the structure of how the curriculum implementation process has to look like in relation to the educational vision of the country which is to acquire a sustainable education.

NEED ANALYSIS OF THE CURRICULUM

IMPLEMENTATION OF THE
____ CURRICULUM

EVALUATION OF THE CURRICULUM

DESIGNING OF THE CURRICULUM

DEVELOPMENT OF THE CURRICULUM

According to Lynn Davies, the school curriculum should pass on enduring values and help learners to be responsible and caring citizens who can contribute to a just society. It should develop their awareness and understanding of respect for the environment in which they live and secure learner's commitment to sustainable education at a personal, local, national and global level.

2.2.1Need Analysis and curriculum designing / planning.

Need Analysis

When we talk of need analysis, we mean what the people need such as education and health. We can define need analysis from different points of view say from the dictionary, and from the authors' definition. Therefore, need analysis can be defined as a formal process focus on how a product addresses the needs of a human. Ambe and Ajeagah (2002) define need analysis as an element of designing (reviewing) a curriculum. Its purpose is to establish key learning outcomes and requirements in the designing and delivery of a course or learning activity. The needs related to the characteristics concerns and potential constraints of the students (or any other relevant stakeholder). The analysis seeks to materialise these needs and thus identify whether the design is appropriate to the intended goals.

Allison defines need analysis as a process of identifying and evaluating needs in a community or other defined population of people when drawing the curriculum what you need to first analyse is the context, the learners or pupils what they will need. Even though there are criticisms modern psychologists don't criticise. Rather they prefer to say that they have a common need. Analysing the task must have done what learners will be needing to learn. We can analyse between a present and a preferred state. Need analysis or assessment is a set of procedures for gathering information about needs. You might need to find answers to the following questions.

- Who is the teacher that will help implement the curriculum so that at the end the education acquired is sustainable?
- Why is this program of making education sustainable necessary? (analysis of learning task)
- Where will the program of sustainable education be implemented (analysis of context)?
- To whom will the programme of rendering education sustainable be implemented?
- And how will the programme of sustainable education be implemented?

The relationship between need analysis in primary schools and sustainable education (development)

Elaine Nevin (2008, p.122.) stipulated that good and quality education is a very essential tool for achieving a more sustainable world. This was emphasised at the UN world summit in Johannesburg in 2002 where the orientation of current education systems was outlined as the key to sustainable development education which is one of the very important needs of a learner who forms part of a given society, promotes the development of the knowledge, skills, competences, values and actions required to create a sustainable or long lasting world thereby ensuring that the environment is being protested and conserved, social equity is promoted and economic sustainability is encouraged. Hence, the aim for this sustainable education is to enable people to make decisions and carryout actions to improve their quality of life without compromising the planet. It also aims at integrating the values inherent unsustainable development into all aspects and levels of learning. To promote education for sustainability linked to need analysis, the united nations Decade of Education for Sustainable Development 2005- 2014 (DESD) was adopted by the UN General Assembly with the United Nations Educational, scientific and culture organisation culture.

According to Nkeng and Mambeh (2008, p.16) in their book current development supervision and evaluating. There are some processes which can be used to do need assessment which include consultation, collection of social indicators and task analysis, need assessment looks forward and asks, "What goals should a programme pursue". Hence to ask this to our research topic it is seen that sustainable education is the goal that is pursued here.

According to Ambe and Ajeagah (2002, p.23) in their book notes on curriculum development and evaluation, need assessment or analysis focuses on the determinants that effect the curriculum or they are the factors that determine the curriculum. These are the various needs that are considered if not it would bounce back and be rejected during implementation for a curriculum must belong to a certain geographical area since it is a process and its implementation is geared towards educating young and inexperienced citizens or members of the society with the help of the knowledge, competences, Skills, attitudes and values acquired in school. Thus, the aim is to render the education acquired durable, but from observations made it has been noticed that the education gotten by these children nowadays is not totally a sustainable one. Below are some major determinants or needs in curriculum development.

The major development or determinants and needs analysis of the Curriculum

- 1) Nature and Society/Culture: According to Nkeng and Mambeh (2007), while designing a curriculum, it must be done in a way that it reflects the major social and cultural needs of the society for an educational system may go astray when it has no relevance to the society. He who is trying to build or develop a curriculum, for a curriculum is not develop in a vacuum, must consider the values, the traditions and beliefs, the culture or way of life of the society so that these resources can be mobilised and be used in the resolution of the daily problems met by these citizens.
- 2) **Philosophy:** One must consider the broad philosophical issues such as the aims and purposes of education, the politics and the ideology of a country. For example, aims and purpose of education today in most countries and the world at large, is to acquire education that is sustainable (long last). Thus the knowledge of philosophy of education is to inform the curriculum planners and designers that after deciding on the aims of education, the next thing to do is to think of ways and means through which the world aims as far as know what can be done to achieve sustainable education where there will be the need for training more teachers who will be competent enough to teach learners during the teaching learning process using good effective teaching strategies, techniques, didactic materials, have a good mastery of their pedagogy that will help the cultures to also acquire skills, values and competences too which can also help them in solving their daily problems encountered.
- 3) **Resources:** (Material and Human Resources) To achieve educational aim or goal for instance, the case of sustainable education, there is a need for finances to help provide a good staff of teachers, constructs school that are well equipped and furnished that will help the learners to be able to make a direct use of their sense (what I see I remember, what I hear, I forget, what I do I understand) for these materials resources can be a barrier.
- 4) **Psychology:** Psychology of learning helps educates teachers to observe both physical and emotional changes in their pupils and thereby be able to determine the type of experiences that will be suitable for them. For these children need to put into practice what has been learnt from school in their society.
- 5) **Subject specialists:** They suggest the specific objectives of each subjects, know to teach and evaluate. For instance, to achieve a sustainable education, subject specialists would set objectives in such a way that teachers will be able to teach children in a way that they

will be able to acquire competences, skills and attitudes that would be used in solving problems encountered by them in their daily lives.

- 6) **The learners:** This is the most important of all the factors or determinants. The main effort of education is aimed at improving on the following needs which must be recognised in them. That is, their physical, emotional and inspirational needs for a future life.
- 7) The teacher: The teacher is very important because he is the one who implements the states policies or comes through education. He gives the feedback to the bosses or hierarchy to ensure effective implementation and acquisitions of sustainability in education. It is the teacher who really stands the better chance to do so for example he must pose the following characteristics such as being committed to his work, must be diligent, creative, resourceful, friendly, patient, fair, and firm in decision making.

2.2.2 Curriculum planning

According to Ambe and Ajeagah (2010, P. 43.) curriculum planning refers to something tangible that can be seen and touched. It is that process that leads to the creation of curriculum plans guide lines of the curriculum. It deals with a number of realities oriented statements concerned with questions such as what should be taught? How should it be taught? To what segment of the population and what should be the relationship between the various components of the curriculum? and what is to be taught that will render education sustainable at the end? Therefore, following this research work for example, to achieve the aim and goal of sustainability in education, teachers will need to know what should be taught (content) how it will be taught (that is the teaching strategies and methods used) and to what segment of the given population (children) and there must be a relationship that exist between these components of the curriculum and the sustainability in education. Thus, a curriculum that is well planned would enable us to achieve the aim of education that is sustainable (durable).

It is good to take note that curriculum planning is defined by certain key concepts that can contribute in the attainment of the aim or goals of education such as sustainable education. These key concepts include aims, Goals, learning objective outcomes where in the researcher is going to highlight more relating to her research topic curriculum practices and sustainable education.

According to Ambe and Ajeagah (2002 p, 43.) aims are long term statements or outcomes that is a general statement of the overall direction of a course, which tells you what the

teacher intends to achieve but doesn't tell you how to achieve it which are usually, specified for the whole course or programme for instance the case of Cameroon education can be sustainability in education National Unity, Self-relevant Development: National integration intellectual physical civic and Moral development of Cameroonian citizens. It is good to note that these aims are sign posts that need to be broken down into goals and objectives.

According to Broudy (1961) curriculum aims are statements that describe expected life outcomes based on some value either consciously and un-consciously borrowed from philosophy. For instance, Broudy said that the basic aim of education is to promote the good life through self determination or self-realisation and self-integration. For example, for the National Forum on education 1995, it was said that, ''the aim of Cameroon school is to promote that type of training that carries attention to man's faculty to adopt to enable him to ensure his very destiny, to take part in Nation building and to be conversant with the requirements of our everchanging world'' Thus, this general aim is based on the general philosophy of good life.

Goals

In curriculum planning, Zais said that goals refer to school outcome which may be goals for a specific school or goals of the general school system. That is, what the school will produce as outcome after the education obtain. It's going to be the citizens who are morally, socially upright or those that will lack respect for the members of the society who are going to be those who will used the competences, skills and knowledge acquired to solve their daily problems encountered as they integrate into the society or they will be the type who will want to be spoon fed with virtually everything.

Learning objectives

According to Ambe and Ajeagah (2002, p .45) learning objectives are descriptions of what you want the learner to be able to perform or how to achieve because of successful learning and they are intended measurable behavioural changes to be brought about in a learner. In order to refer to the researcher's topic curriculum implementation practices and sustainable education children are expected to acquire and perform certain behaviours that come because of the learning taken place. For example, after learning, children should be able to keep their environments clean like not polluting the environments with papers which is knowledge gotten from environmental education and health sciences.

2.2.3. Curriculum Designing

Nkeng and Mambeh (2007, p.34) define curriculum design as the pattern or form which the curriculum takes. It is the various ways which the curriculum takes to form a whole. Several curriculum designs are to be taken into consideration when carrying out curriculum implementation practices. They include;

Subject centred design

This is a design organised around subjects or disciplines. It is the most popular and widely used curriculum design during the implementation of the curriculum, for example, the curriculum of teachers training colleges, primary and secondary schools in Cameroon. We have examples like Biology, History, Geography, psychology, philosophy of education, economics, French, English language and others. Thus, this means that, for a sustainable education to be acquired, during curriculum designing it should be done taking into consideration the different subjects and the different competences and skills to be achieved in each lesson. There are sub types of this curriculum design namely; subject design, discipline design and broad-field design.

Advantages of subject centred curriculum design

- -Teachers of higher level of education are trained in specific subject areas and thus, can easily implement subject centred curriculum design in class.
- It is easy to implement because the class time table can be conveniently compartmentalised to correspond to the subject requirements.
- This also makes it possible for people to remember information for future used.

Disadvantages of subject centred curriculum design

This type of curriculum design does not take into consideration the learner's interest and needs, because of this, the teacher dominates the lesson allowing the learner with little input opportunity. Thus, this counteracts with the idea of the new pedagogic approach the Competence Based Approach where the learner is supposed to be placed at the centre of the teaching/learning process and basing on the new curriculum for primary schools in Cameroon (2018) learners are expected to learn and acquire knowledge, competences, skills, values and behaviours that is, durable that will help them to resolve the problems encountered in their daily lives.

Learner Centred Curriculum Design.

According to Kibinkiri (2017), this is the curriculum design where the learner is the focal point of all the learning that is taking place in the classroom. All curriculum experts are concerned with creating a curriculum that is valuable to the learners. When designing the curriculum, they begin by finding out the content or subject matter from the various subjects or disciplines that will help them to meet the needs and interest of the learners. For example, the case of gaining an education that is sustainable. There are some characteristics of the learner centred design curriculum which include the following:

- The felt needs and interest of the learners is what forms the basis of the curriculum.
- The timetable and other arrangements are flexible and not rigid so that the learner can select the learning opportunities that best meets their needs and interest.
- The subject matter is the means of responding to the needs and interest of the learners.
- School counsellors are also provided to give some assistance to the teachers in helping people to make good decisions about their learning programs.

Advantages of learner centred design

- Subject matter is not learnt for its own sake but as a means of responding to the needs and interest of the learners. This means that children do not only learn because they want to but they have to learn basing on their needs that will help them in resolving their daily problems encountered.
- The timetable or other learning arrangements are flexible so that the learners can select the learning opportunities that best meets their needs and interest.
- Motivation to learn is intrinsic and does not need to be externally induced because concepts skills, competences, values and behaviours are learnt just because they are important to the learners needs, those of the teacher and other persons in the society.

Disadvantages of the learner centred design

This makes the implementation to be difficult because this curriculum design cannot be preplanned before learners come to school. There are some authors who use models to define the curriculum design process. Some of these models include wheelers model, Tyler's model, Kerr's model and Hilda Taba's Model.

Kerr's model of curriculum design.

Kerr (1958) argued that the whole curriculum process should not be static but dynamic and continuously evolving. This is the essence of wheeler's model which was converted by Taylor's original ideas into cyclical form. Kerr divided the domains into four areas (Urevbu,) 1985: 23); objectives, knowledge, evaluations and school learning experiences. It should be noted that these domains are interrelated directly or indirectly, and the objectives derived from schooling learning experiences and knowledge. Kerr divided these objectives into three groups.

Affective: For example, children should show some love and interest for what they learn, have fallings and give some values to certain issues which therefore influence their attitudes and personalities.

Cognitive: Be able to use mental processes such as reasoning, remembering, retrieving, perceiving, thinking and judging in solving problems and developing new ideals and evaluation.

Psychomotor: Be able to use the knowledge skills, and competences gotten in resolving their daily problem encountered

Tyler's model and design

To Tyler, during the development of the curriculum, it should be done in a linear way where in, the process will start by:

- The identification of goals aims and objectives:
- Selection of learning objectives;
- Organisation of learning experiences and
- Evaluation.

Tyler uses these four fundamental questions which he feels needs to be answered if the curriculum development process is to proceed. These questions are:

- Which educational purpose should the school seek to attain?
- What educational experiences can be provided that is likely to attain these purposes?

- How can these educational experiences be effectively organised?
- How can we determine whether these purposes are being attained or not?

Thus, to Tyler, stating objectives, selecting experiences, organizing experiences and evaluation is the simple four step process by which a curriculum is planned and developed.

Wheeler's model

To Nkeng and Mambeh (2007), some people argued that Tyler's model is rather too simple and suggests that evaluation need not to be a terminal process but should take place at every stage. This is the essence of the Wheeler's model which has converted Tyler's model or original ideas into a cyclical form. His model is made up of five (5) stages which can be used for developing a national curriculum. These stages include:

- Formulation of aims, goals and objectives
- Selection of learning experiences
- Selection of content
- Organisation and integration of learning experiences and contents
- Evaluation

Wheelers model illustrates the dynamic nature of the curriculum development process for it goes on as the needs and interests of the society change and the objectives also change

Lawton's model

He has a five-stage curriculum model that is used in planning developing a curriculum. In stage one the aims of education would be defined from the philosophy of education of a society.

In the second stage, the philosophical ideas will operate to improve a society hence the sociological questions about curriculum. According to Lawton education is to be used to level up a society. Say the case of this research topic, education should be made sustainable for example, the kind of society we want.

Stage three is the selection from culture and is reached once philosophical and sociological questions have been posed and answered such elements of arts, crafts, skills, values, attitudes and beliefs that need to be preserved including relevant foreign culture that will help to impact a change is the education obtained by the generation of today and even the future generation.

In stage four, he deals with the question of psychology such as effective teaching methods to be used time allocation for each lesson and period and activities in the course of the teaching learning process and take in to consideration the age of the children with respect to what the learn and the various developmental theories, cognitive, affective development of children etc.

And in stage five, Lawson suggests that when developing the curriculum, it should be examined by organising it in stages and sequences. Curriculum development is very important because if not well developed there won't be no good execution of what has been aimed at the beginning when doing a need assessment.

During the 15th international colloquium of French Associations for comparative education (AFDECE) held on the 5th to the 7th of November 2018 in the campus of the Higher Teachers Training College (ENS) Yaoundé 1, one of the representatives from the Republic of Congo said; it is good to always revise our curriculums and then adapt them to the needs of our society, train the younger generations at all the levels so that we can meet with our tomorrow's vision. Children should be taught in such a way that they have competences and skills(aptitudes), values and behaviours for all these will be necessary for the present life and not only for the future life.

2.2.4. Curriculum implementation.

Kibinkiri (2017), refers to curriculum implementation as the act of working out the plans and suggestions that have been made by the curriculum specialists and the subject experts in a classroom or school setting. Teachers are the main implementers of the curriculum, while at the same time students, parents, school administrators can directly or indirectly involve in the implementation process. Curriculum is a vehicle that transmits education to people through curriculum implementation. Therefore, for us to acquire an education that is sustainable, it must be done with the help of the curriculum through the curriculum practice which is implementation. Curriculum implementation entails putting into practice the officially prescribed courses of study. When the curriculum itself is an educational programme, it puts into practice what is being planned. In this practice the teacher is identified as an implanting agent for example, it is through the teacher that we can make children to acquire knowledge, values, competences, attitudes and behaviours which can later on be used in their daily lives in solving their daily problems and to make effective decisions.

Ambe and Ajeagah (2004) said that, it's important to know that a curriculum is first of all being made and planned before it's being implemented. Therefore, it's important to give some precisions about the planning of curriculum. In the following pages, the main emphasis will be on first planning and then implementation of the individual's school career/curriculum, for the purpose of supporting and developing his/her competences, behaviours or even attitudes according to which aims and/ or objectives that the education of a nation has for people. It is important to recognise that planning the school curriculum, in terms of the subjects to be studied each year for Rethinking Curriculum Implementation: Paradigms, Models, and Teachers' Work, Qualifications, is only part of the process. Ornstein & Hankins (2009) consider that successful implementation depends on careful planning, which focuses on three factors: people, programs, and processes. Instead of focusing on the factor of people, schools that devote a lot of their time and budget by merely modifying the programs or the process, probably have it wrong and might not therefore attain the different intended aims. The nation's vision and aims will include personal and social outcomes as well as academic ones. Learning does not begin or end in classrooms, but permeates the school environment and broader community. What learners experience may not be the same as the written objectives of the curriculum. It will be the consequence of a complex web of interdependent elements including:

- The school's vision and values.
- Teaching quality.
- Learners motivation and prior knowledge.
- School leadership, environment and culture.
- The school's curriculum and subject curricula.
- Assessment practices and expectations.
- The school's internal structures and operations.

Therefore, planning a curriculum from first principles, or evaluating an existing curriculum with a view to improving it, is necessarily a complex and challenging task. While schools may use similar or even identical written curricula, the experienced curriculum is bound to be unique to each school. For this reason, one must take ownership of one's curriculum and regularly evaluate the outcomes against intentions to make sure the educational experience is optimized and in line with the nation's or school's vision and mission.

2.2.4.1 Steps or stages of curriculum implementation.

Nkeng and Mambeh (2007) are of the view point that, when educational goals and aims are formulated, they are first changed into a syllabus, then a scheme of work and finally into lessons that are taught in the classroom. The various stages involved in curriculum implementation or operationalisation are discussed below.

Curriculum.

To Nkeng and Mambeh (2007), curriculum is the way in which a society tries to meet its educational goals. It consists of not only subjects but also all what is planned and guided by the school. Different subjects have specific content to be taught. To Opertti, the curriculum is supposed to be flexible which can be a key to the creation of schools that meet the needs of all the students that is, can meet the diverse needs. To Ambe and Ajeagah (2002, p.22) the curriculum represents the plan for the achievement of the present and the future goals of the nation. It is indeed a way of structuring the conditions that would translate the ideas into realities, theories into practice, covert into overt and principles into observable and measurable actions. It is the way in which a society tries to meet its educational goals (sustainable education). It does not only concern the subject only but also all what is planned and is guided by a school

-The syllabus.

Kibinkiri (2017), defines a syllabus as a course outline comprising a collection of topics on the same subject matter and a series of statements of what is to be learned within a given time frame. Syllabuses are designed by panels of specialists and teachers with experiences in the subject. Many consultations are done before the final document is produced. It is then submitted to the ministry of education for approval. That is why the syllabus can guide and inform teachers in schools. Some syllabuses are printed in a general manner consisting simply of a series of statements of what is to be learned for example, simple interest, reproduction, latitude and longitude through which the education gotten can be said to be sustainable etc. However, the common elements found in most types of the syllabus include, course objectives, course content, teaching strategies, teaching materials and methods of evaluation. The format of a syllabus may differ from subject to subject. When a school receives the syllabus, the document is interpreted and divided into topics to be taught each term. The grouping of these topics depends on the complexity of concepts within each topic, relatedness

of topics and seasons of the year. Once the school syllabus is ready, each teacher will be asked to draft a scheme of work.

-Scheming.

Mabou (2016), defines a scheme generally as a breakdown of topics into teachable units or lessons that are sequentially arranged to facilitate teaching. There are different scheming formats used, depending on the conventions in each school, but most of them include the date, topic, objectives, activities, resources to be used, assignment and evaluation. In the UK, the scheme of work is a guideline that defines the structures and the content of an academic course. It is usually an interpretation of a specification or syllabus and can be used as a guide throughout the course to monitor progress against the original plan. Therefore, to achievethe aim of sustainable education, the teacher's scheme of work will act as a plan of action which will help or enable the teacher to organise the teaching activities that will suit the aim and objectives ahead of time. Thus, it is a summarised forecast of work which the teacher considers to be adequate and appropriate for these topics which are already set in the syllabus. Ambe and Ajeagah (2004), say that there are certain principles that are to be followed when preparing a scheme of work.

- The syllabus must be put first into the order in which its content would be taught. There should be sequence and continuity. For example, in mathematics, simple interest cannot be easily taught until children have learned percentages. This is because the children need the knowledge of solving problems in percentages to successfully solve problems in simple interest. Thus what the children learn in school should be used continuously in the resolution of their daily problems encountered.
- A scheme of work must give suggested allocation of time for the teaching of each section of the syllabus and perhaps mention recommended textbooks. Some schemes of work allocate the work to be covered on monthly basis while others do so on weekly basis and, yet some indicate the ground to be covered in each lesson.

Characteristics of a scheme of work.

- Give an overview of the total course content.
- Provide for a sequential listing of learning task. That is, what children are expected to do after when they must have learnt.

- Show a relationship between the content and didactic materials.
- Provide a basis for a long-range planning, training and evaluation of the course.

Thus, it should be noted that the classroom teacher may not necessarily be involved in the initial stages of the curriculum development process, but the teacher is expected to interpret it correctly. This therefore calls for a thorough understanding of the syllabus and the content, to achieve this study which is to get education that is sustainable.

Components of a scheme of work

Organisation; trainees level; subject; date of preparation; number of periods; syllabus topic; lesson title; objectives; key points /methods; application; student's activities; assignment, practice, that is, for any concept learnt the teachers would love to see their learners through specific activities in class and do some for home works and applications must be designed in order to realise and consolidate concretely the objectives of the lessons; didactic materials must be used and remarks must be made.

-Lesson plan.

Kibinkiri (2017) defines lesson plans as guidelines drawn up to help the teacher in conducting classroom lessons. That is, from the scheme of work it is later arranged in units of related ideas or topics with some central themes which are usually associated to proximate goals. UNESCO holds the view point that education at all levels can shape the world of tomorrow by means of equipping the individuals and the societies with the skills, perspectives, knowledge, values and behaviours to live and work sustainable matter. There are two main types of lesson plan:

- General lesson plan or topic or unit plan
- Daily lesson plan or individual lesson notes

a.) General lesson plan.

It is also called topic or unit plan. It is drawn up to indicate the major objectives to be achieved in each topic or unit. It shows the breakdown of a topic or units into daily lessons or modules. It also shows the major teacher and pupil activities as well as teaching materials that will be required to achieve the objective of the unit or topic.

b) Daily lesson plan or individual lesson.

To Nnam (2016), a lesson plan is part of a unit of study, which may last from a few minutes to one or two hours depending on the level of the students. The individual or specific lesson note is narrower in that, it covers only one aspect of a given topic or unit and is limited to one lesson period. The individual lesson notes are an outline of the important aspects of a lesson arranged in the order in which they are to occur. An individual lesson note should include the following objectives, outline of subject matter related to the objectives, the method to be used, suggested pupils and teacher's activities, teaching materials and evaluation modes. The preamble should contain information such as learners, age, grade, class or level, entry behaviour/ prerequisite knowledge or previous knowledge, reference, instructional materials, class enrolment, duration, time of lesson.

They are different models of individual lesson notes. Whatever a teacher chooses depends on his or her professional experiences. Teachers should strive to use models, which encourage thinking in the learners rather than rote learning. Students in training should use the plans recommended by their teachers or inspectors.

2.2.4.2 Factors influencing the implementation of the curriculum.

Nkeng and Mambeh, (2007), stipulate that, a curriculum is being implemented in a society that has its own particularities. Thus, a curriculum while being implemented, faces those particularities or factors. There are numerous factors influencing the implementation of a curriculum. The factors that are going to be given below are the most important and the commonly faced one's. It's important to know that these factors can be classified in groups like some authors who classified the different factors. Below we will list the generally accepted factors:

The teachers: The teachers selected can decide on what to teach from the prescribed syllabus. It is imperative that teachers understand the curriculum document well to implement it effectively. Teachers should therefore play a more significant role in designing the curriculum. The teachers must be involved in curriculum planning and development so that they can implement and modify the curriculum for the benefit of their learners.

The Learners: The learners hold the key to what is transmitted and adopted from the official curriculum. The official curriculum can be quite different from the curriculum that is implemented. The learners' factors influence teachers in their selection of learning experiences, hence they need to consider the diverse characteristics of learners in curriculum implementation.

Resource Materials and facilities: No meaningful teaching, and learning can take place with no adequate resource materials. The government or ministry of education has to supply schools with adequate materials such as Textbooks, teaching aids and stationery in order to enable teachers and learners to play their role satisfactorily in the curriculum implementation process. The government should also provide facilities such as libraries and sports fields to create an environment in which implementation can take place.

Interest groups: Some interest groups can influence implementation. Examples of such interest groups in Cameroon include Parents, Parents Teachers Association (PTA), school management board, religious organization, local authorities, companies and private school proprietors. This groups can influence implementation in the following ways

- Provide schools with financial resources to purchase required materials.
- Demand the inclusion of certain subjects in the curriculum
- Influence learners to reject courses they consider detrimental to the interest of the group. It is therefore important to involve interest groups at the curriculum planning stage.

School Environment: The circumstances of each school can influence curriculum implementation. Schools located in rich socio-economic environment and those that have adequate human and material resources can influence the curriculum to an extent that would be difficult or impossible for schools in poor countries to easily put into practice all these things learnt in school.

2.2.5. Curriculum Evaluation

According to Ambe and Ajeagah (2004), curriculum evaluation is defined as the process by which a project or programme is judged in relation to its stated objectives. In education it's a valid judgement made to find out if our learning objectives have been achieved. To the evaluation aims at finding how close you have come in achieving your goals or objectives. It is closely linked to assessment which is at the heart of learning.

According to Nkeng and Mambeh, (2002), curriculum evaluation is the final phase in the curriculum development process. It involves drawing conclusions about the success or failures of the education by means of some measurements of the change in behaviours. The essence of evaluating the curriculum is to strengthen theory and make practice more effective through curriculum reforms and change.

Thus, it is very necessary to evaluate the extent to which these skills, knowledge, attitudes, competences, behaviours and values obtained by children through education is sustainable. That is, this will be seen in the way they will behave and integrate in the society, and how they use these knowledge skills and competences in solving their daily life problems encountered a general sense curriculum evaluation is a complex activity in which data is collected in order to either pass judgement about attainment of objectives or goals by an educational programme or for effecting revision or improvement. Curriculum evaluation may involve evaluating the entire curriculum or a small aspect of the curriculum like in the case of sustainability in education which is an educational vision.

2.2.5.1 Forms or Types of evaluation

There are four main forms of evaluation which include:

-Placement evaluation. This is evaluation which determines learner's performance at the beginning of the lesson. This is concerned with the learner's entry performance and typically focuses on questions such as;

Do the learners possess knowledge and skills needed to begin the planned lesson that will later be transferred in the society in which they find themselves? For example, does the beginning reader have the necessary reading skills?

Diagnostic evaluation. This has to do with difficulties faced by the learners during the teaching learning process. That is find out iflearners are able to use the knowledge gotten to resolve problems or not.

- **-Formative evaluation:** This is evaluation that takes place during the teaching learning process. This type is used to monitor the teaching learning process and to provide continuous feedback to both the teachers and the learners concerning the learning successes and failures.
- -Summative evaluation: This is evaluation that comes at the end of the course or at the end of the lesson. Thus, at the end of the training or course, teachers will have to evaluate their learners to find out if they have acquired the expected knowledge, skills, attitudes, values and behaviours which they can use in resolving their problems encountered. This is evaluation that is designed to determine the extent to which the expected objectives have been achieved and it's primarily used for assigning course grades, or certifying learners' mastery of the intended learning outcomes.

2.2.5.2 Components of Curriculum Evaluation and Sustainable Education

- **Objectives:** According to Gatawa (1990) cited in the Common Wealth learning (2000), the following questions must be asked when evaluating the objectives.
- Is the objective worthwhile?
- Can this objective be achieved?
- Can teachers accept them? What are the expected outcomes?
- **Content:** The content of the curriculum or the programme should be evaluated for its suitability and correlation with specified objectives.
- **Materials:** Instructional materials should be evaluated to determine whether the expected objectives have been attained or not.

-Instructional methodology and administrative processes. The methods of teaching used should tie with the different subjects and the different didactic materials so that it will help facilitate the attainment of the objectives in the official program or the curriculum for example the objective of Cameroon which is to train citizens who will acquire long life learning skills.

2.3. Sustainable education

To Ruhizan (2011), this can also be addressed as lifelong learning, long-lasting education or durable education, reason being that it is a process which starts from birth and passes through all the other stages of life. It is also the total number of learning activities which persons of all given age aim al ameliorating knowledge qualifications and competences in their personal perspectives, civic, social and/ or linked to employment (UIL 2015). UNESCO (2000) views sustainable education as education that is associated in a more restrictive way to the adults and the training given to adults to compensate a quality education. The development programme for after 2015 sees long life from birth and continues is all the stages of life. The approach is education offers a multiple and flexible learning pathway, important points and to reintegrate at all age and reinforce the links between the formal structures and non-formal structures, notably the formal acquisition of knowledge skills (aptitudes) and competences in the framework of the non-formal and informal education.

The fourth objective of sustainable education for development, précises the type of education which is necessary in occurrence to the inclusive education, that is equal and is of quality. One of the teachings of the last 15 years is that educational progress should not only base on access to education. About 38% of children who have almost passed the primary

school age, have not acquired the most elementary or basic competences which they need to succeed in life (UNESCO, 2014). A quality education must develop competences and skills in children that will prepare them to overcome their difficulties or problems encountered. Thus, importance attached to the quality of education, guarantees that the fundamental competences acquired in reading, writing and calculations which favours the acquisition of other competences in matters of reflection, of high levels, of creative thinking and the resolution of problems and other social and affective skills. UNESCO (2014), defines education for sustainability as the process where, every human being can acquire the knowledge, skills, attitudes and values that is necessary to shape a sustainable future. That is, to include Key sustainable development issues into teaching and learning; for example, Climate change, disaster, risk reduction, biodiversity, poverty reduction and sustainable consumption.

Sustainable education also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take actions for sustainable development. This education for a sustainable development consequently promotes competences like critical thinking imagining future Scenarios and making decisions in a collaborative way. It requires far reaching changes in the way education is often practiced today.

children on how to learn how to learn and on how to think about their own thinking (metacognition). She goes further to explain that if we want to have a sustainable future we must plan for it and work for it and even design for it, buy and sell farms and of course we must educate for it. Apparently, all systems are perfectly designed to get the results they get (Richmond). We must learn how to live well in our places so that we can contribute better and that they can sustain us when we begin with the learner. Learners are nursed in the classroom and the learners who are young people and adults learning together are nursed inside learning organisations with the whole school that are learning and changing are in real time over time and those schools that learners are nursed inside physical plans with food and transportations and energy and buildings and school yard and all that is nursed in communities that learn so that we think that schools and communities that learn as the most important distributor for moving towards the future we want which is sustainable education.

The Objectives of Education for Sustainability

Teachers and schools make a special contribution to sustainable education through the educational objectives they emphasise when selecting the content of the and learning

experiences for learners to study it should be chosen in a way that it influences the areas of knowledge to be learnt while the learning experiences chosen determines the skills and attitudes that students will develop. Several organisations have developed a list of knowledge, skills, and attitudinal objectives of sustainable education. Here are three examples:

- **A non-governmental organisation**: One of the earliest sets which was proposed by the Canadian educational group, that is, learning for a sustainable future.
- **A local school district**: The Dorset Local Authority in England identified the following aims and objectives for education for a sustainability.

Aims

Education should achieve changes in the community which:

- Lead to change in work, lifestyle and consumption patterns.
- Encourage people to consider alternatives.
- Enable people to take part in decision making.
- Enable people to find out information.
- Give people the opportunity to participate.
- Encourage principles leading to a fairer society.
- Help people to understand the links between issues.

Objectives

Achieving these aims, it means that education should help learners towards the following objectives

Table 1: Objectives of learning

Knowledge	Values	Skills
How natural processes	A commitment to all living	Co-operative working
work	things	
How our lives connect	A desire for social justice	Critical thinking and
with others	empathy and awareness	negotiation
The planet earth as a finite	Understanding of the quality	Reasoned debate problem
resource	of life, rights and	solving
	responsibilities	
How to make decisions	A global perspective and	Creative ability, research and
and how we provide for	loyalty to the world	data handling and
human needs	community	communication skills

A government committee: An English Panel for Education for a sustainability organised its proposed objectives around seven key themes:

- Interdependence of society, economy and the natural environment, from local to global.
- Citizenship and stewardship -rights and responsibilities, participation and cooperation.
- Needs and rights of future generations.
- Diversity -cultural, social, economic and biological.
- Quality of life, equity and justice.
- Sustainable change-development and carrying capacity.
- Uncertainty and precautions in action.

Outcomes

Learners are expected to meet a certain standard in their education where in, these learners form an assessment specification which is used to check their level of competences. Since these competences, knowledge, skills and attitudes are what of the factors that will determine that the education obtained by citizens is sustainable.

Competence Based Education or Curriculum and Outcome Based Education (OBE)

William Spacty, a sociologist and director of the High Success Network on outcome-Based Education, in Ealey, Colorado is the precursor of this concept. It is a recent curricular pattern common since from the 1970s till the 1990s. This is an approach of knowledge that is related to solutions to some problems they may encounter in their daily lives. This outcome-based education is (CBE) in a structure and approach; however, all the outcomes that students must successfully perform are related to skills and concepts they need to function as effective adults in the real world rather than as students or learners studying sake. At least with all these competences and skills gotten the learners should be able to use this knowledge in their society through actions. For example, they should be able to use knowledge in health education and offering first aid to someone who might have had a malaria or fainted by doing the person a mouth to mouth oxygen.

Therefore, teachers need to identify and revise teaching methods and strategies that will help the learners to be able to achieve these durable competences.

According to Nkeng and Mambeh (2007, p.16) curriculum planning and design with reference to sustainable education, simply aims at deliberating arrangements of instructions that are planned to promote the attainment of some intended goals. For example, (sustainability education) to explain sustainability in education with the help of curriculum planning Nkeng and Mambeh (2007, p.16), there are phrases to elaborate namely analysis in the form of objectives, strategy selections and evaluation.

Analysis in the form of Objectives with Reference to Sustainable Education

In this phrase, the objectives are written as statements of intent that describe the behaviours which children are expected to exhibit because of being educated. This must answer the questions where we going to? That is, since the aim of education today is to get education that is of good quality and sustainable too, teachers need to know that they have to teach children such that they acquire competences and the learners too must know why they are learning they can know that the knowledge obtained must not only end in the classrooms, but it should be used even in future it should be practiced.

Strategy selection of the curriculum related to Sustainable Education

To get education that is sustainable (Long Lasting), there is the need for the selection of organisational, delivery and management strategies. That is, teachers must decide how their classroom can be organised (sitting position) for example; Those with visual and audio problems should be asked to sit in front, decide on the method of teaching to be used that will be convenient enough for all the learners and the native of controlling his/her classroom. This is to answer the question how will we get there? Thus, to attain the objective of getting an education that is sustainable, teachers must bear this question in mind and learners too will have to work extremely hard too to get education that is sustainable. It should be noted that not only the teachers, stakeholders and learners have a role in the achievement and attainment of sustainable education, parents also have to support their children and why not the teacher also by making sure that they provide the Child's necessary school needs such as school fees, buy books and textbooks, provide the child with teaching and health facilities that will facilitate and ease the child's work.

Other related literature

Council of The European Union 2010

To the council of the European Union 2010, education for sustainability is essential for the achievement of a sustainable or long-lasting society and it's therefore Experiential learning methods that engage the learners and makes a real difference to their understanding, thinking and ability to act.

In this light, five pedagogic elements have been identified that will cover a host of pedagogical approaches or methods that might be used to bring these elements into the learning environment.

1-Critical reflection

This includes more traditional lecture, but also newer approaches such as reflexive accounts, learning journals and discussion groups.

2.-Systematic thinking

The use of real-world case studies and critical incidents, projects-based learning, stimulus activities, and the use of the campus as learning resources.

3-Participatory learning

With emphasis on group or peer learning, developing mental dialogue, experiential learning, action research/learning to act and developing case studies with local community groups and businesses.

2) Thinking creatively for future scenarios

This can be done by using role play, real-world inquiry, futures, visioning, problem-based learning and providing space for emergence. Jaimie Cloud also stipulates that teachers have to invent and affect the future. That is, it's all about envisioning, imagining, tapping our passions, and persevering that is never going back, taking a risk, doing things you have never done before and turning problems into opportunities to create value.

Collaborative learning

This should be done by putting the children to work in teams or groups like it is with the project method where they have a secretary who will present their work at the end of the exercise given to them for this is exactly what the new curriculum for both the nursery and primary schools want and they should also include contributions from guest speakers, work-

based learning, interdisciplinary/multidisciplinary working, and collaborative learning and coinquiry

. **Education for a sustainable future:** It is defined as a lifelong learning process that leads, informs and involves citizenry, develops creative problem-solving skills, develops scientific and social literacy, engages people in responsible individual and cooperative actions, that will help ensure an environmental sound and economic.

Schumacher Briefings (2001) today sees sustainable education as learning that is mostly functional or informational which is oriented towards socialization and vocational goals that take western educational systems by the introduction of managerial economic restructuring. This modernist educational paradigm derives from a broader, social and cultural paradigm which is fundamentally mechanistic and reductionist. There is a poor fit between this dominant paradigm and our experience of increasing. Complexity, interdependence and systems breakdown in the world. Asserting education for sustainability, within the present educational framework can only meet with limited success, as such forms of educational change are marginalized by the mainstream. The real need is to change from transitive towards transformative learning, but this is turn requires a transformed educational paradigm. Educators for change need a clearer understanding of an ecological social and environmental change that helps to support the developmental sustainability of a given society. Sustainable education (SE) and education for sustainable development (ESD) are interchangeable terms describing the practice of teaching for sustainability. Education for sustainable development is the term mostly used internationally and by the United Nations agenda 21 which was the first international document that identified education as an essential tool for achieving sustainable development and highlighted area of actions for education. Sustainable education in the (2001;22) is a change on educational culture one which develops and embodies the theory and practice of sustainability in a way which is critically aware. It is therefore a transformative paradigm which values sustains and realizes human potential in relation to the need to attain and sustain social, economic and ecological well-being recognizing that they must be part of the same dynamic. Hence, the concept of "sustainable education" a term which suggests not just a simple "add-on" of sustainability concepts to some parts of the curriculum, but a cultural shift in the way we see education and learning. Rather than a piece meal, bolt on, fragmentary response which leaves the mainstream otherwise untouched, it implies systematic change in thinking and practice informed by what can be called more ecological thinking and values-essentially a new paradigm emerging around the poles of systemic thinking sustainability and complexity. This offers the possibility of education that is appropriate and responsive to the new systemic conditions of uncertainty and complexity that are reflected in the headlines every day; One that nurtures the increasingly important qualities of adaptability, creativity, self-reliance, hope and resilience in learners.

To Stephen Sterling's, Sustainable education implies four descriptors: educational policy and practice which is sustainable, tenable, healthy and durable.

- **Sustaining**: This means it helps sustain people communities and ecosystems.
- **Tenable**: It is ethically defensible, working with integrity, justice, respect and incisiveness:
- **Healthy**: It is itself a viable system embodying and nurturing healthy relationships and emergence at different system levels.
- **Durabl**e: This work well enough is practice being able to keep doing it.

To the total disseminator of knowledge, sustainable education means finding long-lasting solutions through education, namely with regards to social environmental and economic issues. Thus, it is a concept that involves active academic participation to create economic, social and environmental programs improving life standards generating empowerment and respecting interdependence

Education a Key to Sustainability

May 19, 2015, marks a turning point for the world with the international community adopting a new global development strategy and negotiating a universal deal to combat so many problems such as climate change especially in the month of December. To succeed, policy makers must recognize that today's global imperatives to educate poverty and improve wellbeing, while restoring the earth's balance-form a single agenda and that the most effective means of achieving it is education.

The good news is that the proposed set of sustainable development Goals which will under pin global efforts for the next 15years, reflect this recognition. Likewise, Article 6 of the United Nation Framework Convention in Climate Change (UNFCCC) stipulates that education training and public awareness on climate change towards sustainable education must be pursued but with negotiations on these global agreements far from complete, it is vital that policymakers emphasize on education which continues to be reinforced. To this end, the world's education ministers must take the opportunity offered by this which is aimed at

highlighting the role that education can and should play in advancing sustainable education. A strong education system broadens access to opportunities, improves health, and bolsters the resilience of communities-all while fueling.

To McKeown (2002), education for sustainability was formed out of the recognition that there exists a distinct difference between education about sustainable development and education for sustainable development. The former was seen to be a theoretical exercise while the latter was used as a tool to achieve sustainability promises to make the world livable now and in future generations. It calls for giving people knowledge and lifelong learning skills that will help them find new solutions to their environmental, economic, social, cultural and educational systems within the communities that need to develop sustainability goals, local educational systems that can modify existing curriculum practices to reinforce these goals or plan actions on which it's going to be based educational charge.

Suzan Padua quoted by Fritz puts it "The world in 2020 should be a world that is conscious of what it uses and what it lives behind, a world where people have knowledge and values that include respect, solidarity and empathy for all living species a world where individuals are educated with skills that reflect concerns for an equitable society, viable economic and sustainable environments (Fritz Hesse irk, 2002)

The Cloud Institute for Sustainable Education (1995)

This institute was founded in 1995 as a program of American Forum for Global Education known as sustainability education center. From its conception, the cloud institute has been a pioneer of education for sustainability. Jaimie P. Cloud, founder and president of the institution over 30 years decided that:

- A shared understanding be developed that schools have a responsibility to contribute to our individuals and collective potentials and to that of the living systems upon which all life depends
- Schools should be transformed into learning organizations
- Unleashing the potentials of having all our children in schools with their teachers and mentors during the most favorable time for learning and to honoring them with transformative learning experiences that prepare them to participate in and to live with us, the shift towards sustainable future.

To the United Nations decade of education for sustainable development (DESD), education for sustainability Is the practice of learning how to achieve global and local sustainable communities. They had the following as objectives that could help them achieve education that is sustainable.

- Facilitate networking linkages, exchange and interaction among stakeholders in education for sustainable development (ESD)
- Foster increased quality of teaching and learning
- Help countries make progress towards and attain the millennium development goals through the efforts of ESD
- Provide countries with new opportunities to incorporate ESD into education reform efforts.

The Global Action Program on Education for Sustainability (GAP On EFS)

The UN Decade of education for sustainable development tool place from 2005-2014 with the goal of emphasizing education in all its forms (formal, non-formal) as an indispensable element for achieving sustainable development. In November 2014 as the official follow up to the DESD, UNESCO launched the Global Action Programs (GAP) for ESD with the overall objective to scale up action on ESD worldwide. Two basic and very important objectives of GAP on education for sustainable development are:

- Re orienting education and learning so that everyone had the opportunity to acquire the values, skills and knowledge that empowers them to contribute to sustainable development;
- Enhancing the role of education and learning in all relevant agendas programs and activities that promote sustainable development.

The GAP focuses on generating and scaling up actions in five priorities

Actions Areas:

- Advancing policy
- Transforming learning and training environment
- Building capacities of education and trainers
- Empowering and mobilizing the youths
- Accelerating sustainable solutions at local level.

Sustainable Development Goals in Education.

By 2030, it should be ensured that, all learners acquire knowledge and skills which are needed to promote sustainable education, including among others, in August 2015, 193 countries agreed on the following Goals.

- **No poverty**: That is, put an end to poverty in all its forms everywhere.
- **No to hunger**: Ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture
- **Good Health**: ensure healthy living and promote wellbeing for all ages.
- **Quality Education**: Ensure universal and equal quality education and enhance lifelong learning opportunities for all. This is the focus of this research topic. That is quality education should acquire skills, competences, attitudes and values which they can use in solving their problems encountered in their daily lives.
- 1) **There should be gender equality**. That is, achieving gender equality and empowers all women and girls.
- 2) **Provide clean water:** That is, ensure that there is abundant and sustainable water and health management for all.
- 3) Provide renewable and affordable energy that is reliable and sustainable and accessible for all
- 4) Good jobs and sustainable, comprehensive, economic growth that is full, decent and productive in employment should be offered for all.
- 5) Innovative and good infrastructure: That is, build a flexible infrastructure and promote comprehensive, sustainable manufacturing and innovation promotion.
- 10. Reduce inequalities within states and between states and each other.
- 11. Make cities and human settlements inclusive, secure, flexible and sustainable.
- 12. There should be responsible use of resources such as oceans to ensure a sustainable consumption and production patter.

Integrating Education for Sustainability in Curricula and Textbooks

Curricular need to ensure that all children and young people learn not just foundation skills but also transferable skills such as critical thinking problem solving, advocacy and con ICT resolution, to help them become responsible global citizens (UNSESCO, 2014:36). Thus, from the development of sustainability the curricula are expected to "Improve the capacity of our educational systems to prepare people to pursue education and development that is sustainability. Hence, Reviews of official curriculum documents show that "many countries

now include sustainability and/or environmental themes as one of the general goals of education. For instance, in primary and secondary education most progress has been made in curriculum development towards education for sustainability'. Close to 40% of member states indicate that their greatest achievement over the Decade for education for sustainable development (DESD) has been the integration of ESD into formal curricula, with another that is describing school projects as being their most important contributions to ESD.

Examples

Mauritius – National Curriculum Framework

The Maurice Ile durable policy was introduced in 2008 with the objective of making Mauritius a world model of sustainable development by 2020. Education is one of its five pillars with a multi-stakeholder working group put in place to integrate Education for Sustainable Development (ESD) into all levels of education. The goal is to reorient the education system towards sustainability, build a capacity at all level and strengthen awareness of key issues. As Mauritius reports, education for sustainability is now part of the National curriculum, Framework and because of the Maurice the durable societal project ESD is being addressed by many formal and non-formal institutions/ organizations.

Togo-Quality Education for a Sustainable Future

In Togo, the education policy framework (Lakalaka) is grounded in the National Curriculum entitled quality education for a sustainable future.

Finland- Reforming the National Core Curricular for Pre- School and Basic Education

Finland is reforming the national Core curricular for pre-school and basic education to support and promote sustainable development and well-being following the value basis of education, where eco-social all students in developing the knowledge, skills, values, and attitudes that promote their ability to understand the importance of a sustainable future.

Manitoba, Canada Profile of Successful Leadership

In Manitoba ESD is a priority action area of the government and has been embedded in the overall purpose of primary and secondary education. It is now government policy to that all Manitoba's children and unities such that every learner experiences success through relevant engaging and high-quality education that prepares them for lifelong learning and citizenship in a democratic, socially, just and sustainable society. This statement is included in the mission of the provincial ministry of education and advanced learning. In response to this policy commitment, ESD has been integrated into the curriculum from Kindergarten up to 12thgrade with specific learning out comes identified in science, social schedules, health and physical education. Building the capacity of educations and school leaders as well as dedicated funding to ensure the development of sustainability practices, principles programs and partnership helps schools to embed sustainability in to their classrooms, operations and management.

A climate friendly school

A climate friendly school is a school that uses education for sustainable development (ESD) to promote a culture of sustainability in which students, staff and families hold shared values and beliefs about the importance of acting for a more sustainable society. Taking care of the environment and contributing to reduce climate change in an integral part of this climate actions which means different things to different schools. Some schools see climate action as key to doing their part. To take care of the planet. For other schools and it is about addressing issues directly affecting them.

The connection of ESD and TVET (Technical and Vocational Education and Training)

TVET is education and training which provides knowledge and skills for employment.

TVET is recognized to be a crucial vehicle for social equity inclusion and sustainability.

TVET systems are progressively expected to provide education for sustainability as part of their core curricula. TVET prepare people for work in a range of sectors, e. g construction waste, management and agriculture, industries that consume enormous amounts of energy raw materials and water. Sustainability requires that those working in these sectors have the requisite technical knowledge to make these industries more sustainable.

The connection of ESD and Global Citizenship Education (GCED)

The global citizenship education (GCED) and education for sustainable development (ESD) pursue the same vision. It is all about empowering learners of all ages to become proactive type of contributors to a more just peaceful tolerant, inclusive and sustainable world. Both GCED and ESD.

- Focus not only on the content and outcomes of what is learned but also on the process of how it is learned and in what environment it is learned.
- Emphasize action change and transformation.

- Place importance on acquiring values and attitudes relevant to addressing global challenges.
- Faster skills for collaboration, communications and critical thinking.

Thus, both GCED and ESD help learners to understand the interconnected world in which they live, and the complexities of the global challenges faced. GCED and ESD helps learners to develop their knowledge, skills attitudes values and behavior so that they can address these challenges responsibility and effectively now and in the future.

The connection of education for sustainability and climate change education (CCE)

When we hear of climate change education, it means it is education for a sustainable disaster risk reduction and others into education, in a way that addresses the interdependence of environmental sustainability, economic liability, and social justice for, it promotes participatory teaching and learning methods that motivates and empower learners to change their behaviors and to take actions for a sustainable development. Bio mimicry was used which is a science that is used in solving human problems by looking at the way nature solves problems and how it applies to the problems we are trying to solve. Thus, looking at this problem of sustainability in education we can say that a problem is a solution in a wrong place. That is, problems can help us preserve what we want to preserve and help us change what we want to change. Hence, the more we want to think about the problem, the more we reinforce the thinking that caused the problem. Therefore, it is good to provide the future we want, think about the thinking so that we can continually improve it and address more than one problem at a time and minimize the creation of new problems.

The millennium development goals Also amongst the eight (8) millennium development goals, the second (2) who states that a universal primary education should be achieved also contributes to the achievement of a sustainable education and goal four (4) which states that quality education should be provided to children. Below is an elaboration of the forth millennium development goal (goal 4).

Goal 4. Quality education Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Since 2000, there has been enormous progress in achieving the target of universal primary education. The total enrolment rate in developing regions reached 91% in 2015, and the world-wide number of children out of school has dropped out by half. There has also been a dramatic increase in literacy rate and many more

girls are in school than ever before. These are all remarkable successes. It was noticed in the sub Saharan Africa that children from the poorest households are four times more likely to be out of school than those of the richest households. Disparities between rural and urban areas also remain high.

Furthermore, achieving quality and inclusive education for all reaffirms the belief that education is one of the most powerful and proven vehicles for sustainable development. This goal ensures that all girls and boys complete free primary and secondary schooling by 2030. It also aims to provide equal access to affordable vocational training and to eliminate gender and wealth disparities with the aim of achieving universal access to a quality higher education. It should be noted that quality education is one of the 17 global goals that make up the 2030 agenda for sustainable development.

UNESCO set groundwork for sustainable education in Cameroon

The united nation sustainable development goal no 4 states that the need for children to be given quality education by 2030. A three-day workshop on the implementation of the sustainable development goal no 4 began from June 6th, 2018 to June 8th in Yaoundé. UNESCO multi-cultural region representative Salah Kalet promised that his institution will assist Cameroon in designing and implementing a comprehensive education sector strategy. He indicated that the strategy should be one that responds to the needs of the youths and the demands of the job market. Mr. Salah argued that the workshop was organized to elaborate the plans of action and identify the indicators which Cameroon should follow in achieving a sustainable development goal no 4. The workshop is also a forum to discuss the individual rules attributed to all actors involved in the education 2030 project. The UNESCO representative said achieving inclusive and equitable quality education for all will require increasing efforts, especially in sub Saharan Africa.

He specifically mentioned vulnerable populations, persons with disabilities indigenous people, refuge children and poor children in rural areas. The lack of trained teachers and poverty in many parts of Cameroon are factors that inhibit quality education for all. That is it's with the help of these trained and quality teachers that children can easily acquire skills, knowledge, competences and values which they can use in future or presently in resolving their problems. The education 2030 project takes into consideration the poor living standards and proposes solutions to the problem of education in Cameroon and other sub Saharan countries are facing. The UNESCO re4presentative saluted governments resolve to widen

access to education. Finally, the UNESCO education 2030 presented sound investment for quality education offered free at primary and secondary school levels. According to Lynn Dervies, the school curriculum should pass on enduring values and help learners to be responsible and caring citizens who can contribute to a just society. It should develop their awareness and understanding of and respect for the environmental in which they live and secure learner's commitment to sustainable education as a personal, local, national and global level.

How to teach children about sustainability

According to the Eco Watch, (2003) to teach a child sustainability that is to acquire long lasting learning, you must act as a role model wherein you are about to teach them. Thus, as a teacher, there are some quick pointers on how to do so that will help them to be taught 5tips about sustainability living which is always geared towards a younger audience.

- 1. **Lead by example.** That is teachers should serve as role model for their learners to emulate.
- 2. **Make it fun.** Whatever thing that is to be taught to the children should be done with allot of enthusiasm, fun and interest.
- 3. **Get kids involved.** Make the kids to be fully involved in the activity or the task given to them.
- 4. **Read to them.** Teachers should read respectably the instructions that are guiding the given task.
- 5. **Volunteer with your kid**. The Vanderbilt university center for teaching offers suggestions on teaching about this sustainability issues for a more mature audience.
- 6. **Beware of students overhead**. Teachers should avoid giving over hard work to their students for the cognitive and feelings of overload can cause students to feel disengaged, disempowered and even resentful which can disrupt the learning process.
- 7. Avoid doom and gloom. While teaching children about the many challenges to the environmental sustainability which will necessarily introduce some risk of overhead, teachers can limit this by being sure to discuss environmental success stories. For example, this may include discussion of environmental policies or movements that have succeeded in mitigating pollution, conserving resources or promoting ecological resiliency. Whatever the success, incorporating them into courses can help students

envision a future that is shared by their agency and any descent into cynical resignation or fearful reaction.

- 8. Focus on quality of life issues
- 9. Peer engagement and support, student analysis of data, deconstruct Eco Rhetoric, precautionary principle, embrace under disciplinarily

According to the facing the future, educators therefore must equip and motivate learners to develop critical thinking skills, build global awareness and engage in positive solutions for sustainable future.

Education for a sustainable future a paradigm of hope for the 21st century skills According to Keith A. Wheeler, Anne Prerace said; if we ask most people especially the young people of today what the future looks like to them they will paint a rosy picture of their individual lives, their future homes, their careers and sometimes even the lives of their children meaning that they will like to have a future that is promising and for them to acquire this, they will have to achieve knowledge, skills, competences and values that will prove that the education they have obtained is durable.

According to Bipoupout, (2011, p.23.) in his article; Develop competences in school, An Integrator Model of Teaching and Learning, it is a question of letting children have a trend by tend means towards the acquisition of competences integration of learning in terms of competences in the teaching and learning process. He attached more importance on the pedagogy of integration while talking of learning. To him, when formulating the statement of a competence as a teacher, you have to identify the task that the subject or the pupil must be able to carry out in order to be declared competent, formulate the task using an action verb and make it to be preceded by statements like the pupil must be able to....; after that you state the competence and define the type of task to be carried out specifying the circumstances under which the task is to be carried out that is, the type of didactic materials and make sure this task is to be preceded by expressions such as from...; or given...

Xavier Rocgiers (2001) says that "Pedagogy of integration rests on the putting in place a learning process which does not only contain of the accumulation of knowledge and skills but also that which learns to mobilize this knowledge, competences, skills, attitudes values, behaviors which can be used in resolving problems encountered which maybe faced by the learners. To Bipoupout, (2011), he sees the learner as a principal or main actor in the

construction of their learning and the learning realized across the resolutions of problems, by the learner himself with the teacher being just a guide (scaffolding). Also, he stipulates that it's the learner himself who learns to install the knowledge, competences, skills and attitudes and values into practice and integrate the resources and to mobilize in situations of real life. To Belinga Bessala, (2013, P.7) it poses a problem of professionalization of teachers who must pass by their own competences and not by the simple fact of having made studies universal by a diploma or certificate of specialization. This is the more reason why didactics is proposed as a science of education which permits all teachers to think on the practices of teaching and learning in view of ameliorating the situation. In this effect, each teacher must organize well teaching in a manner that is simple and precise to carry out the teaching and learning process, it should be the teachers place to decide which technique or method to use so as to conduct an evaluation of the learners initially fixed objectives. Thompson (1991), states that the methods of teaching use in Africa are said to be examination centered and restrictive of the growing child, failing to produce original thinking or problem-solving ability on the one hand, and genuine commitment to the service of the community on the other. What Thompson is saying here is that, most learning is being done just for examination purpose and it does not help the learner in solving his problems encountered in his daily life.

Wilkins (1976), supports the view by saying that, the primary education has a greater role to play in rendering education sustainable that is, what is learned in the classroom should be put more practicable outside in their daily life thus primary education must make sure that it sees into it that, the school leaver can take his responsibility and place as an intelligent, balanced personality that is full of competences, skills values, attitudes and behaviors that will make him to be able to solve his problems in life and also to integrate well in the society.

According to Tambo (2012), the subject matter (content) should be selected according to strategic importance and the sources of the content may come from interest and the needs of the learners that will suit the society's vision which is gaining education that is sustainable which the children will use in resolving their daily problems.

2.3.1 Environmental sustainability.

In his work Adams ,W.(2006) rightly observes that, during the last quarter of this century ,there has been an increasing global concern for rethinking development, re-examining the traditional mode of development based on the logic of industrialism, reviving public interest in the uncertain future of the natural environment and non-renewable resources ,thereby

reinforcing the focus on the question of sustainability. Thus, Adams said that education should be in such a way that, children will be able to reserve their environments like they should fight against environmental ills such as global warming, pollution, deforestation just to name a few but, it has been a different case in our society of today these learners acquire all these knowledge, yet they don't put it into practice to resolve their daily life activities.

2.3.2 Economic sustainability

Blewitt J. (2008, p.24) in his work 'Understanding Sustainable Development thinks that, sustainability concerns the specification of a set of actions to be taken by present persons that will not diminish the prospects of future persons to enjoy levels of consumption, wealth, utility, or welfare comparable to those enjoyed by present persons.

Tolman, (2002) explains that economic sustainability is the term used to identify various strategies that make it possible to use available resources to their best advantage. The idea is to promote the use of those resources in such a way that is both efficient and responsible and likely to provide long term benefits.

Table 2: Factors that favour sustainability in education

Environmental sustainability	Economic sustainability	Social sustainability
Natural resource management	Alternative futures	Sustainable communities
Food and farming	Leadership and change	Cultural diversity
Ecological systems	Learning organizations	Intercultural understanding
Waste/water/energy	Corporate social responsibility	Sustainability in the built environment
Bio-diversity	Consumerism and trade	Travel transport and mobility
Climate change	Co-localization of economy	Health and wellbeing
	Accountability and ethics	Peace/security and conflict
	International development	Citizenship/government / democracy
	Sustainable and ethical tourism and population.	Human rights and needs

Pedagogical approaches in sustainable education

There is no correct pedagogy for sustainability in education, but there is a broad consensus that it requires a shift towards active, participative, and desirable at all the levels of formal education and training, as well as in non-formal and informal learning.

Sustainable development education panel report 1998

Education for sustainability is the learning needed to maintain and improve our quality of life and the quality of the lives of generations to come. Thus, it will enable people to develop the knowledge, values, skills, competences and behaviors that will help learners or children to participate in decisions about the way we do things individually and collectively both locally and globally, that will improve the quality of life now without damaging the planet for the future.

2.3.3 Sustainability in the Curriculum

Here, we take the approach that there is no definitive knowledge content that should be included in a curriculum addressing sustainability or sustainable development. Rather following the situations of some areas like Tilbury and Wortman 2004, we point to indicative curricular things that may be relevant to each disciplinary area and which may be used and adapted as entry points to develop sustainability in education. Stephen Sterling and the publisher of Schumacher Briefings in 2001 had a chart about the title of the new education wherein Briefing tried to find out how it shall be called, whether it shall be called education for sustainability or sustainable education implying that education lasts long. But Stephen Sterling refused saying 'No' and 'Yes' that sustainable education is exactly the title that he wants reason being that he wanted to provoke little cognitive dissonance and what that means. Meaning that he wanted people to move from how we educate for sustainable development towards deeper attention to education itself. Its paradigms, policies, purposes and practices (these are linked of course and its adequacy for the age we find ourselves in.

2.3.4 The 21st Century knowledge skills

The American Association of Colleges for Teachers' Education (AACTE) and the partnership for 21st century knowledge skills believed new teachers and candidates must be equipped with 21st knowledge and skills and will learn how to integrate them into their classroom practice for our nation to realise its goals of successfully meeting knowledge economy and skills. It's about fusing the two so that our children will make the demands of a global economy well as

they engage in good citizenship and participate fully in a vibrant and civil society. This is an important step into an effort to promote the inclusion of 21st century knowledge and skills which are formally into teacher preparation programs. In phases of these words, we hope to provide additional resources and technical assistance to support this effort among colleagues of education nationwide. (In late 2000) a shared sense of urgency prompted a group of the deans to come together to consider how the education program might embedded 21st century knowledge skills were more effective in their programs. According to the 21st century knowledge skills, competences and expertise such as critical thinking, complex problem solving, collaboration and multimedia communication should be implemented into all content areas. Thus, it's important to gain knowledge and understanding of the interdisciplinary nature of learning which includes the intersection between the core subjects.

Preparing learners for the 21st century economy

Today as before, meeting our society's challenges demands educational excellence .Reinvigorating the economy achieving energy independence with alternative technologies and green jobs, and strengthening our health care system require a skilled population that is ready for the critical challenges we face .There is widespread consensus , however that our education systems are falling to adequately prepare all with the essential 21st century knowledge and skills necessary to succeed in life, career and citizenship.

Learning and innovation skills

These are the skills most often cited when referring to 21^{st} century skills. They are increasingly being recognised as attributes that separate learners who are prepared for a more and more complex life and work environment in the 21^{st} century, from those who are not.

- Critical Thinking and complex Problem solving. effectively analyse and evaluate
 evidence, arguments, claims and beliefs; solve different kinds of non-familiar
 problems in both conventional and innovation ways.
- Creativity and innovations. With the knowledge acquired, the learners should be
 able to use a wide range of ideas and creation technique to create new and worthwhile
 ideas.
- Communication e.g. articulate thoughts and ideas effectively using oral and written communication skills in a variety of forms and contexts.

• Collaboration e.g. the children should acquire knowledge, competences and skills in such a way that they will be able to demonstrate the ability to work effectively and respectfully with diverse teams and personalities.

Urubu (1985), holds that teachers during implementing the curriculum, it should not only adhere to the formal aspects of the curriculum, but it should also take into consideration the aspects of knowledge that is derived from other sources. That is, it can also be informal or non-formal and that if at the end of all these, there is no success in the attainment of the stated goals and objectives for the curriculum can be changed.

2.4. The 15th international colloquium of French Associations for Comparative education (AFDECE) 2018.

During this very important and rich educational colloquium on the type of education that should be offered to our children, a comparison was made with European countries and the African countries. In one of the representations made by one of the participants or presenters it was said that it is very important to keep in spirit that the competences, skills and attitudes acquired, must be in ad equation with the works of tomorrow. It is equally important to put in place the appropriate mechanisms for the learners to be able to acquire the competences that will help them all through their life time and for the school of tomorrow, it is also good to know the opportunities that exist in the country. Thus, there is no consultation for it I also good to work hand in gloves so as to get the criteria of the school for tomorrow or the future school and to be able to evaluate the performance that will help the children. Still during this presentation but now in the domain of the new technologies, it helps permit us to renovate our learning and gives us the chance to improve our lives while developing strategies and techniques that will help u to get a better future and make things to be more practicable in the real life and this can be likened to a non-formal learning. Hence it is now that good decisions should be taken that will help us to be able to harvest good fruits in fifteen, (15) years to come for it is not an obligation that all the youths must go to the university in all the countries, but they are all supposed to be educated and even gain competences, values and attitudes. It is also good to note that the education or school for tomorrow, has its own functions which are the comprehension function, the diagnostic function, the accompanying function and the collaboration function. The use of ICT will help us to be able to learn to see, touch and manipulate for our dream of tomorrows school. The new school will have a lot of pedagogic teams to dream of. Distance learning is and will help us to have a link with those who are at home and even in the diaspora. ICT is not only used for communication, but it can be used for the resolution f problems. Prof Fozing Innocent said, ICT will help permit us to be able to verify what has been rendered during the teaching/learning process. He also said that ICT does not only facilitate the teachers to teach but also that it has a sociological function which helps the teacher to be able to collaborate with the learners but he also made a remark that the environment too where the ICT is implemented also matters for very few teachers do put into practice what is planned for ICT in Africa, very few know how to resolve the communication problems encountered for it is necessary to learn ICT in order to participate in the sustainable education of our country. Thus, for us to make ICT to be effective in our context, we have to change our mentality and not only be focused on the material things and we need to know what technology to be chosen for our tomorrows school that will help simplify the education. Also Joy Reid (2018) said education should no longer be a paper stencil issue but children's capability of using the knowledge gotten in resolving their problems of the present generation and even the future generation.

2.5 Theoretical Review

According to J. S Farrant [1980], learning theories are conceptual frameworks that describes how information is absorbed, processed and retained during learning. He stresses that cognitive, emotional, and environmental influences as well as prior experiences, all play a part in how understanding, or a world view, is acquired or changed and knowledge and skills retained.

Behaviourism theory of learning (Ivan Pavlov, B.F. Skinner, Albert Bandura and Eduard Lee Thorndike)

Luma, (1983) is quick to point out that behaviourist looked at learning as an aspect of conditioning and will advocate a system of rewards and targets education. Andouchi, (2013) adds that educators who embrace cognitive theory believe that the definition of learning as a change in behaviour is too narrow and prefer to study the learner rather than the environment, and the complexities of human memory. Generally, Humanists emphasize on the importance of self-knowledge and relationships in the learning process. Those who advocate constructivism believe that a learner's ability to learn relies to a large extent on what he already knows and understands, and that the acquisition of knowledge should be an individually tailored process of construction. Behaviourism, as a learning theory, is based on a change in knowledge through controlled stimulus /response conditioning. This type of learner is dependent upon an instructor for acquisition of knowledge. The instructor must

demonstrate factual knowledge, then observe, measure and modify behavioural changes in specified direction. This type of learning is a conditioned response or rote memorisation of facts, assertions, rules, laws and terminology. The focus of intelligence development is visual /spatial, musical/rhythmic, and bodily/ kinaesthetic intelligence. The purpose in education is to help a learner build initial schema by adopting knowledge from an instructor through use of the learner's senses. This learning goal is the lowest order learning: factual knowledge, skills attitudes and training. Thus, this theory supposes that the learners after having been educated should be able to experience a change in their behaviour and attitudes that is they should be able to show positive behaviours like keeping their environments clean through environmental and health education, show respect for their elders through civic and moral education. With this we can say the education gotten from school is sustainable because it's being lived and practiced in real life. To the behaviourists, they assume that the learner is essentially passive, responding to the environmental stimuli. They believe that the learner starts out with a clean slate, and behaviour is shaped by both positive and negative reinforcements hence with the reinforcement be it positive or negative, it increases the possibility of an event happening again. They also believe that punishment be it negative or positive reduces the possibility of an event from happening again. Thus, with this theory we are expected to have a change in learners' behaviour after the teaching/learning process must have taken place. Teachers have to make sure that they encourage good and positive behaviours in children and also discourage the negative and bad behaviours in them for as earlier mentioned in article 4 of April 14th, 1998 law of orientation on education in Cameroon states that we should train the children in such a way that they will be morally, socially, intellectually, culturally upright that will help them to integrate well in the society in which they find themselves.

Experiential Learning Theory of David A. Kolb (1970)

Beginning in the 1970's, David A. Kolb helped to develop the modern theory of experiential learning, drawing heavily on the work of John Dewey, Kurt Lewin and Jean Piaget. He believes that '' learning is the process whereby knowledge is created through the transformation of experience' (1984, p.38). This type of learning theory is a process, which directly acknowledges, welcomes, values and uses the existing knowledge and competence of those being taught. Its use is particularly appropriate where the subject matter under consideration touches on people's deeply held beliefs and attitudes, involves emotionally charged. In this theory learning occurs at intellectual, emotional and behavioural levels in an

integrated manner, resulting in real and behavioural change as influential early learning is effectively re-evaluated. This theory is very exciting in that it includes a range of different processes such as individual or team problem solving initiatives, physical challenges, games and structured interactions which are all what the curriculum encourages. In all these learners are actively engaged in the learning process and can generate meaningful, relevant insights from their experiences. One good thing about this theory is that, it is not only applicable in the school, but it is also implemented in businesses and industries. This theory requires a self-initiative, which is an intention to learn and an active phase of learning. Kolb's cyclical model of experiential learning theory is a holistic perspective that combines experience, perception, cognition and behaviours which can be used as a framework for considering the different stages involved. Jennifer A. Moon elaborated on this cycle to argue that this theory most effective when it involves:

- A reflective learning phase
- A phase of learning resulting from the actions inherent to the experiential learning
- A further phase of learning from the feedback

What this theory is all about is that, these children should be able to use their experiences gotten to resolve their daily problems by so doing we will say education can be rendered sustainable.

Constructivism Theory of learning (Jean Piaget)

This is the theory which holds the view point that the learner constructs his own knowledge from his interactions and past experiences and from his understanding of the world. When we encounter something new, we must reconcile it with our previous ideas and experiences, maybe changing what we believe, or maybe discarding the new information as irrelevant in case we are active creators of our own knowledge. Thus, to do this the children need to ask questions, explore and assess what they already know. The constructivists belief that learners need to interact with the physical world and with their peers to stimulate a meaningful life. Thus, this theory only holds the view point that learners should be able to use the knowledge gotten from school to develop creative and thinking skills that will help them to be able to resolve their problems and to suit well into the society.

Socio-Constructivism theory of Lev Vygotsky (1978).

The socio constructivism theory is generally attributed to the work of Vygotsky and Brunner in continuation to the works of Jean Piaget. It is a theory that attaches importance on the relational dimensions of learning in contact with the others to construct his /her knowledge and the social dimensions of knowledge constructions. This is the theory which holds the point of view that children construct their own knowledge with the help of an elderly person basing on their past experiences which they can use in resolving their daily problems which they come across. This theory ties with his concept of scaffolding. Also, another commonly used concept of the socio constructivists is the concept of Zone of Proximal Development (ZPD) by Lev Vygotsky. This is the distance between the child's actual level of development and his potential level of development. That is, what the child can do alone and what he can do with the help of others. Thus, teachers should teach children in such a way that they develop competences and skills that they can use in resolving their daily problems. Thus, to Vygotsky (1978), the teacher has a very important role to play as a facilitator, where he has to create an environment in which he will direct and guide the learners for their interactions to occur and because of this many other educational theorists, accepted his social process ideas and proposed strategies that fosters the construction of deeper knowledge which is one of the characteristics of sustainable education that is expected from the children of levels three (classes five and six) in the primary schools. He is also of the opinion that, the collaborative work of the learners based on projects, will make the learners to share their results and it will be of a great benefit to all the other learners who are weak. That is the more reason why this assertion of Vygotsky can be referred to the new curriculum for primary schools which aims at making children learn through projects and this is done by grouping them so that the stronger ones can help pull along the weaker ones so that no one is left behind at the end of their studies.

The Theory of Motivation and Learning of Simon Belinga Bessala (2013)

This theory aims at resolving practical problems which the teacher comes across in relation to the subject to be taught and to be learnt (Belinga,2013 p. 123). It also presents the type of learner's motivation which the teacher has to take into consideration for an effective student learning among which he proposes the following;

- Extrinsic motivation which is related to the marks earned by the child.
- Intrinsic motivation which is translated by the interest which the leaners have on this or that subject, his object of learning or studying.

- Motivation for competence. Here, the learner must feel satisfied to have realised certain things in the course of his learning, thus knowledge, skills and competences acquired by the learners.
- There is cognitive motivation which is based on the intellectual dispositions of the learners who are interested in subjects, must be able to proposed the products of the results which the teacher is expecting.
- Affective motivation where in learners appreciate the value and intrinsically carries the subject during his or her learning (p.124).

The Theory of Transfer of Learning by Jacques Tardif (1999).

The theory of transfer of learning constitutes a cognitive mechanism of the first plan meant for human beings, the knowledge and competences they acquire in given situations permits them to face new situations. Thus, this process of learning will serve in the development of transferability of knowledge and competences and should not only concentrate on the accumulation of knowledge without putting it into practice. According to Tardif (1999, p 58), transfer of learning refers to "a cognitive mechanism which consists of using constructed knowledge in each given task or a developed competence source task ". Frenay cited by Tardif (1999, P .55) simply defines it as "a learner's capacity to resolve new situation by mobilising or putting together knowledge acquired within difficult situations. It has been remarked that transfer of learning is therefore very important in this sense in that it constitutes of the thinking and the resolutions of problems. According to Tardif, each transfer situation must be exposed to the realisation of new learning, the contextualisation or the putting in place the knowledge, competence, skills, attitudes, values and behaviours in a new and a bit familiar context. The learner is obliged to adapt or adjust to the structure of his or her knowledge at this new context resulting also to a new learning. Many factors are seen in this Transfer of learning and they are said to be multi-dimensional and they include the learner; the teaching objectives; the task to be transferred and the context of transfer (1999, p. 50). Also, when the transfer of learning is assured and is successful, it gives rise to the learner to exercise it in his resolution of situational problems faced in their daily lives and problems faced during integration with others. It therefore means that children should be capable of using the knowledge, competences, skills and values learnt in class to resolve their daily life problems encountered. It is therefore in this light that we again bring about another theory which is the change theory.

The Theory of change by Kurt Lewin.

This is the most influential theory. Lewin theorized three stage models of change known as unfreezing, change and freeze model that requires prior learning to be rejected and replaced. This theory is a specific type of methodology used for the planning, participation and evaluation that is used in the philanthropy, not-for-profit and government sectors to promote social change. This theory defines long-term goals and then maps backward to identify the necessary preconditions. This theory explains the process of change by outlining causal linkages in an initiative, that is, in its shorter term, intermediate and in its longer-term outcomes. Hence the identified changes in the learners are to be mapped as the outcomes, showing each outcome in a logical relationship to all the others as well as the chronological flow. Thus, with respect to curriculum implementation practices and sustainable education the knowledge, skills, competences and values acquired by the learners should be able to effect a positive change in the behaviours of the learners which will impact their lives and that of the society in which they find themselves. The innovation of this theory lies in making a difference between the desired and the actual outcomes before deciding on the forms of intervention that will be done to achieve these outcomes. Public education has an important role to play in preparing learners to lead a successful and happy lives, and helping their countries to prosper. Learning must be more of learner centred. That is, it must be built on a foundation of strong relationships responsive to basic needs, driven by the learners' interests, respectful of their identities, adaptive to their academic needs, relevant to their lives beyond school, and not confined within the school days. If the student/learner centred learning is customised to each student's needs, it is the goal, how we get there is what matters and so there is the need for the change theory which is in two folds.

-Teachers: They are the ones who work very close to the learners and must have larger professional roles in designing and leading the schools. Therefore, teachers are must put in power in learning. That is, they must take initiatives, lead the design and implementation of the student-centred learning and their lesson prepared must be adapted to these coming changes.

-Policy: This must enable and support innovations by creating space, removing barriers, and creating a climate of encouragement. The student should be at the centre of the teaching learning process that is, the teacher must make sure that he removes any obstacle or barrier that can prevent the child from acquiring a competence, a behaviour and a value so that a

change can be observed in the child and hence pave the way to a sustainable education. Lewin (1951) introduced the three-step change model known as the unfreezing, the change and the refreezing model (2001, p.114).

The unfreezing stage: This is the process which involves finding the methods of making it possible for people to let go of an old behaviour or pattern that was somehow counterproductive. Here it is very necessary to overcome the strains of an individual resistance and group conformity. Thus, teachers must do everything possible for learners to throw away their old behaviours especially behaviours that are in acceptable or that are not in conformity with the norms of the society. There are three methods that can be used to achieve the unfreezing model; the first is to increase the driving forces that direct behaviour away from the existing situation. Second, decreases the restraining forces that negatively affect the movement from the existing equilibrium. Thirdly, finding the combination of the first two methods.

The change stage: It is also called "moving to a new level" or movement which involves the processes of change in thoughts, feeling, behaviour or all three, that is in some way more liberating or more productive. That is, the learners must improve on their cognitive level of development by the time they reach classes five and six, their attitudes too should no longer be the same they should be able to manifest some acceptable behaviours like being able to resolve complex and concrete problems which they might come across.

The refreezing stage: This is establishing the change as the new habit, so that it now becomes the' standard operating procedure'. Without this final stage, it can be easy for the person to go back to his old habits or behaviours.

2.6. Definition of variables

2.6.1. Independent variable: Curriculum implementation practices in primary schools

2.6.2. Dependent variable: Sustainable education in Yaoundé III and VI subdivisions

Table 3: The Synoptic Table

Topic	Research questions	The Objectives of the	Research hypothesis	Variables of	Indicators	
		research		study		
Curriculum	GRQ : How can	GRO: To verify how	GRH: Curriculum	Independent	Need	
implementation	curriculum	curriculum	implementation	variable:	analysis/Curriculum	
practices and	implementation	implementation	practices influences	curriculum	designing	
sustainable	practices influence	practices influences	sustainable education in	implementation	Curriculum	
education	sustainable education	sustainable education	the primary school.	practices in	implementation	
	in primary schools?			primary	Curriculum evaluation	
				schools		
	SRQ: - How does	SRO: - To find out the	SRH:H1 Need	Dependent		
	need analysis and	extent to which need	analysis/curriculum	variable:	Practical and 21 st	
	curriculum	assessment /curriculum	planning influences	s ustainable	knowledge skills, deep	
	design/planning	designing and planning	sustainable education in	education in	knowledge.	
	influence sustainable	influence sustainable	primary schools.	the Yaounde	Behaviours and	
	education in primary	education in schools.	H2 Curriculum	III and VI	attitudes.	
	schools?	-To examine how	implementation	municipalities.		
	-How does curriculum	curriculum	contributes to			
	implementation	implementation,	sustainable education.			
	contribute to	influence sustainable	H3 Curriculum			
	sustainable education?	education	evaluation enhances			
	-How does curriculum	-To verify the	sustainable education in			
	evaluation enhance	influence of curriculum	primary schools			
	sustainable education	evaluation on				
	in primary schools?	sustainable education.				

CHAPTER III RESEARCH METHODOLOGY

3.0 Introduction

Grawitz, (2001, P.114) considers methodology as a scientific pathway, which permits us to sort out all the stages that cut across that which the interviewer has. In effect in this chapter we are going to be dealing with the area of study, the type of research design, the population of the study, the sample and the sampling technique, the instrument of data collection, validation of the instruments, research variables and techniques for the data analysis.

3.1 The type of research design

According Amin. M. (2004), research in education is based on two main methods that is to the quantitative method it is based on the verification of statistical hypothesis; and the qualitative research method seeks to understand deeply a given phenomenon. Thus, this present research is a qualitative research. The researcher's choice for this is based on the fact that the researcher is to find out how curriculum practices influence sustainability in education and to understand whether we could put on effective learning through curriculum practices like curriculum implementation that is relative to a durability in view of a sustainable education across the disciplines taught in schools be it at the nursery, primary, secondary and even the higher level. The researcher also wanted to understand how the curriculum practices such as need analysis, curriculum planning, curriculum implementation and curriculum evaluation influence a sustainable education. To realise this study, it is necessary to define the target population, the accessible population and the sample.

3.2. The population of study.

Amin. M (2004, p.6.) defines a population as a complete collection or universe of all the elements or units that are of interest in an investigation. The population of this study is going to be teachers in primary schools in the Yaoundé III and VI municipalities. Primary schools are ideal for this study because basic education in Cameroon represents an indispensable instrument in the promotion of an education that is sustainable or durable education.

3.3 The area of study.

The area of study chosen for this study is the Yaoundé III and VI subdivisions. With all the numerous schools widely spread all around Yaoundé, the researcher limited her study to only three schools comprising of two government primary schools and one private primary school. A description of the site of these schools will be further examined below.

The Government Practicing Primary School Melen 1 Yaoundé Group I

The government practicing primary school Melen 1 Group I, is situated in the Yaoundé III subdivisions a few kilometres from the higher teachers training college Yaoundé (ENS) the school is headed by Mr. Atangana Atangana Jean (IPED). The school was created in 1920, was opened in 1967. In 2013, it was changed from a government school to a government practicing school. The present head teacher was appointed on the 17/9/2012. The group 1 has ten teachers with each class having two teachers. The school has five structures and one which is the administrative office. The total population for the school is 479 pupils. The school has served as an examination centre for the past years and the results of the school have not always been the best as compared to other schools like the government English primary school Group II Etoug-Ebe. The environment is not conducive enough for learners to learn well as it is located just by the road side.

The Government English Primary School Group II Etoug-Ebe

The school is in the Yaoundé VI subdivision in the Etoug-Ebe neighbourhood. The school is divided into two groups and it is purely an English-speaking school. It was created on the 4th of August 2015 by the then minister of basic education madam Yousuf Nee Hadidja Alim under the decree number7706/A/501/MINEDUB/SG/DEMP and the head teacher by the year was Mrs Asonganyi Nee Nkenglafac Celine Formin who was appointed by the decree number 359/MINEDUB/SG/DEMP CE of 25/08/2015. The school has as its present head teacher Madame Fonge Vivian Ndum who is an IC 5, was appointed in August and she assumed her duty in September 2018. In group II which was the researchers site of interest it is made up of eleven teachers with each class having two teachers and one French teacher for the whole school. It has eight contract teachers and two PTA teachers. The school is structured in to five buildings including the head teacher's office and has enough space and school gardens. Statistics shows that the school has been producing good results ever since its creation. There Is no infirmary for the school and all the classes are overcrowded with the least class having at least eighty learners. The school has its own organigram made up of the head teacher, level

heads, the teachers, school prefects like the time keeper, sanitation prefect just to name a few and class prefects both boys and girls for all the classes.

Les Goelands Bilingual Nursery and Primary School Biyemassi Yaoundé

The school is situated about 200m from ronde point express Biyemassi. It is headed by Mr Simo Simo Louis with his grade IEG. It is a private institution which has an English-speaking section, a French speaking section and a bilingual section. The school was created in 1993 under the Authorisation number 346TB/3376/MINEDUB/SG/DEP/SECP/SCAFES/SCAFEF. It is structured into five different buildings and a computer lab and has thirty teachers in the whole school but in the English section which was the researchers centre of interest particularly teachers of level three (classes 5 and 6) which is the English section has fourteen teachers. The teachers are all trained teachers except for two who are not trained. The results too have been encouraging for the past years for statistics have proven that the school has been scoring a 100% in its entrance exams into form one (CEP). The moto of the school is success, work and discipline.

3.4. The Target Population

Martin E Amin (2004, p7.) defines the target population as the population where the researcher ultimately wants to generalise the results. The target population may not be accessible to the researcher. Our target population is made up of teachers of primary schools of levels III in the Yaoundé III and VI Municipalities in the centre region of Cameroon notably the teachers of some schools like the Government English Primary School Etoug-Ebe Group II, Government Practicing Primary School Group I of Melen and the Goelands Nursery and Primary School Biyemassi. The reason for the choice of this work is based on educative channels the teacher has a principal role to play. It is the teacher who puts into practice the decisions taken by the hierarchy in the subjects programmed in the curriculum, the teaching learning methods and evaluation. Also basing on the field work made to these schools as a student teacher under training it was noticed that right at this level, teachers are not really succeeding with the teaching of their learners in such a way that they gain some competences, skills, values and attitudes which they can use in future in resolving their daily problems encountered. It is therefore for this reason that we had to ask this question to know what these teachers do during their implementation of the curriculum to render education sustainable, whether they take into consideration the needs of their learners to render education sustainable.

Table 4: A table showing the target population

SCHOOLS	TEACHERS EFFECTIVELY PRESENT	PERCENTAGES (%)	
Government Practicing Primary School	14	21.538	
Melen 1 group I			
Government Practicing Primary School	10	15.384	
Melen 1 group II			
The Goelands Bilingual Nursery and Primary	14	21.538	
School Biyemassi group I			
The Goelands Bilingual Nursery and Primary	13	20	
School Biyemassi group II			
Government English Primary School Group II	11	17.741	
Etoug-Ebe Yaoundé			
TOTAL	62	100%	

For administrative reasons which were beyond our own will, we had to be limited only to three primary schools which therefore constituted to our accessible population.

3.4 .1 The accessible population

To Amin. M (2004), accessible population is the population from which the sample will be actually drawn. The accessible population of this research, is made up of primary school teachers of three (3) primary schools in the Melen 1, Etoug -Ebe neighbourhood and Biyemassi. Therefore, for this reason it made the researcher to use two main criteria to make part of her chosen population. That is, to take a class of level III (classes 5 and 6), for these classes are the final classes of the primary school whereby the learners ought to have completed and capitalised their learning through the knowledge, skills, values and competences acquired to resolve future problems encountered in their daily lives in schools or at home or the society.

Table 5: A Summary table of teachers in relation to the various classes and their schools

SCHOOLS	LEVELS III	LEVELS III	TOTAL	
	CLASS 5	CLASS 6		
Government practicing primary	1	2	5	
school melen1group1 and 2				
The Goelands bilingual nursery and	2	1	3	
primary school Biyemassi group 1				
and 2				
Government English primary	2	2	4	
school Group II Etoug-Ebe				
TOTAL	5	5	10	

3.5 Sampling technique and the choice of sample.

The sampling technique used in this piece of research work is the non-probabilistic sampling technique. According to Martin E. Amin (2004, p.8) a non-probabilistic sampling technique is a sampling methodology based on the subjective judgement of the researcher where the researcher decides on the elements of the population to be included in his sample. On the other hand, Martin E Amin, (2004, p.6.) defines the sample of the population as the study which constitutes the fraction of the population drawn from the accessible population on which the researcher has to carry out his investigation on. That is, a collection of some or a subset of elements of a given population. Thus, our sample is made up of teachers from these three mentioned primary schools in the Yaoundé III and VI subdivisions where the researcher had to determine the sampling technique of her choice which consists of or has to do with the process of taking a sample or it refers to the selection of the subjects for the study or to any portion of the population that will be a representation of the population .The researcher therefore chooses only some teachers(8) teachers in these afore mentioned schools who were directly involved. The researcher also chooses to use the simple random sampling technique. The schools under the study were randomly selected to achieve the objectives of the study. That is the researcher wrote down all the names of some the of the primary schools in Yaoundé Etoug Ebe and Melen 1 neighbourhood.

- The institution of level III classes 5 and 6; had a situation of 8 teachers, 50 percent of the accessible population which represents 4 of the teachers and 4 for the sample.

Table 6: The summary table for the sample

LEVELS OF INTEREST	NUMBER OF THE POPULATION	NUMBER OF THE SAMPLING	
LEVELS 3	10	8	
TOTAL	10	8	

3.6 Research instruments used for data collection.

The research instruments chosen for this study by the researcher were observation grille and interview guide that were used for the collection of data. To Mucchieli, (1984, p 42) these instruments are meant to gather the opinions of the different teachers chosen in these selected schools, the observations made in these schools while using these different instruments. Hence these instruments helped us to measure the link or relationship that exists between the curriculum implementation practices and sustainable education.

- Validation of the research instruments

The researcher formulated the observation grille with the help of some class mates reason being that it was not all that easy for her to do so all alone. After having formed this observation grille, it was therefore forwarded to the supervisor who read it and made the necessary corrections and then handed it back to the researcher wherein it was then ready to be taken to the field for administration.

3.6.1, Administration of instruments

- Observation grid

According to Amin M. (2004), this an instrument which is taken to the field that permits the researcher to collect data if it is qualitative. Given the case of our research topic, observations made here were based on the professional behaviour of the teachers in their classrooms, observe whether the pedagogic methods used in teaching have a link with the objectives of achieving an education that is sustainable or not, the materials used in delivering their content, the teacher /learner relationship whether it is teacher centred or learner centred (the design), observe how the lessons are taught from the start to the end of the lesson and to evaluate also

to verify if the learners actually acquire competences and skills at the end of each lesson which they can use in resolving their daily problems encountered . A sample of the observation grid was presented by the researcher comprising of the different modalities and indicators

3. 6.2. Interview guide

To Egbe, (2016, p 13), an interview guide is an instrument which permits us to sort out the different answers of the research work and to denude or go through the collected data. Depelteau (2003, p.313) defines an interview guide as 'as scientific investigation made by using a process of verbal communication to collect information that is in relation to the fixed goal". Therefore, this has to do with communication between two persons who aim at collecting information about the given subject. In general, interview is just a technique used in collecting data or information which is going to be done using direct questions asked in a finding made in relation to the previously established criteria. In this our piece of research work, it was necessary for us to collect information on sustainable education taking into consideration the fact that it has to do with a set of educational values that are transmitted across the other disciplines taught in the primary schools which favours the effectiveness of learning during the implementation of curriculum through teaching thereby making the learners to gain their autonomy. Hence, for the interview, it was focused on curriculum implementation processes and how they render education sustainable. The questions were meant for the teachers of levels three and after answering the questions verbally, the researcher took note of their points of view. Our interview was divided into themes and sub themes as far as the dependent and independent variables were concerned

3.6.3. Methods of analysing the data collected.

The data which was collected was regrouped into the following three groups

- Observations grid
- Interview guide.
- The consultation of documents.

The operationalisation of these collected data was mostly based on the reading of these data marking the points that were relevant to the problematic of the research topic analysing the data and then interpreting the results.

Defining the Research Variables

A variable is therefore defined as a property or a characteristic that can take two or more forms. That is, it has to do with the ability to vary or change. The dependent variable is the presumed effects while the independent variable is the presumed cause. Hence in this our piece of research work curriculum implementation practices is the independent variable and sustainable education is the dependent variables.

3.7. Technique for data collection

The researcher used the percentage count to analyse the raw scores of the data collected from the field. The formula is

Number of responses obtained / the total population x 100

3.8. Content analysis

Content analysis is one of the best methods used that is appropriate for the study of interview or qualitative observations (Krippendorf, 2003). It consists of putting together the qualitative data with the help of a grille analysis, code the information collected and treat them. This analysis permits the description, finding or investigation material and stating its significance. In our study we used the hypothetical-deductive method, distribute our analyses into 5 stages. The collection, preparation, classification and the evaluation of the data analysis material had a reparation of the different time interval that the interviews and observation were conducted. That is, the indicators elaborated while carrying out the operationalisation.

Select and define the codes or the units of classifying the collected data. Codify the data collection instruments by numbering the questions.

CHAPTER IV DATA PRESENTATION AND ANALYSIS OF RESULTS

4.0. Introduction

This chapter deals with the presentation, interpretation and analysis of the findings gotten from the teachers through the interviews made. The researcher went out to the various schools like Government Practicing Primary School Melen 1, Government English Primary School Etoug-Ebe Group II and The Goelands Bilingual Nursery and Primary School Biyem-Assi. We equally made a brief presentation on the observations made to better present our results. The researcher collected data from the selected classes of the above-mentioned schools that is, classes five and six.

4. 1. Identification of the findings made on the participants

Here we are going to be presenting the analytical results according to the themes related to curriculum implementation practices and sustainable education.

This follows the order in which the research themes in relation to the objectives of our research work will be presented. The content of this interview was a mere synthesis which was realised with the help of many data collection instruments based on 8 accessible teachers out of the 10 who were targeted.

4.2. Analytical Presentation of results from teachers

Theme 1. Planning phase of curriculum implementation practices

Table 7: Responses as to whether teachers take into consideration the need analysis in the form of the objectives when planning their lessons and sustainable education in the following schools such as: GPPS Melen 1, the Goelands Bilingual Nursery and Primary School Biyemassi and Government English Primary School Group II Etoug-Ebe Yaoundé.

Responses	No of respondents (teachers)	% of respondents	
Yes, to those who consider the need analysis	5	62.5	
No to those who do not consider the needs analysis	3	37.5	
Total	8	100	

From the table above, 5 out of 8 teachers take into consideration the need analysis such as the learners age, their previous knowledge, their basic needs such as learning materials, environment, cultural background and what they already know with respect to the expected objectives to be attained related to the needs of the learners making a percentage of 62.5%. for example, one of the class 6 teachers of Government English Primary School Etoug-Ebe

Name: Madam Atelefack Vivian

Sex: female
Grade: IC1

Longevity in service: 15 years

Longevity in the present class: 3 years

Class taught: 6

Level of education: GCE A/L

said: 'when I am planning my lessons, I consider the children's environment for instance the school is constructed at the road side how do I manage all the noise made by vehicles, pedestrians, bar owners just to name a few. What I often do is that when there is a scene outside like an accident, I do some digression so that they will not be too distracted with what is going on outside. I tell them to tell me what they need to do when they want to cross the road? you will hear them saying I look left and right before I cross, then I ask where they are supposed to work when moving on the road? They will say on the pedestrian's footpath. Which is under citizenship. Then we too can see that I have taught a lesson in another I also take into consideration their cultural background as one of my aspects of need analysis as

you rightly said. For example, like in lessons such as national language I call one who has a good mastery of the language of the people of this place and then ask the person to speak so that the children listen and follow up for easy comprehension'.

This was against 3 teachers who were observed to just plan their lessons without considering all the need analysis they rather just plan their lessons based on the objectives to be attained at the end of the lesson and not what the learners have learnt which can help them in the next future to come, in resolving their daily problems encountered making a percentage of 37.5% giving a total of 100%. For example, a class 5 teacher in one of these schools said; ''talking about the things, i consider the side where the school is located for it is a big problem if the school is at the road as there is always noise from vehicles and bars and there is nothing, I can do about it. I just have to try my best in managing the class in my own small way I can". Thus, the analysis of collected data at this phase is based on how the teacher plans his or her lessons before implementing the curriculum taking into consideration certain aspects and the vision of the state which is obtaining an education that is long lasting and the expected objectives to be attained at the end. In this light, it is discovered that majority of the teachers (6/8) do plan their lessons appropriately taking into consideration the need analysis such as the environment, culture, age of the learners, their previous knowledge just to name a few. They also do a need analysis based on the objectives to be attained that is, the written statements of intent behaviours, attitudes, knowledge and competences which the children are expected to exhibit after being taught to acquire a sustainable education. This therefore can be reflected to the pedagogical objective of education which is to train a citizen who will be morally, intellectually, socially and civically upright and is deeply rooted in his culture and can integrate well in the society in which he finds himself, develop creativity skills which he/she can use in resolving his problems encountered in daily life. Taking into consideration the learners being taught, most of them can resolve problems that are only at the classroom level reason being that 6 among the 8 teachers have noticed that, most of these learners when they complete school, they are not able to do something that can help them.

Table 8: Responses to whether teachers from these three schools plan their lessons so that the children acquire an education that is sustainable or not sustainable.

Responses	number of respondents (teachers)	% of respondents
Plan lessons linked to sustainable education	4	50
Plan lessons without linking it to a sustainable education	4	50
Total	8	100

From table 2 above, 4 out of the 8 teachers responded that they plan their lessons in a way their objectives are practical and prepare children for an adulthood be it in the absence of the teacher. Thus, they plan their lessons base on the objectives that children get an education that is sustainable therefore giving a percentage of 50%. For example, one of these teachers whom I approached said:

"When I prepare my lesson notes, I preview a situation that takes the children in their daily lives with their parents and family members and even the society or environment to make them understand well what is being taught. Thus, with the use of this competence based approach (CBA) which they are asking us to use as a pedagogic approach and the explicit teaching method where there is always a problem situation, now obliges us to plan our lessons with learning activities on practical subjects in the child's present life. Hence it is in this spirit that we can also say we are striving towards an education that is sustainable which I could simply define as the act of putting into practice what is learnt from school into our everyday life and integration with others to gain a sustainable education. This is also for the fact that the child should learn how to read, write and calculate in primary school and which is going to help him or her in future".

Another also gave her own point of view confirming the other colleague's point of view that when planning their lessons, they consider the educational objectives saying: "it is urgent for me to integrate sustainable education in the preparation of my lessons especially lessons for class 5 and class 6 because the children are supposed to be inserted in a way that they can be autonomous in their present society and the future society after obtaining their First School Leaving Certificate(FSLC) or in French Certificate D'Etudes Primaire (CEP),

thus, the child therefore has to use this knowledge received in class in order to better succeed in life".

This means that, the teachers plan their lessons taking into consideration the place where the curriculum will be implemented and the goals to be pursued and it is also done in a way that the activities will be project based as the new curriculum for primary schools, demands. That is, the goal is aimed at training citizens who will develop good moral behaviours and creativity skills whereas 4 teachers out of 8 responded that they have been planning their lessons without taking into consideration the fact that the children acquire an education that is sustainable and all what the curriculum wants from them thereby making a percentage of 50% rather they teach in order to finish with their program of work and to prepare them for the next class because they are not fully convinced with what the children can do even after school in other words they just teach so that the children should acquire but knowledge. Therefore, the situation observed in these schools do not match with the curriculum because, the educational system does not really train the learners to be citizens who will be able to fit well into the needs of the society. All these when summed up together gives a percentage of 100%.

Table 9: Responses as to whether those who are to teach these children are trained or untrained in relation to the goals being pursued.

Responses	Number of respondents	% of respondents		
Number of trained teachers	7	87.5		
Number of untrained teachers	1	12.5		
Total	8	100		

From the table above 7 out of 8 teachers are trained teachers giving a percentage of 87.5% thus, from the information collected it was noted that these 7 teachers do plan and implement their lessons based on the content, they engage the learners in serious learning. They develop a collaborative skill in their learners which enables them to work productively with their teachers and they also do have that spirit of developing that creativity and presentation skills in the learners since it motivates learners and holds their interest. Thus, majority of them know how their learners learn. This was in contrary with the one (1) untrained teacher from the Goelands Bilingual Nursery and Primary School Biyemassi who has been teaching based from his past experiences as a teacher for the past two years and the educational seminars he has attended and with the collaboration he has had with his colleagues who have been in the

field for years. This data collected when analysed gave a percentage of 12.5%. hence when all

these was put together it gave a percentage of 100%. Thus, the classes 5 and 6 teachers of the

Government English Primary School Group II Etoug-Ebe, confirmed that they teach their

children so that what they teach has a relation with the goals and objectives to be pursued.

Theme 2. Delivery Phase of Curriculum Implementation Practices

- Responses showing teachers organisation and use of didactic materials through

organisational strategy to get a sustainable education.

Here we are interested in the organisation strategies of the different teachers and the available

didactic materials being used during curriculum implementation and its influence on

sustainable education. In general, classroom management and the use of appropriate didactic

materials is necessary in the course of delivering the curriculum in the form of planned

lessons notes. Nonetheless it's each teacher who tries in his or her own capacity to see how to

do this, using his available means to render his/her lessons pertinent. For example, Madam

Patience of the Government English Primary School Etoug-Ebe said " talking about the

availability of didactic materials, it's not easy because the school does not provide us with

any, but we improvise based on what we are to teach on the selected lesson, but I must

confess that even the few that you do like the chats and hang them on the walls, when coming

the next day, they are nowhere to be found again". Thus, they all expressed a common view

of not having enough availability of didactic materials provided to them by the school; but

that according to the objectives of the lessons to be taught, they all struggle to get a didactic

material which matches with the objectives of the CBA.

This is another economic declaration of one of the teachers in government practicing

primary school of Melen 1

Name: Mme Ekoto Bibian Epse Le

Sex: female

Grade: IC1

Longevity in service.41 years

Longevity in present class: 5 years

Class: six (6)

Level of education: BAC

"we don't have the available appropriate didactic materials, the school does not give us any of these didactic materials, for example we don't even have any. Even us we only struggle on our own to have some to use them and plan and teach our lessons. Now that all the lessons are said to be practicals so that the children can gain competences, it's good to concretely present the situations to the learners. For example, with ICT, we can photocopy or snap an ICT tool say a computer, take the image to class and show the children to observe then the fact that children like images, it just attracts them and even calls their attention to class. Also, sometimes if we want to present a lesson on the respect for human rights in citizenship, we can just select some pupils to take their different roles and they dramatize it for this even helps them to understand better the lesson and store it in their memory for future use. Truly speaking didactic materials is a very determinant factor that assures the effectiveness of learning for, when a learner is given the opportunity to participate or manipulate what he learns in class he keeps it for the rest of his life and even continues with the acquired experiences back at home".

Talking about the organisational strategy of the classroom, this was what one of the teachers in class five (5) at the Goelands Bilingual Nursery and Primary School at Biyemassi said

"As a teacher what I do in terms of organisation, is that I organise my class in terms of sequencing the content, put my children in groups of at least three (3) or four (4) children per group and they are put to sit in the form of a semi-circle. I do this to enable them to fully participate in the teaching learning process, reason being that following the old pedagogical method of positioning the children where they use to sit in rows and columns, some children hide behind their mates and are distracted with other things that are of no use to them and this will obviously make them to be passive participants in class. I also allocate the teaching learning materials to be used for each lesson that will help to facilitate the attainment of the expected objectives".

Also, the classes 5 and 6 teachers of Government English Primary School Etoug-Ebe Group I responded to their own questions posed on the organisation of their classroom especially their sitting positions in class and gave their reasons for doing so. The class 5 teacher by

Name: Madam Muna Patience

Sex: female

Grade: IC 2

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

Said:

"I arrange their sitting position in groups because it is what the new curriculum for primary school's states. When they sit in groups everybody is active they are given posts and a secretary must be in the group chosen by the children themselves who will gather all their answers when given a group work and then presents it in front of the whole class when the time comes. This method has really helped the children a lot especially the weak ones too who are now being taught by their own class mates and again when I compare this sitting positions with that in the past which used to be in rows and columns there Is a big difference because in the past children used to hide behind others and do different things not everybody was given the chance to talk which even made most of the children not to be active in class" The class six (6) teacher.

Name: Madam Atelefack Vivian Asong

Sex: female

Grade: IC1

Longevity in service: 15 years

Longevity as class teacher: 3 years

Class taught: six (6)

Level of education: GCE A/L

said:

"my own children still sit using the old method of positioning which is sitting in rows

and columns reason being that the population is too much, but it doesn't cancel the

fact that they do not work in groups. They do when I just give them group work, what

they do is that they just quickly turn and face those siting behind and by so doing their

groups are formed with no problems".

In summary, the use of didactic materials and a good organisational strategy remains a very

important factor which is indispensable in a teaching learning process. In effect the use of

didactic materials must be appropriate and adapted to the objectives of the lessons thereby

assuring an effective curriculum implementation during the delivery phase of the planned

lessons, that will assist in the attainment of a sustainable education which is our principal

objective. Hence as Belinga Bessala (2013, p.60), highlights that,

"the choice of didactic materials also obeys the exigencies of the stated objectives, the

content and the teaching/learning activities. All didactic materials help the teacher to

facilitate the explanations and the understanding or comprehension of the subject

being taught"

-Responses showing the delivery strategy which has to do with the methods of teaching,

the content taught in relation to the stated objectives and the pedagogic approach used

with the lessons planned or organised.

Responses in relation to the methods of teaching and content.

Identification of the interview.

At this level, we did an examination of the data collected based on the methods used in

teaching the content taught relation to the objectives and the pedagogic approach used in

teaching and the planned lesson notes. The teachers in these three schools said they don't use

only one method to teach the different lessons in the different subjects but they alternate their

teaching methods and it depends on the different subjects. For example, a teacher in the

Goelands Primary school

Name: Madam Ngufack Smiley

Sex: female

Grade : IEG (Instituteur de l'enseignement générale)

Longevity in service: 8 years

Longevity as the Classroom teacher: 4 years

Class taught: six (6)

Level of education: INI BEPC

said

"When I want to teach a lesson I make sure that the lesson I choose has a link with the methods, the pedagogic approach to be used and the content to be delivered like now when I wanted to teach a lesson in ICT on the parts of a computer I had to come with the toy computer so that the children could be able to see, touch and manipulate it where necessary. This was the demonstration method where the children are shown all the parts of a computer for them to see and not hear, I also use the illustration method to accomplish this lesson. Sometimes too, when I want to teach a lesson in literature, I even choose the dramatization method where I give them roles to play in the drama and when you see them acting, it develops their vocabulary and building up their acting skills which is a talent, in this same lesson they also developed that spirit of communication as they can talk and discuss with one another since they do learn in groups there by encouraging that spirit of solidarity and togetherness in them. Hence when we look at these two lessons which you did observed while I taught, do relate with the objective that was stated and which was expected to be attained at the end of the lesson for example, what you are working on which is a sustainable education. From the lesson in ICT the lesson cuts across many aspects of the different domains of life such as sociability through communication".

Responses given in relation to the pedagogic approach used by the teachers.

At this level we did an examination of the collected data based on the methods of teaching and the pedagogic approach used in the primary school and its influences on curriculum implementation practices and sustainable education. Thus, here we are also going to note the different viewpoints of the different teachers interviewed with respect to the teaching methods and pedagogical approach applied during the implementation process of the curriculum to obtain a sustainable education for there are some teachers who do not yet understand the demands of the competence based approach and who don't even make an effort of putting it into practice whereas there are some who really do their best in using the different available methods of teaching and the pedagogical approach in teaching their lessons and struggling to

obtain a sustainable education. In a general point of view, the teachers are supposed to take into consideration which teaching method best suits the lesson to be delivered and must consider the pedagogical approach that is supposed to be used in the teaching of these lessons that will help in the attainment of the stated objectives. Here are the responses of the different teachers who were interviewed in respect of these aspects; the teachers of the Government English Primary School Etoug-Ebe gave their own opinions like what the other class six (6) teacher

Name: Bonjem Elvis

Sex: male

Grade: PTA

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: BA Degree holder in history

Said:

"When I am teaching I make sure that the method chosen is in conformity with the subject for example the lesson in home economics which I just taught in citizenship on the topic 'the family' could not be taught using dramatization method. No! this wouldn't have worked not at all, I must illustrate and demonstrate using a chart bearing the different forms or types of families. It's true that it is sometimes good to use real objects as didactic materials to facilitate the learners understanding of the lessons, but this is very different because you won't expect me to go and bring the different parents at home to come and illustrate the different forms of family, we must know that, this class will not be enough to contain the population. Also, another example of a lesson taught which was English on "synonyms" had to obviously have its own method of teaching that will suit it. I had to use the brain storming method, where the children had to do a bit of critical thinking or brainstorm to come out with answers to the words posed. Just imagine that I came and gave a word like" fail" and I start struggling to demonstrate or dramatize, am sure most of the children will be lost and even you, won't you look at me that I don't have a mastery of my content

because if I had I will know which teaching method best suits each lesson that I teach. At least things like this must be considered and not just teaching because I want to teach or because I want to cover up the syllabus, but I need to use the real teaching methods and materials to teach and to let my message flow well. Talking about the use of pedagogic approach in the teaching of lessons, I will say that when we heard of this issue of Competence Base Approach we thought it was just another means of giving us much unnecessary work for by the time it was introduced in the educational system of Cameroon, the programmes were not actually talking on it but the manuals which we were using and are still using are in the form of the CBA for each discipline taught, corresponds with the competences to be developed by the learners and thus we are really happy with this approach and today we see that it is even in conformity with the new curriculum and explicit teaching issue that is the talk of the day as far as education is concerned in our country Cameroon for it is no longer the case of the old pedagogic approach which was just a matter of the teacher alone and no competences were developed in the learners. Today, we do our lessons with problem situations that are concerned with the real life of the child or learner, and the child himself is also recognised as an actor in the teaching learning process and this even becomes very easy for the child to recall what was taught in class. Thus, we are effectively attaining the objectives of that sustainable education, which we call it at our primary level; the lifelong lasting learning which wants that the child should develop knowledge, competences, skills, attitudes, behaviours and values which results from a lesson learnt in class. For example, after teaching a mathematics lesson on the calculations of areas, the child should be capable of recognising that a land can be rectangular or square while he too can now measure and evaluate its surface area back at home or in the quarters".

Another teacher from the same school, but now the class five teacher Madam Muna Patience in the same logical sense also emphasised on the interactions of the learners on one part and teachers on the other part that will help facilitate the acquisition of these competences, values and behaviours by the children thereby rendering education a sustainable one.

She said:

"It is true that the CBA is the new pedagogic approach that is being used in the educational system of our country today and is of very great value and the school

programmes integrate them today. It is very interesting to me because It puts the

children in a serious interaction with the teacher. They exchange their ideas, and this

permits them to understand well the lessons and even develop competences and

behaviours at the different levels. With the CBA in relation to the objectives of the new

curriculum for primary and nursery schools, we can see that the children no longer go

to school for schooling reasons, but they are served with a durable school life. The

only problem I have with this issue of the CBA is that, we the teachers are not

sufficiently trained for the effective implementation of this in the classroom reason

being that we need many seminars where we will do some workshops on how we can

put into practice this approach so that most teachers will be able to do it without

facing difficulties. For example, there was a seminar in September on the new

curriculum which was very enriching because it was really in relation with the CBA.

Hence with this new approach we see that the teaching / learning process is lively,

and I think that this CBA is really in line with the expected objectives of our country

today and the world at large which happens to be your research topic sustainable

education, for these two aim at developing competences, skills, values, behaviours and

attitudes in the learners where they will become autonomous in their society".

From this teacher's point of view, we can say that it is in line with Vygotsky's theory where

teachers have to interact with their learners so that they can easily acquire knowledge and why

not skills and competences. The head mistress for Group II,

Name Madam Fonge Vivian Ndum,

Sex: female

Grade: IC5

Longevity in the profession: 20 years

Longevity at present post: 4months

Post of duty: head teacher

Level of education: Master's in curriculum and evaluation

said:

"The CBA is a pedagogical method which make references to sustainable education

or the lifelong learning reason being that, it is not only interested in academic

competences that are developed by the children, but it permits them to be able to use

the knowledge they have acquired in the classroom or in the school in resolving their

daily life problems while interacting with other people for the total fulfilment of all".

In the same line with the use of the CBA one of the teachers interviewed in the Goelands

Bilingual Nursery and Primary School Yaoundé Biyemassi, Madam Omba Christelle was also

convinced of the fact that the approach associates to the educational values that prunes

sustainable education thereby permitting the child to develop well an autonomy in all what he

has acquired in school and takes it back home or in the society in which he finds himself.

Thus because of the time given for each planned lesson to be delivered the teacher affirmed

this:

"With the Competence Based Approach, one of the problems we are facing is the

problem of time, for we cannot in forty-five minutes teach well a lesson that needs to

have all the exigencies of the CBA and attain the aimed objectives of curriculum

implementation practices that will lead to a sustainable education. Hence it is with no

doubts that the approach that permits us to acquire our objectives during the

implementation of the curriculum practices and a lifelong lasting education is the

CBA. But we need to be given enough time in class for it to be well done since the

child has to mobilise many resources to resolve the problem- situations, and by so

doing we could be able to judge the effectiveness of how the implementation of

curriculum practices has helped the child to acquire a sustainable education".

Nonetheless even though most of these teachers were for the fact that all the different

subjects have their different methods of teaching that helps in the better comprehension of the

learners and the use of the CBA, some of the teachers from the Government Primary

Practicing School Group I of Melen

Name: Madam Ekotto Bibian Epse Le

Sex: female

Grade: IC1

Longevity in service: 41 years

Longevity in present class: 5 years

Class: 6

Level of education: BAC

said:

You are talking to me about the CBA and the teaching methods which I use in

teaching, and you are asking me how they influence curriculum implementation

processes and sustainable education. I don't even know what that your CBA nor the

curriculum is and then talking about its implementation and again they are even

talking about competences to be developed, who is supposed to develop these

competences, Is it the teacher or the learner? We have never had a training in this not

to talk of good educative seminars since this your story arrived and even if the

programmes are talking about it, they are not telling us how we can do to get the main

competence that can help us in implementing it. How then do you think I can teach so

much such that the lessons taught can influence the learners' capability of obtaining

an education that is durable because me am continuing with my NAP and the children

are succeeding at least".

Still in the same line another teacher, the class 5 teacher of the same school gave her own

point of view but this time around she spoke while referring to the new curriculum.

Name: Mme Legoubou Cecile

Sex: female

Grade: IC3

Longevity in service: 10 years

Longevity in the present class: 4 years.

Class taught. Five (5)

Level of education: BAC

She said:

"I don't see why they had to change the NAP to CBA which are merely one and the

same thing ok see there is this new one they call the curriculum that is everywhere as

far as education in the primary school is concerned. I am taking you to the issue of

curriculum because I just heard you talk about the curriculum this new development

in education that curriculum is not easy because it has changed a lot and it is really

confusing me and again the fact that they have not given some practical lesson on how to do it, all they do is to tell us that go and do it with the children no sample nothing tell me how will I put such a thing into practice when I don't even know it? This is not just different from the competence-based approach because its objectives state that the children must acquire knowledge, skills, competences, values and attitudes of which looking at these children I teach do they really look like people who want to gain competences? They are all interested in playing"

Hence with respect to the different points of view raised by these teachers on which teaching methods and pedagogic approach they used during curriculum implementation to render the education obtained by the children to be sustainable, it all comes to a conclusion that the project method and the competence based approach are the best methods and approach to use during curriculum implementations which can permit the easy attainment of one of the states' educational vision or objectives which is a sustainable education or lifelong lasting education. At the same time, it is good that enough practical seminars should be held at the regional, divisional, sub divisional and even at the school level for these teachers to really have enough knowledge on this CBA and enough time too should be allocated to teach the lessons using the different methods and the approach.

Theme 3: Evaluation phase of the curriculum implementation process

In this phase, the main aim was to find out how the teachers do measure the learner's level of obtaining a sustainable education through curriculum implementation. The different teachers gave their different points of view with respect to this evaluation phase. Here, we are also interested in the model of the construction of the items in the objective of the evaluation, the impact of this evaluation on the knowledge, skills, competences, values and behaviours or attitudes acquired. It is also going to be interested in the revision of the instructions stated at the beginning of the teaching /learning process, the effectiveness of the learners learning in line with the stated objectives and to measure the accomplishments gotten and comparing them with the identified objectives taken at the beginning of the planning of the curriculum planning implementation process which is the country's vision of obtaining a sustainable education and using it in resolving the daily life problems encountered giving justifications for the different responses made and finding out if the CBA has actually helped in the obtainment of the sustainable education. Thus, it is at this evaluation stage where all the teachers do verify their lessons taught to find out if the stated objectives have been attained or

not, and it is only through evaluation that the teachers get to know that their objectives were

not only to be concerned with what was taught in class but also concerned with what the

children have learnt in class and how they can apply it in their daily lives. Thus, the

evaluation phase during the implementation of the curriculum, must render the education

obtained by children in the primary sustainable and why not throughout their life time.

With the different findings made during the interview, we could recall that whenever the

teachers do evaluate their children, they expect that their learners should work well,

understand well what they are expecting of them and to put into practice what has been

acquired or learnt and portray a change in their behaviours at least in a positive way. In other

words, the learners are supposed to change their behaviours and attitudes, acquire values after

the evaluation, and go as far as applying all what they have learnt from the classroom in

resolving the problems encountered in their daily lives be it the present or the future one. In

this effect, here are the different responses given by the different classes five (5) and six (6)

teachers from the three different schools as far as evaluation is concerned.

The class 5 teacher of Government English primary school Etoug-Ebe Group I said:

"From the lessons taught which are based on integrated themes, I can say that all the

children have their different things learnt or acquired during the teaching learning

process. For example, with the introduction of the new curriculum where the children

now sit and do their works in groups, it is very rare to find a child who goes back

home with an empty head some acquire the competences, others acquire skills, some

just the knowledge, others behaviours or attitudes and some acquire values, but some

acquire all. So, it all depends on the individual children and their different capacities

to acquire".

Another responded on the measurement of the level of education acquired by the learners.

The class 6 teacher GEPS Group II Etoug-Ebe

Name: Mr Tanlaka Thomas

Sex: male

Grade: IC5

Longevity in service:20 years

Longevity in the present class: 5 years

Class taught: six (6)

Level of education: GCE A/L

said:

values through evaluation. For example, the new curriculum which now states that the children should be evaluated in groups, they are given some projects to do and these projects come because of the problem situations which might have been given to them to search for the possible solutions. When we evaluate our learners, we are always waiting on what they effectively understand from the lessons taught and what we are expecting from them, is mostly a change in their behaviour. The scripts are

"We measure their level of acquiring knowledge, competences, skills, attitudes and

constructed basing on a life problem situation which sends the learners not only to

what they learn from school but also sends them to what they live back in their daily

lives at home and in the society. Hence, it is obvious that evaluations help us to be

able verify if our stated objectives that were planned at the beginning of the lessons

have been attained or not so that we can be able to carry out a remediation".

Another teacher said:

"looking at evaluation in the context of the competence based approach used which has an impact on the knowledge, skills, competences, attitudes, behaviours and values acquired by the learners and their own objectives, that is, finding out to know if the objectives of the evaluation have been well defined and the items of the script, this will be easy according to the instructions, the duration allocated to the scripts and the real capacities of the child to be able to treat the paper. Evaluation can faithfully take in to account the competences that are linked to the academic tasks which permits the

transposition of the daily aims."

A class five teacher in the Government English Primary School Etoug- Ebe said:

"I measure the level of the competences acquired by my learners through evaluation which is done in the form of projects and no project can exist on its own without resulting from a problem situation or it is from a problem situation that we can have a project. For instance, if you look round the school compound you will find that trees have just been planted all-round the school compound and there is also a vegetable garden. This is to solve the problem of drainage and to serve as sheds when it is very

hot especially during the dry season. The roots will help to reduce the water that is always on the campus which causes the compound to be very muddy and so making it difficult for us to move. These same trees planted by the children will also help in blocking the buildings from being destroyed by the wild winds and storms that disturb during the rainy season. The fact that the children are the ones who did the planting project, already shows that they have acquired long life learning skills that will help resolve a problem which they have been facing".

A different teacher but this time from the Goelands Nursery and Primary School also gave a convincing response to the fact that evaluations has an impact in the children's learning. This is in the sense of the effectiveness of this learning and the learner's autonomy. He said:

"my evaluations really have an effective impact on the learners learning. It is from the marks obtained by the pupils that I can then make a decision that is needed to conduct their learning, for these marks will help determine the quality of education obtained by the children and this can equally influence the child in his daily life be it at home or elsewhere and the parents too at this level have all the rights to check on the child's learning while verifying their marks all the time after each evaluation and thus, the children's autonomy too will also be acquired". Another teacher in the same line, believed that evaluation effectively renders into account the quality of learning achieved by the learner. But this will be possible if only they do remediation always in view of reinforcing what they have learnt. She said" I always orient my evaluations with instructions of the work which I have given them. After each evaluation phase which they have been doing, since they mostly do group works which I have prepared them for the upcoming evaluation given to them, a catch-up lesson is given to those who did not understand better the lessons. Hence, remediation also permits the teacher to put all the leaners at the same level and ameliorate their academic achievements".

A teacher who was more experienced said that if evaluations can render the learning effective, it means that it is more difficult to know whether these children even truly use these knowledge, competences, values and attitudes acquired in class to solve the problems encountered in their day to day life. Thus, this is what she said:

" It is true that evaluation translates the quality and even the effectiveness of the lessons from the teacher to the learner; but to me am not sure that all these children

will or shall continue to put into practice what they have learnt in school so far in their daily lives which is the objective of the sustainable education. In our educational context without the adequate use of real didactic materials, poorly equipped and non-classrooms, no libraries even on one part and the quality of marks obtained on the other hand, we are not very sure of acquiring good results that will prove that at the end of their primary school life they will be able to attain this objective of obtaining a sustainable education".

Equally another one laid more emphasis on the fact that a good evaluation signifies that there is effective acquisition of knowledge, skills, values and competences, thus, it is no longer a question of bringing together the sustainable education and the competence-based approach of adding numbers 1+1=2 but it is now a matter of using this knowledge gotten in resolving concrete problems encountered. He said:

"it is true that evaluation aims at verifying the degree of knowledge acquired by the children and the level at which the stated objectives have been attained. In the context of the CBA, evaluation aims at finding out if there has been a realisation in the learning that has been taking place, it therefore means that the learner can resolve a problem situation on his own. It is no more an issue of staying on one point and do mental exercises such as counting, adding, subtracting, multiplying and dividing but it now has to do with the resolution of real life problems that are concrete within and outside the school and not abstract but these has to be in congruence with the objectives of the lesson and which can help in the development of competences, attitudes, values and behaviours in the learners and facilitate the attainment of a sustainable education".

One of the teachers Mr Tanlaka Thomas, simply replied that:

"yes from the results gotten from the evaluation whose aim was to find out if the children during the curriculum implementation process, which is the teaching learning process, acquired some competences and values which they could used in the resolution of problems encountered in their daily lives; that is the objectives of the lessons and it is certain that during an evaluation we will obtain both positive and negative results".

In the Government Practicing Primary School of Melen 1 of Group I, the class five teacher there said:

"it is not easy to measure the degree of competences, values and behaviours of the learners which is our objective but from the little observations made I can say that the children have at least acquired something. For example, most of them had torn trouser but now from some of the lessons taught in needle work, majority are capable of stitching their own dresses".

Generally, considering all the points of views given by the different interviewees on the findings made considering our analyses, it turns out to be in a holistic manner that sustainable education remains a concept that is little or less known by some teachers of the primary school after when the concept was introduced in the educational system of many countries both in Europe and Africa. Also, since some seem to understand the importance of the sustainable education, where, there will be the lack of the will of political powers, teachers wished that, they double the limited number of seminars held by conforming the noneffectiveness of sustainable education in primary schools for it is only seen in the curriculum or official programmes, but it is not actually what is being practiced in the field. Nonetheless they are putting it into practice but at a very limited level. All the same it implicitly brings out certain values drawn out from certain disciplines, the object of the teaching/learning process and also serves as learning conducts for some teachers and even with the difficulties encountered, there are still some advantages that the teachers in the primary school still come across for the introduction of the new curriculum that has helped in ameliorating and rendering education effective and sustainable at the primary level, which even makes the children to become autonomous when it comes to decision making.

4.3. Analytic presentation of the observation.

Concerning the observation, we observed that the teachers notably their behaviours as professionals in the classroom on one hand and those of the learners on the other hand during the curriculum implementation process, was not in total conformity with what our objectives for the research stated. Thus, we tried to find out whether the teachers do a need analysis of the learners and their teaching learning process which is the curriculum implementation process, the availability and appropriate use of the didactic materials in relation to the content and the objectives of the lesson taught or to be studied, we also observed the pedagogical method or approach used by the teachers in carrying out their lessons so as to gain a durable education which is the objective of education nowadays, we also observed the construction of items and evaluation objectives that are based on the knowledge, skills, attitudes, competences and values and not leaving out the fact that if the teachers teach from a problem

situation and close to the present nature of the learners and if the children are put to work in groups as it is the case with the new curriculum for primary schools where learners are supposed to be taught in groups during the teaching/learning process, education will be sustainable.

In the same line, we also observed to find out if the evaluations are done following the three main forms of evaluation that is, the diagnostic which is done at the beginning of each lesson to know learners entry behaviour towards the new lesson to be taught and the difficulties faced by the learners, formative evaluation done during the lesson and summative evaluation done at the end of the training or term or not and if these forms of evaluation are in congruence with the objectives of the lessons and making references to the daily practices of the child in a given society and which can also make the learner to develop some skills, competences, attitudes/behaviours or not. At the same time, we decided to consult the lesson note books of some teachers after having apprehended if they even take into account the concept of sustainable education in the preparation of their lessons or not.

Just after having observed one or two complete lessons in just some few minutes, a mathematics lesson in the domain of measurement drew our attention. With the topic "the calculation of area and surface area, and precisely the area of a parallelogram". It was about a lesson taught in class five (5) which lasted for about 50 minutes instead of 40 minutes, which really drew our attention. The pedagogic objective of the lesson was stated thus:

"From the problem situation basing on the calculation of the area of a parallelogram, in terms of the lesson, by the end of the lesson, each learner should be capable of: constructing the formula of calculating the area of a parallelogram and applying it in a problem be it in the class or out of class in 5 minutes".

The teacher then proceeded from a problem situation after which she raised autonomy in the learners with a functional revision. She also delivered her lesson in 3 big stages: putting in place the situation (discovery, putting in place the project and the research); the systematisation (confrontation and validation of results, consolidation and synthesis) and the application (evaluation and integration). Also, the teacher's problem situation was as follow:

"Ebolekeng wishes to cultivate in his farm in the form of a parallelogram with the measurement of 8cm for the side and 6cm for the height. Construct a figure while materialising the part to be cultivated. What name is given to the part that is cultivated? What are we to calculate? Do the calculations then'.

The teacher later proceeded by asking a series of qualified questions that were comprehensive, and ended up by asking the learners to reformulate the problem situation in their own words.

What was interesting here, were the interactions between the learners on one part and the teachers on the other part. The learners were always asking questions and sometimes one of the pupils asked the teacher, who responded to the questions even if the answers were not correct what counted most was the fact the learners were interactive. The exchange of the different ideas given by their mates made them to learn well among themselves. In brief the class was active as the teacher made sure that the children actively participated giving their points of view one after the other on the questions asked.

In conclusion, the evaluation was taken to a house situation and it was in relationship with the objectives of the lessons: "papa wants to dry his cocoa on a land which is in the form of a parallelogram having 22dm as the side and 14m as the height''. Calculate the area of this field. This means that even if the problem necessitates the reflection of who so ever works on the conversion units of area measurement, the children are being effectively represented where papa dries his cocoa, and sometimes he helps them to do it. That is why the problem posed to the learners is significant to the learners, the teacher does not only send the children to do the calculations of the area of the school but to reflect this situation to their daily lives during the cocoa season and besides its going to be easier for the children to resolve similar situations like this, for she will be able to mobilise all the resources (knowledge, skills, attitudes, competences, behaviours and values), thereby rendering the education sustainable. That which concerned the use of appropriate didactic materials, it was observed that there was the problem of non-availability of didactic materials which made some of the lessons presented to be abstract. All the same, while referring to the description of the competences to be developed on one part and how these competences can be developed on the other part in the classroom (2013); we noticed that certain conducts are evoked during the delivery of lessons in the classroom. In effect, Belinga (2013, p. 169-170), presented seven competences that are to be considered in the class in view of assuring the basic theories of teaching through competences and can obtain an effective education. these competences include: the epistemic competence, cultural competences, procedural competence, aesthetic competence, axiological competence, cognitive and socio affective competences.

In this light therefore, he proposed a competence-based approach lesson plan which is applicable in all the levels at the primary involving all the didactic steps to be followed when delivering a lesson, the objectives and how the objectives of sustainable education can be attained.

Table 10: Sample of a preamble of a lesson plan

Name of school: Academic level: Duration: Year:

Didactic unit	Objectives	competences		Didactic method	Didactic materials	Summary

Source: Belinga Bessala, S., (2013).

The use of the CBA through curriculum implementation, permits the learners to develop competences, knowledge, skills and attitudes that can be applicable in their contemporary lives. These competences, skills, attitudes and behaviours serve in the resolution of the concrete and practical problems they come across. Consequently, it is a great wish that, during the learning process or after the learner's completion of their training in primary schools, they should be capable to solve a problem which is presented to them in their immediate environment. Thus, after all these all we are expecting from the child is a positive change in the learners' behaviour Bessala, (2013). Since it appeared after the observations made, the teachers must make sure that the objectives of the teaching learning process must be stated in relation to the objectives of the durable education even if they don't really have a mastery of the concept.

CHAPTER V INTERPRETATION OF RESULTS, DISCUSSION, LIMITATION AND RECOMMENDATION

5.0. Introduction

This chapter encloses our research work, it is therefore the place where we will interpret the results of our study. It is going to permit us to be able to recall the theoretical framework, bring out the data collected, interpret the results, bring out the difficulties encountered and suggest possible solutions that are relative to our study. To understand the level at which curriculum implementation practices have given value to education in primary schools, thereby contribute in rendering the acquisition of knowledge, skills, values and behaviours while assuring the fact that the children must gain their autonomy at the end of their training in the primary school. In this chapter we are going to be basing on some of the theories which we treated in chapter two of this research work namely, the motivation theory of Simon Belinga (2013), the theory of transfer of learning by Jacque Tardif (1999), the socioconstructivism theory of Lev Vygotsky and Brunner and the experiential learning theory of David Kolb.

To Belinga, the theory of motivation and social learning helps in resolving problems of lack of learner's motivation with respect to the discipline being taught or learnt. (Belinga Bessala 2013, p. 123), Frenay cited by Tardif (1999, p. 55), considers the transfer of learning as 'the capacity of an individual or a learner to resolve the new problem situation while mobilising or putting together the learnt knowledge from school in daily life situations which are difficult moments in life'' and to the socio-constructivists, they aim that children should be able to construct the Knowledge themselves with the help of their elderly ones who can be their teachers, use it in resolving their daily problems encountered. Thus, they wish and aim that the learners use the knowledge gotten in elaborating their understanding of the realities of life through the comprehension of the comparison of their perception with those of their group and that of the teachers, Anastasis Kozanitis (2005, p. 11). In fact, the study of these theories show that they are complementary to one another. Meaning that motivation and school learning is like the foundation or base of the transfer of learning and the two participates in the construction of knowledge and the resolution of real life problems

encountered in their daily lives in interacting with others (socio-constructivism). This means that, to be capable of resolving a problem situation of a child's daily life in the class and to assure that knowledge is transferred, the learners have to exchange their ideas, argue amongst themselves and the teachers, and they also have to be motivated by the teachers at the beginning of each lesson. It is good that the teachers give them the maximum support needed that will encourage them to acquire the knowledge, contextualise all what they have learnt and develop the competences, skills, attitudes, values and behaviours in the learners, where they must mobilise all the resources as it is stated in the Competence Based Approach and the new curriculum for primary schools to resolve their daily life problems encountered and in situations of learning.

5.1. Interpretation of results

This interpretation of results is going to consider the different categories of the analyses that were made in the previous chapter.

Curriculum implementation and sustainable education in primary schools

In view of the analysis of curriculum implementations practices and sustainable education in the primary school, the results show that sustainable education is still at the embryonic stage in the primary school as far as the teaching learning process is concerned. To this effect, our study produced the results showing that teachers at the primary school level wilfully employ sustainable education in their professional practices in function of the level of general knowledge they have, their longevity in service in that class and the professional consciousness of the teachers. This therefore means that, the sustainable education that is not well elaborated in the primary school curriculum and the official texts that are having fixed modalities of the integration of this sustainable education in the teaching of disciplines in the primary school. Thus, sustainable education focuses its interest on the daily life problems and promotes the adoption of civilised conformed behaviours towards the social, environmental, economic and ecological environment. Also, it was noticed that it is good to start education at a very tender age in the primary level to obtain very good results at the end. After the findings made which favours the research work of one of the European researchers we came across, Marion Moineau, an engineer student who worked on the influence of environmental context on the development of competences in education, environmental education of the learner in the optical sustainable development of the child. During her internship in the office of national coordination in ENS Yaoundé; in the case of the corporation; in the framework of the corporation between the Rocare-Cameroon and the agro-paris tech: basing on the double notifications which the education of societies do pass through, the education of the youths for the first year of their lives, is necessary to be used and that this education could be used in resolving problems when faced with the problem of sustainability which is posed in the world. However, it is for this reason that certain primary school teachers do master well the basic concept of sustainable education, but it is at the start of the appellation of the sustainable education which embarrasses them in the understanding of the concept and it is the lack of information and training on the new concepts that are linked to education which pose this problem. It is for this reason that we can say that the recommendations of the UNESCO on the reorientation and reforms of programs of study in view of the promotion of sustainable education for the country's vision for 2035, will still be ineffective in our educational systems at the level of the primary. Therefore, to come out with the results, it is indispensable not to assure only the motivation of learners during the curriculum implementation processes, but also the transfer of learning which permits the durability of the academic learning. It is therefore in this sense that Belinga Bessala, said that the theory of motivation and academic learning wants to resolve one of the practical problems which the teachers come across while establishing academic knowledge, the lack of motivation with respect to the subject to be taught and learnt (Belinga, 2013, p.123) and Tardif (1999) in his theory of transfer of knowledge which supports the fact that transfer of knowledge is the foundation of all learning. He therefore, finished by defining transfer as "a cognitive mechanism which consists of using a targeted task, constructed knowledge or the developed competences, skills and attitudes in each source of the task.

All the same, for the objective of curriculum implementation practices to be attained and to assure a sustainable education, it has to take into account all the context, the need analysis of the children that is, what is needed to be taken into consideration before planning or designing the curriculum such as the country's vision which is obtaining a sustainable education, their environment be it their economic, social, cultural background, the health conditions of the learners too have to be taken in to consideration, what they are planning, where it is going to be implemented (place), those who are going to implement it (teachers) how they are going to implement it (the teaching methods, strategies, techniques and approach used), and to whom they will implement it to (the learners who actually form part of the society). Skinner in his behavioural learning theory states that teachers should properly arrange the learning environment that will help the learners to learn such as arranging

activities that will suit the environment. This can be done by encouraging good and positive behaviours through rewards and appraisals and to discourage bad and negative behaviours which are not in conformity with the norms of the society. The teachers need to help learners make practice of what they have learned for this is very important as learning is subject to the rate of occurrence of behaviour. Thus, the practicing is important for strengthening the responses. Given the fact that these objectives have to do with the daily life situations of the learners, societal and environmental events, it is therefore obvious that the teachers must do something to motivate and encourage the learners to learn. Hence this can be related to one of the factors of the theories of motivation of Belinga Bessala (2013) and transfer of learning of Jacques Tardif (1999) respectively.

Furthermore, the results of our research states that, to obtain a sustainable education through curriculum implementation practices in the primary school, it is good to put the children in an interaction amongst themselves and with their teachers during the unfolding of the lesson to be taught. It is therefore here that the theory of socio constructivism sets in. This theory lays more emphasis on the rational dimensions of learning and helps learners to construct their knowledge with the help of their teachers. Emile Lottici (2013, p.10) precise that learning is seen in the socio constructivism theory as, the acquisition of knowledge by learners through their interactions with their teachers and classmates who give them a helping hand. The learners do not only learn for learning reasons, but they learn to use the knowledge, competences, skills and attitudes acquired in resolving their daily problems encountered.

Vygotsky who is the first to have elaborated on this theory of socio-constructivism stipulated that, to learn; it means that they must elaborate be it the knowledge, skills, competences and even behaviours while actually passing through a social interaction with another person and this has different ages. All the same, it is shifting the results of our study that is sustainable education which formally and officially introduces it in the school curriculum of the primary school; and to regularly see if the objectives which are applied in the teaching or implementation of the discipline with the help of pedagogic method or approach used are attained and to find out if the effectiveness of the curriculum implementation processes and sustainability in education will have to be assured. Equally since one of the teachers during the interview period said it was good for the parents of the learners to collaborate with both the teachers and the school since the parent do have a very important role to play in their children's education. In effect the success of acquiring competences, knowledge, values,

behaviours and skills, thus the effective implementation of the curriculum, can also pass through the parents who are the children's first educators.

5.2 Discussions made.

The pedagogic methods/strategies of teaching and the pedagogic approach used during the curriculum implementation practices in the primary school.

Here the results gotten showed that majority of the teachers used different teaching methods in delivering the different lessons planned, but the most common method which they use nowadays is the project-based method which is in line with the explicit teaching and the pedagogic approach which they use too is the CBA. This competence-based approach is only stated in the official programmes but putting it into practice is what is difficult to understand, and text books written are translated in the form of the CBA which is like the demands of the new curriculum for the nursery and primary school which indicates that, for each lesson taught, in each discipline knowledge, competences, skills, values and attitudes should be developed by the learners. It is therefore in their different arguments as teachers with an exception of a minority, that some of the characteristics of the CBA, effectively have a relationship with the way the curriculum is implemented and how it influences the attainment of the objectives of a sustainable education. To this effect, the employment of a contextualised and a significant didactic situation in the teaching of lessons, justifies and favours the understanding and integration of learners learning. This means that the CBA, seems to be the best pedagogic approach that permits the attainment of the objectives that are aimed at obtaining a sustainable education through curriculum implementation processes that can be used for the resolution of present and future problems of a learner. Thus, this only brings us to the idea that it is urgent to reform the school curriculum or programmes and increase the number of seminars and training of teachers should be informed on the CBA and most especially be allocated enough time for the teaching of lessons during the curriculum implementation practices.

Also, with the sustainable education which is aimed at developing knowledge, competences, skills, attitudes, behaviours and values in relation to the environment in which they find themselves in resolving their problems encountered in their present and future daily lives in a large sense, the obtained results of our study shows that the use of the CBA, as a pedagogic approach used in the primary school influences positively the implementation process of the curriculum and the sustainability in education for the researcher thinks that the

teachers have to use this approach to help draw out the knowledge, competences and skills that exist in the learners which will obviously effect a change in their behaviours as they will now be capable of using all these in resolving their daily problems encountered and this is in line with what the socio-constructivism theory of Lev Vygotsky states. It is therefore important that the learners be put in a situation where they will interact with their classmates and their teachers in class as it can be seen in the teachers' strategies of putting the learners to sit in semi-circular form or in small groups of four as the new curriculum for primary schools requires from the learners of today. Thus, it is in this sense the socio constructivism theory of lev Vygotsky and Brunner and Emile Lottici (2013) which has attracted our attention.

The appropriate use of didactic materials in implementing the curriculum to get a sustainable education.

The experiential learning theory is that which asserts that without reflection, we would continue to repeat the same mistakes. The theory found that, learners learn more when the teachers use instructional materials in the different steps of the curriculum implementation with the likelihood of developing one mode of learning than the other. The characteristics of this theory are seen through concrete experience, through observations and reflection, through abstract conceptualisation and active experimentation. For example, for learners to learn the different types of stitches in a home economic lesson, they need to have their different didactic materials such as needles, thread and clothes ready to put into practice as they will observe the teacher demonstrates and next will ask them to put what they just observed in to practice. On the other hand, the case is quite different in some schools like the Government Practicing Primary School Group I, Melen 1. Here there was in adequate availability of the didactic materials and the inappropriate use of the few available didactic materials by the teachers. There are still some teachers who still teach in these schools without even using a didactic material and even if they use the didactic materials, it is inappropriately used; for a teacher cannot be presenting a lesson on reading comprehension in English language knowing fully well that all the learners do not own a reader and she is not able to make photocopies of the passage and distributes them to the learners, but she instead prefers to move round the class holding it for children to observe. I think this is pedagogically wrong, reason being that, as a teacher in the class he/ she is a master of the class and so should either use a chart bearing the passage or has copy of the reader, count the number of students in class who don't have a reader, photocopies for them and distributes to them. It is sometimes a matter of sacrifice especially in situations where the government does provide the teachers with the didactic or instructional materials. Hence it is difficult to attain a sustainable education where there is the non-availability of didactic materials and the inappropriate use of the ones that are even available.

Generally, the obtained results at this level shows that the use of adequate didactic materials is very indispensable and seen to be very obligatory, to have an effective learning that will lead to the acquisition of a sustainable education. Thus, the use of didactic materials in the teaching learning process also remains of great educational value. Teachers must always make sure that they continue to use their professional qualities to render learning practicable and motivating to the learners. It is for this reason that we bring in the theories of motivation by Belinga Bessala (2013) and the transfer of learning theory of Jacques Tardif (1999) wherein to Belinga, teachers must motivate the learners to gain their interest and attention on this or that subject which interests him/her most. He also talked about motivation for competences. Here, the learner will feel that he has learnt something at least from the lessons taught, be it the knowledge, competences, values, behaviours and skills. There is also the affective motivation which he evoked. This is relative to the emotions of the learner towards the subjects taught and the behaviour of the teacher. Here the learner can be motivated to copy a trait from the teachers' behaviour as he teaches which he admires most. For instance, it can be the teacher's empathic nature toward the learners which can make the child to see it to be a character trait worth emulating and so strives to put in to practice this behaviour and value that even influences his own behaviour and thus rendering the education gotten to be sustainable. There is also the moral motivation where the learners appreciate values in the teacher and takes it in an intrinsic way in any of the subjects which he has learnt (Belinga 2013, p.124). The teacher does not only have to precise what is expected of the learners, he rather has to present to the learners the different themes which may provoke the interest of the learners and desire to continue to deepen their knowledge and he or she must evaluate to verify the personal progress of each learner (Belinga Bessala 2013, p. 125). Therefore, while motivating the learners, the transfer of knowledge is done easily with the help of appropriate use of didactic materials which by chance render the child or children competent and autonomous in the society in which they find themselves. And this is the vision that Tardif developed in the knowledge being transferred. Many factors have been implicated in the transfer of knowledge and why not the skills, values and attitudes which can be used presently and in future to resolve any problems encountered in their daily lives depending on the context Tardif, (1999, p. 50)

Also, when the transfer of knowledge is assured and successful, it then gives room for the learners to exercise themselves in the resolution of problems in situations which they come across in their lives and as a result of their interactions with others too where this approach of socio-constructivism is developed by Belinga Bessala (2013, p. 160), in his own terms which he states ''the conception of learning shared in most of our school curriculum, is registered in a socio-constructivists vision where the learner becomes the main actor of his own knowledge. The teachers' role is to consequently situate the learners' learnings in the heart or midst of the didactic act''.

All the same, all the teachers interviewed (8/8) were unanimous so much so that the adequate materials which they even claimed that was present were not even truly available in the school, but they did employ them by finding and using them according to their lesson objectives. Hence we cannot go about saying that the availability and use of didactic materials is not necessary or important because it is by having and using these didactic materials that the implementation of the curriculum that is, the delivery phase of the curriculum is facilitated and thus, there is a high possibility for the learners to understand well and can be able to use these learnt knowledge, skills, behaviours and competences in resolving their daily life problems encountered thereby obtaining a sustainable education.

The evaluation of the learners based on curriculum implementation practices and sustainable education.

The results of our study shows that evaluation remains a fundamental issue in finding out the effectiveness of curriculum implementation processes and sustainable education in the primary school learner. Majority of the teachers interviewed shared almost one and the same ideas; for they all said evaluation in general as far as education is concerned, is focused on attaining the stated objectives of a given vision, aims and goals and it also reflects the quality of education obtained by the learners. Also, when teachers are evaluating, they are not only based on what they have taught the learners, but also on what the learners have learnt and which they must reproduce. Still in line with the data collected from the different teachers, evaluation then in terms of the acquisition of competences, skills, values and attitudes during the curriculum implementation process, is supposed to favour the attainment of the objectives of sustainable education. That is, sometimes evaluation renders the learners that capability of resolving their daily life problems encountered by mobilising the different resources acquired

from school; hence the sustainable education permits the learners to be able to use their competences, skills and attitudes to act or react effectively in their environment.

In this aspect of evaluation, Belinga Bessala (2013, p.65-66), states that: "academic evaluation does not have to be only concerned with instructions, but should also consider learner's education for the knowledge of being is conditioned by certain values learnt in the society. This is also why we are saying that a learner who is respective, responsible, sincere and has a solidarity spirit just to name a few has learnt certain values which can help him or her to integrate well in the society". This is just in line with the behaviourists theory as stipulated by Albert Bandura. Also, Jacques Tardif (1999), raises the point of competences in terms of knowledge based on the use and effective mobilisation of a set of resources (knowledge, skills, competences, attitudes/behaviours and values), where evaluation therefore must guide the identification and use of these competences in resolving concrete and real-life situations that is, the immediate problems faced by the learners in their environment.

In view of this piece of research work, taking into considerations the different responses of the interviewed teachers, it still results that sustainable education remains an educational value to be incorporated in all the lessons taught during the curriculum implementation process in the primary schools. It is therefore necessary to put it in a formal way say formative, in the school programmes for example what the new curriculum for primary schools wants that is, knowledge should be project based and competence based so that learners will be able to use these resources acquired to resolve their daily life problems. Elsewhere, it became that the objectives of the CBA are linked to those of the sustainable education, and the CBA is a good pedagogic approach and method that is appropriate to expensively sell the merits and pertinence of the sustainable education in primary schools. After these results of the observations made, not all the teachers teach using the CBA and it shows that there is a lot of gap as concerns the teaching methods the teachers use. We are somewhere based on the works of professor Belinga (2013) on CBA where he in effect presents competences to be developed in school and especially how to develop them using a didactic form and one of the articles of Bipoupout, (2011) who thinks that children should be given a trend by tend opportunity to integrate the competences acquired and that teachers should inform their learners about the task to be done so that it will help facilitate their comprehension. And teachers should use action verbs to describe the actions that is expected of the learners. It is therefore good to convey sustainable education in primary schools while emphasising on the use of the CBA, the project based methods, the problem, solving methods the explicit teaching method, that will influence the curriculum implementation processes and help render the education obtained by the learners' durable and long lasting thereby making the learners to become autonomous in the societies in which they find themselves. All the same, despite all the difficulties faced by the teachers during the implementation of the curriculum, many of them who were interviewed are unanimous in their teaching and learning activities and even their evaluation, thus, evaluation in terms of the competences, skills, behaviours, acquired during the curriculum implementation processes and a sustainable education. This research work has really dealt with us as we had some difficulties encountered in the realisation of this research work.

5.3 Difficulties Encountered (Limitations).

In a general sense, our study was realised in conformity with the norms and scientific laws of a research work. All the same during our process of carrying out this research, we came across a series of numerous difficulties they include

- The problem of treating well our research topic.
- The difficulties to mobilise all the resources and works of other authors who have treated the topic or something related to the topic 'curriculum implementation processes and sustainable education in primary schools'.
- The in availability of some of the teachers who constituted our target population of this study.
- The difficulties for certain teachers to accept or to honour the" render-vous" given to them.
- The difficulties to be granted the permission to carry out a research in the schools selected.
- Time too was another threat to the research work as we had to manage the this with classroom activities in the school.
- Finance was another problem that we faced in carrying out the research.
- Some of the teachers also face the problem of elaborating or putting into practice these basic competences in terms of the knowledge, attitudes and skills which the teachers ought to have had a mastery of it to make it easier for the children to equally acquire these resources.

5.4 Recommendations

In a perspective, this new educational concept happens to have been brought up just now when Cameroon has its vision of getting an emerging country by the year 2035 and there are a lot of challenges met in the educational sector in general and in the primary school. It should therefore be noted that:

"offering quality training to many young Cameroonians: thereby preparing them to integrate well in the society and to be opened to a job market, thanks to the teaching and learning process, also, the training devices in their conceptions and the putting in place of these devices have evolved in a scientific way. In effect, in a school that is formerly dedicated to the acquisition of knowledge which is often decontextualized, it is substituted everywhere in the world, a school concerned with the empowerment or equipment of the learners so that they will be able to resolve any problems they come across despite the situation be it, complex situations or diversified ones. In the place of a school that is cut off from a society and is located far away, an integrated school concerned with the sustainable development and which considers the cultures and local knowledge". (curriculum for ENIEG, the GCE A/L level, 2013, p.3)

Thus, our system of education at the primary level, must be of advantage to the learners as they school throughout their lives. Also, a curriculum implementation process with the help of the CBA, that is centred on sustainable education aims at developing competences, skills, attitudes, knowledge and behaviours for a harmonious integration of the learners in the society after having completed the training in the primary school. With respect to our findings made our possible suggestions will be made taking into consideration the results of the study obtained. Thus, for this reason to ameliorate, curriculum implementation practices in primary schools to get a sustainable education especially at level three (classes 5 and 6) in Cameroon, we have to address our suggestions to the following personnel's, curriculum designers or experts at the primary level, the ministry of basic education (MINEDUB), to the pedagogic inspectors, teachers and to the parents.

The curriculum designers or experts or the state for primary schools

- Since education today is modern and has a lot of challenges such as integrating what has been learnt in the society by resolving daily problems encountered, curriculum designers must define the curriculum in terms of the needs of the society since the learner's form part of the society, it should be defined in terms of the competences, skills, attitudes and behaviours which shall be developed by the learners during their training in the primary school.

- The curriculum also must be adjusted as soon as possible if there are any changes made in the educational system especially with this new concept of sustainable education or sustainable education for development whereby, they should also be taking into consideration the ecological, economic, and the sociocultural interactions of the children
- The training programmes on the appropriate practicals of the concepts of curriculum implementation and sustainable education should be defined to the student teachers of both ENS and ENIEG and enough budget should be allocated for the education of the country.
 - Reorient and assure the continuity of learning acquired in schools and their daily lives for this will favour or encourage the development of competences, skills, attitudes, behaviours and values that will be used in the resolution of the problems to be encountered in their daily lives.
 - -They should also prepare and integrate the interdisciplinary themes or topics in the different curricula, taking into consideration local, national and international correlations.

The Ministry of Basic Education (MINEDUB)

- There should be the organisation of pedagogic seminars on this issue of acquiring a durable or long-life lasting education through curriculum implementation practices at all the levels be it nursery, primary and secondary why not the university.
- They should make sure that they equip the schools with necessary teaching and learning materials such as textbooks should be given to teachers. It should not only be concerned with the syllabuses, libraries, sufficient spacious classrooms should be constructed so that they should be able to explore well their acquired resources.
- There should be an adjustment on the allocated time of the lessons taught since most of the lessons now taught are more practicable

The pedagogic inspectors.

- -Organise numerous and frequent pedagogical seminars, national pedagogic days and meetings should be organised among the teachers of different schools in order to have an exchange of ideas on how the curriculum implementation processes can be done so that children will be capable of obtaining a sustainable education.
- Increase the number of times the student teachers go to the field for practice so that they will get use to the curriculum implementation practices in primary schools and also learn how it is applicable in all the subjects and how what is learnt using the CBA leads to obtainment of a sustainable education.

- Increase the number of inspections in the classrooms during the teaching learning process, to verify if the teachers apply the recommendations of the state that will help in the attainment of the objective of getting a long-life lasting education which will not end in the classroom but would be used for future reasons in resolving the problems encountered in their daily lives. That is, there should be pre-inspection exercise, the inspection exercise and the post inspection exercise.
- The inspectors should address the children and then later the teachers or the staff in case of any observed errors made. This should be done in the absence of the pupils. They should point out the strong and weak points observed during the inspection and use it as an opportunity to educate, inform and advice the staff on the educational, economic, social and cultural issues such as this issue of sustainable education

The teachers

The teachers are the main actors of the curriculum when it comes to the implementation of the curriculum in schools and at the basic level we propose that they should auto document themselves more on issues that concern the sustainable education to ameliorate the teaching learning process that will help facilitate the acquisition of the competences, skills, values and behaviours that will lead to a sustainability in education.

- Teachers should frequently take part in pedagogic seminars and pedagogic meetings, and even go in for in service training to update their knowledge and competences that will help them to implement easily the curriculum that will help in the attainment of a sustainable. For instance, a lot needs to be done by the teachers today as far as the explicit method of teaching is concern for it is only through numerous seminars and inquests that teachers can fully grab a mastery of this method of teaching so as to be able to implement it well their classrooms.
- Orient the reflections and actions of the children during the curriculum implementation process towards the objectives of sustainable education.
- An elaboration of basic competences in terms of knowledge, skills, attitudes and behaviours which the teachers must possess. In other words, it means codifying all the category or set of knowledge, skills, behaviours and pedagogic attitudes which the teachers need to be operational and be effective in a class.
- Generally, since the teacher is the main actor in the implementation of the curriculum, they must serve as a model for the learners to adopt and emulate their behaviours towards the environment and the society in which they find themselves.

- The teachers must also evaluate the learners to make sure that the problem situations which the learners treat are centred around problems which they come across in their society.
- The teacher must take into account the interdisciplinary transversal characteristics of sustainable education in the content of activities during the curriculum implementation process. To this effect, we will therefore propose some examples of some groups of subjects taught in the primary school that are inter-disciplined.
- In human and social sciences, the teachers must organise learning activities that
 valorise the acquisition of knowledge, skills, attitudes and necessary competences for
 the better understanding of the world in which they live, and which helps to insert
 them well in the society and contributes in their evolution when it concerns this issue
 of a sustainable education.
- In mathematics and nature study, the teacher must make sure that he chooses to develop in the learner, that spirit of resolving problems, some scientific postures after having permitted them to progressively develop the capacity of creating problem situations and resolving them, mobilising the tools used, and the ideas and drawing conclusions based on the events, in view of understanding the natural world, the exchange of ideas that concern human activities and the taking of decisions.
- In moral education and citizenship, the teacher must show the learners that this discipline responds to the same aims of sustainable education. For it aims at training future citizens to use their analysis tools and that of choice in relation with other social actors. The teacher then must organise learning activities that will be centred around the three main interaction poles: citizenship and instructions; practices of the citizen in school and citizenship and its role in the society. This will be done while analysing the values and objectives of sustainable education.

The teachers should evaluate the learners in a way that they will be able to use their competences to act, to create, to develop initiatives and to make prove of the citizen's engagement.

The parents.

Teachers are not the only persons who contribute to the education of the children, but their parents also have a role to play and, so it was necessary for us to address the parents of the learners so that together a sustainable education for a sustainable society could be built.

- Parents should help provide their children with all the necessary accessories back at home that will help them develop skills, competences and values.

-	They should follow up the evolution favourable learning conditions.	of the	heir	children	by	providing	them	with

GENERAL CONCLUSION

The topic for this our piece of research work was' 'curriculum implementation practices in primary schools and sustainable education in the Yaoundé III and VI'. It was a question of finding out how curriculum implementation practices such as need analysis and curriculum designing/ planning, curriculum implementation (the delivery phase) and the curriculum evaluation can help learners in the primary schools to acquire long life lasting knowledge, skills, competences, values and behaviours that will help them in resolving their present and future problems encountered in their daily lives. Also, we wanted to show how this sustainable education which has to do with a set of educational values are to be transmitted across the disciplines taught in primary schools thereby assuring the effectiveness of the states' objectives of getting a society made up of competent, skilful, creative and well-behaved citizens.

Furthermore from the observations made, it appeared that this concept of sustainable education through curriculum implementation practices, have not yet been well apprehended by a good number of primary school teachers especially the level III (Classes 5 and 6), also the new school curriculum for primary schools have not yet been well understood by these same teachers for just very few of them are struggling to see how they can put into practice what the state wants and this is actually posing a problem and again the teachers are not sufficiently trained on the new curriculum for the primary schools which can somehow be linked to the CBA and the explicit teaching method which is the pedagogic approach and method that is to be used in the classroom during the teaching learning process to help facilitate the obtainment of this sustainable education, and there is the non-availability of sufficient teaching and learning materials to be used by the teachers and even the learners too, the population size of some classes in some of the schools such as, the Government English Primary School Group II of Etoug-Ebe where in class 5 there were 123 pupils and in class 6 there were 118 pupils making it difficult for the teachers to carryout proper classroom management and to pay attention to the individual needs of each learner. Nevertheless, there are some teachers who have been making efforts to integrate this notion of a long-life learning skills (sustainable education) in the preparation of their lesson notes. In addition to this it is necessary to make sure that while planning, designing, developing, implementing and evaluating the curriculum to meet up with the objectives of the sustainable education, it should be done taking in to consideration all the levels in primary school starting with the nursery school children. To be able to resolve the problems which preoccupied our research work and the results obtained from the field, we emphasised on the qualitative research. We had a target population of 62 teachers in the three main schools and an accessible population of 10 teachers and finally a sample population of just 8 teachers were met. The sampling technique used was the non-probability sampling technique and the methods used were observation and interview. We treated our main research questions through the specific research questions which included:

How can need analysis/designing influence sustainable education in primary schools?

How can curriculum evaluation enhance sustainable education in the primary school? Hypothesis were emitted to these research questions where it was confirmed that curriculum implementation practices influence sustainable education. Some recommendations were made to the different personnel of education such as the state and curriculum experts, the ministry of basic education, the pedagogic inspectors, teachers and parents of the children. It is with these recommendations made that, educational conditions can be improved, and it will also help in the perfect attainment of the research objectives of this piece of research work across the analysis of the content, supported by the theories of motivation by Belinga, B. (2013), the transfer of learning theory of Jacques Tardif (1999) and the socio constructivism theory of Lev Vygotsky and Brunner.

We cannot end up without saying that it is sustainable education which drives the adoption of good and acceptable behaviours, values, skills, and competences for a good living lifestyle that is meant for all generations with the protection of the environment in which they live, make a good use of the natural resources and the adoption of civic values, make use of the CBA and the explicit teaching method which is a very active pedagogic approach and method that favours the integration of acquired resources and the durability of learning. Hence, the learners at the end of the training, must obtain long life skills by developing attitudes, competences and behaviours that will help them resolve problems in the social domain, economic, moral, cultural domains and ecological domains and make them to remain autonomous in their decisions for their perfect insertion and total fulfilment in the society they belong. Teachers therefore, must put in a lot of effort as far as this is concerned. They must do the following: use adequate didactic materials, change their teaching methods base on the different disciplines, take into consideration the needs of the learners, do a good preparation of their lesson plans making sure that their objectives are related to the content and the

evaluations done which could remain in a perfect footpath of attaining quality and lifelong education.

In a null shell, we can conclude that for us to elaborate and affirm that curriculum implementation practices in primary schools influence a sustainable education in the Yaoundé III and VI, the obtained results in this research work can be affirmed or rejected in another research which could be quantitative. Thus, several perspectives have been proposed to improve on this work and relevant proposals or recommendations were addressed to the situation at hand concerning primary school leavers in the Yaoundé III and VI sub divisions and in the whole of Cameroon. To make this piece of work look authentic and to show how sustainability in education can be influenced by curriculum practices, we chose some few sample individual lessons plan showing how the curriculum is evolving and with this, it shows that the citizens that form part of the society, must change.

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ANNEXES

The Observation Grid Table

School	Class teacher.	Date
SCI1001	Class teacher.	Date

Modalities

Items observed.	Actions	Effective	Not effective	Very effective
Considering sustainable	-Is there the use of terms which show that they associate and behave well with others - do the teachers integrate the			
education in the preparation of lesson	notion of daily life of the learners during lesson preparation - do they make use of socio- cultural, environmental and			
notes Pedagogical methods	economic facts -Is there the use of competence			
used in relation to the primary school	Based Approach (CBA) during lesson delivering? -Do they teach from problem situation and is it related to the content and objectives of the lesson? - Are the learners put in groups			
	during lessons so that they can easily integrate among themselves			
Availability of didactic materials	Is there the use of appropriate didactic materials? Does the didactic material reflect the content and objective of the lesson?			
Model and methods of the construction of items and evaluation objective base on knowledge, skills, attitudes, competences and behaviours	Do they evaluate taking into consideration the objectives of the lessons? -Do they propose items that bring out the development of behaviours, skills, competences, values and attitudes in the learners?			
	Do the teachers propose items that objectively evaluate the competencies, skills, values, attitudes and behaviours, that take into consideration all these acquisitions?			

INTERVIEW GUIDE

Instructions

This is an interview guide that the researcher wishes to use to get information with your kind collaboration that will help in getting or providing a possible solution to the problems encountered when implementing the curriculum so that education can be sustainable. With your corporation and collaboration, the answers you will give shall help to facilitate this piece of research work.

Identification of The Respondents
Date Location Duration
Interview code number or name
Interviewer
Sex: Male, Female
Age Qualification
status: married, single, divorce
I) Curriculum implementation practices

-Theme 1: Planning

Sub theme 1: Need analysis in the form of objectives: That is, written statements of intent that describes the behaviours, attitudes, knowledge, competences which the children are expected to exhibit after being taught to acquire a sustainable education.

Sub theme 2: The learners to be taught so that they achieve a sustainable education and where the programme will be implemented and what the goals are to pursue. Thus, this has to answer the question of who is the learner, who will teach them and where are we going.

-Theme 2: Delivery

Sub theme 1: Strategy selection which has to do with the organisational strategy where the teacher decides on how he will organise his classroom and the didactic materials to be used.

Sub theme 2: Delivery strategy which has to do with the method of teaching to be used, the

content taught in relation to the stated objectives, the pedagogical approach used, how the

lessons plans are organised.

Sub theme 3: Management strategy which is concerned with the nature of classroom control.

Thus, this has to answer the question of how will it be implemented? or how will they get

there? so that the learners will be able to acquire a sustainable education.

- Theme 3: Evaluation

Sub theme 1: Revision of instructions

Sub theme 2: Effectiveness of students learning in line with the stated objectives

Sub theme 3: Measure the accomplishment and compare them with the objectives identified

at the beginning of the curriculum planning process. This will answer the question of how will

we know when we are there?

II) Sustainable education

-Theme 1: Practical skills

Sub theme: 1 Multimedia communication

Sub theme: 2 Innovations and creativity skills.

Sub theme: 3 competences

- Theme 2: Deep knowledge

Sub theme 1: critical thinking.

Sub theme 2: complex problem solving

Sub theme 3: collaboration

Theme: 3 Behaviours

Sub theme 1: Self efficacy **Sub theme 2**: Attitudes and **Sub theme 3**: Good moral values

XIII

TRANSCRIPTION OF THE INTERVIEW GUIDE

Curriculum implementation practices and sustainable education

Theme 1: Planning phase

- What are some of the things you take into consideration during your lesson planning for example, the learners sitting position, how is it done and why?

Case 1

Name: Tah Joseph

Sex: female

Grade: IC 2

Longevity in service: 5 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

Said:

"When am planning lessons I consider their environment, their cultural background and also their storage capacity. This is to know if the stated objectives will be attained easily or not"

Another teacher from the Goeland Bilingual Nursery and Primary school also gave her point of view.

Case 2

Name: Membom Chritelle

Sex: female

Grade: PTA

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

Said:

"As for me, i plan my lessons without considering anything apart from completing my syllabus"

Theme 2: Delivery phase

- How do you organise your classroom in rolls and column form? or in a semi-circular form?

Talking about the organisational strategy of the classroom, this was what one of the teachers in class five (5) at the Goelands Bilingual Nursery and Primary School at Biyemassi said

Case 1

Name: Tah Joseph

Sex: female

Grade: IC 2

Longevity in service: 5 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

Said:

"As a teacher what I do in terms of organisation, is that I organise my class in terms of sequencing the content, put my children in groups of at least three (3) or four (4) children per group and they are put to sit in the form of a semi-circle. I do this to enable them to fully participate in the teaching learning process, reason being that following the old pedagogical method of positioning the children where they use to sit in rows and columns, some children hide behind their mates and are distracted with other things that are of no use to them and this will obviously make them to be passive participants in class. I also allocate the teaching learning materials to be used for each lesson that will help to facilitate the attainment of the expected objectives".

Case 2

Also, the classes 5 and 6 teachers of Government English Primary School Etoug-Ebe Group I responded to their own questions posed on the organisation of their classroom especially their sitting positions in class and gave their reasons for doing so. The class 5 teacher by

Name: Madam Muna Patience

Sex: female

Grade: IC 2

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

Said:

"I arrange their sitting position in groups because it is what the new curriculum for primary school's states. When they sit in groups everybody is active they are given posts and a

secretary must be in the group chosen by the children themselves who will gather all their answers when given a group work and then presents it in front of the whole class when the time comes. This method has really helped the children a lot especially the weak ones too who are now being taught by their own class mates and again when I compare this sitting positions with that in the past which used to be in rows and columns there Is a big difference because in the past children used to hide behind others and do different things not everybody was given the chance to talk which even made most of the children not to be active in class"

Case 3

The class six (6) teacher by

Name: Madam Atelefack Vivian Asong

Sex: female

Grade: IC1

Longevity in service: 15 years

Longevity as class teacher: 3 years

Class taught: six (6)

Level of education; GCE A/L

said:

'' My children still sit using the old method of positioning which is sitting in rows and columns reason being that the population is too much, but it doesn't cancel the fact that they do not work in groups. They do when I just give them group work, what they do is that they just quickly turn and face those siting behind and by so doing their groups are formed with no problems".

-a) Is there availability and appropriate use of the didactic materials?

Case 1

Name: Madam Muna Patience

Sex: female

Grade: IC 2

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

Said:

^{&#}x27;' talking about the availability of didactic materials, it's not easy because the school does not provide us with any, but we improvise based on what we are to teach on the selected lesson, but I must confess that even the few that you do like the chats and hang them on the walls,

when coming the next day, they are nowhere to be found again because these materials are even supposed to help facilitate the children's acquisition of these resources to talk about that is the skills, competences, values and behaviours'. Thus, they all expressed a common view of not having enough availability of didactic materials provided to them by the school; but that according to the objectives of the lessons to be taught, they all struggle to get a didactic material which matches with the objectives of the CBA'.

This is another declaration of one of the teachers in government practicing primary school of Melen 1

Case 2

Name: Mme Ekoto Bibian Epse Le

Sex: female

Grade: IC1

Longevity in service.41 years

Longevity in present class: 5 years

Class: six (6)

Level of education: BAC

"We don't have the available appropriate didactic materials, the school does not give us any of these didactic materials, for example we don't even have any. Even us we only struggle on our own to have some to use them and plan and teach our lessons. Now that all the lessons are said to be practical so that the children can gain competences, it's good to concretely present the situations to the learners. For example, with ICT, we can photocopy or snap an ICT tool say a computer, take the image to class and show the children to observe then the fact that children like images, it just attracts them and even calls their attention to class. Also, sometimes if we want to present a lesson on the respect for human rights in citizenship, we can just select some pupils to take their different roles and they dramatize it for this even helps them to understand better the lesson and store it in their memory for future use. Truly speaking didactic materials is a very determinant factor that assures the effectiveness of learning for, when a learner is given the opportunity to participate or manipulate what he learns in class he keeps it for the rest of his life and even continues with the acquired experiences back at home".

case 3

Name: Madam Atelefack Vivian Asong

Sex: female

Grade: IC1

Longevity in service: 15 years

Longevity as class teacher: 3 years

Class taught: six (6)

Level of education; GCE A/L

Said:

"The lack of these didactic materials really makes work difficult for us as now have to deal with the available means which can actually not be the best for instance, there are when I want to teach a lesson say on the respect for human rights we select some pupils to take their different roles and they dramatize it for this even helps them to understand better the lesson and store it in their memory for future use but it is not the best for it would have been good if we get a film that deals with the respect for human right and we project it, that way we will know we have used ICT to integrate a learning"

-b) During the teaching and learning process does the content relate with the didactic materials and stated objectives?

Case 1

Name: Madam Muna Patience

Sex: female

Grade: IC 2

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

said

"It is very obvious that the content is supposed to be in relation to the didactic materials even if there is that problem of the non-availability of adequate didactic material but at my level I try my best. You cannot be teaching part types of stitches and u don't ask the learners to come to school with threads and needles. You have to since the objective is that they should be able to stitch their torn dresses back home by so doing they certainly will acquire a skill and a competence which they can use in resolving a problem"

one of the class 6 teachers of Government English Primary School Etoug-Ebe

Case 2

Name: Madam Atelefack Vivian

Sex: female

Grade: IC1

Longevity in service: 15 years

Longevity in the present class: 3 years

Class taught: 6

Level of education: GCE A/L

Said;

'When I prepare my lesson notes, I preview a situation that takes the children in their daily lives with their parents and family members and even the society or environment to make them understand well what is being taught. Thus, with the use of this competence based approach (CBA) which they are asking us to use as a pedagogic approach and the explicit teaching method where there is always a problem situation, now obliges us to plan our lessons with learning activities on practical subjects in the child's present life. Hence it is in this spirit that we can also say we are striving towards an education that is sustainable which I could simply define as the act of putting into practice what is learnt from school into our everyday life and integration with others to gain a sustainable education. This is also for the fact that the child should learn how to read, write and calculate in primary school and which is going to help him or her in future'.

Another also gave her own point of view confirming the other colleague's point of view that when planning their lessons, they consider the educational objectives saying:

Case 3

Name: Busah comfort

Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: A/L

Said:

"it is urgent for me to integrate sustainable education in the preparation of my lessons especially lessons for class 5 and class 6 because the children are supposed to be inserted in a way that they can be autonomous in their present society and the future society after obtaining their First School Leaving Certificate (FSLC) or in French Certificate D'Etudes Primaire (CEP), thus, the child therefore has to use this knowledge received in class in order to better succeed in life".

This means that, some teachers plan their lessons taking into consideration the didactic materials in relation to the objectives.

- Basing on the competence based approach do you teach using different teaching methods that are suitable for delivering the planned lessons?

Some teachers from Etoug-Ebe gave their own opinions like what the other class six (6) teacher

Case 1

Name: Bonjem Elvis

Sex: male

Grade: PTA

Longevity in service: 7 years

Longevity in present class: 5years

Class taught: six (6)

Level of education: BA Degree holder in history

Said:

"When I am teaching I make sure that the method chosen is in conformity with the subject for example the lesson in home economics which I just taught in citizenship on the topic 'the family' could not be taught using dramatization method. No! this wouldn't have worked not at all, I must illustrate and demonstrate using a chart bearing the different forms or types of families. It's true that it is sometimes good to use real objects as didactic materials to facilitate the learners understanding of the lessons, but this is very different because you won't expect me to go and bring the different parents at home to come and illustrate the different forms of family, we must know that, this class will not be enough to contain the population'

Case 2

Name: Busah comfort

Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: A/L

Said;

'For us to teach a lesson like in one of the lessons that I just taught which was English on 'synonyms' had to obviously have its own method of teaching that will suit it. I had to use the brain storming method, where the children had to do a bit of critical thinking or brainstorm to come out with answers to the words posed. Just imagine that I came and gave a word like' fail' and I start struggling to demonstrate or dramatize, am sure most of the children will be lost and even you, won't you look at me that I don't have a mastery of my content because if I had I will know which teaching method best suits each lesson that I teach. At least things like this must be considered and not just teaching because I want to teach or because I want to cover up the syllabus, but I need to use the real teaching methods and materials to teach and to let my message flow well'

8) Which pedagogic approach or method is suitable for the delivering of lessons that can contribute to the attainment of a sustainable education?

Case 1

Name: Bonjem Elvis

Sex: male

Grade: PTA

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: BA Degree holder in history

Said:

'Talking about the use of pedagogic approach in the teaching of lessons, I will say that when we heard of this issue of Competence Base Approach we thought it was just another means of giving us much unnecessary work for by the time it was introduced in the educational system of Cameroon, the programmes were not actually talking on it but the manuals which we were using and are still using are in the form of the CBA for each discipline taught, corresponds with the competences to be developed by the learners and thus we are really happy with this approach and today we see that it is even in conformity with the new curriculum and explicit teaching issue that is the talk of the day as far as education is concerned in our country Cameroon for it is no longer the case of the old pedagogic approach which was just a matter of the teacher alone and no competences were developed in the learners''

Case 2

Name: Busah comfort

Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: A/L

Said;

"Today, we do use the explicit method as a pedagogic method when preparing our lessons with problem situations that are concerned with the real life of the child or learner, and the child himself is also recognised as an actor in the teaching learning process and this even becomes very easy for the child to recall what was taught in class. Thus, we are effectively attaining the objectives of that sustainable education, which we call it at our primary level; the lifelong lasting learning which wants that the child should develop knowledge, competences, skills, attitudes, behaviours and values which results from a lesson learnt in class. For example, after teaching a mathematics lesson on the calculations of areas, the

child should be capable of recognising that a land can be rectangular or square while he too can now measure and evaluate its surface area back at home or in the quarters'

Case 3

Name: Madam Ekotto Bibian Epse Le

Sex: female

Grade: IC1

Longevity in service: 41 years

Longevity in present class: 5 years

Class: 6

Level of education: BAC

said:

'You are talking to me about the CBA and the teaching methods which I use in teaching, and you are asking me how they influence curriculum implementation processes and sustainable education. I don't even know what that your CBA nor the curriculum is and then talking about its implementation and again they are even talking about competences to be developed, who is supposed to develop these competences, Is it the teacher or the learner? We have never had a training in this not to talk of good educative seminars since this your story arrived and even if the programmes are talking about it, they are not telling us how we can do to get the main competence that can help us in implementing it. How then do you think I can teach so much such that the lessons taught can influence the learners' capability of obtaining an education that is durable because me am continuing with my NAP and the children are succeeding at least".

Still in the same line another teacher, the class 5 teacher of the same school gave her own point of view but this time around she spoke while referring to the new curriculum.

Case 4

Name: Mme Legoubou Cecile

Sex: female

Grade: IC3

Longevity in service: 10 years

Longevity in the present class: 4 years.

Class taught. Five

level of education: BAC

She said:

"I don't see why they had to change the NAP to CBA which are merely one and the same thing ok see there is this new one they call the curriculum that is everywhere as far as education in the primary school is concerned. I am taking you to the issue of curriculum because I just heard you talk about the curriculum this new development in education that curriculum is not easy because it has changed a lot and it is really confusing me and again the fact that they have not given some practical lesson on how to do it, all they do is to tell us that go and do it with the children no sample nothing tell me how will I put such a thing into practice when I don't even know it? This is not just different from the competence-based approach because its objectives state that the children must acquire knowledge, skills, competences, values and attitudes of which looking at these children I teach do they really look like people who want to gain competences? They are all interested in playing"

Theme 3: Evaluation phase

9) From the lessons taught can it be justified that the learners acquire competences, knowledge, skills, behaviours, attitudes and value.

Case 1

Name: Madam Ekotto Bibian Epse Le

Sex: female

Grade: IC1

Longevity in service: 41 years

Longevity in present class: 5 years

Class: 6

Level of education: BAC

said:

All of the above

None of the above

✓ Some of these

Case 2

Name: Busah comfort

Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: A/L

Some of these
All of the above
✓ None of the above
Case 3
Name: Bonjem Elvis
Sex: male
Grade: PTA
Longevity in service: 7 years
Longevity in present class: 5 years
Class taught: six (6)
Level of education: BA Degree holder in history
Said:
Some of these
✓ All of the above
None of the above
10) Is the teaching learning process competence or objective based.
Case 1
Name: Madam Ekotto Bibian Epse Le
Sex: female
Grade: IC1
Longevity in service: 41 years
Longevity in present class: 5 years
Class: 6
Level of education: BAC
✓ competency based
objective based
Case 2
Name: Busah comfort
Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5years

Class taught: six (6)

Level of education: A/L

competence based

✓ objective based

Case 3 Name: Bonjem Elvis

Sex: male

Grade: PTA

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: BA Degree holder in history

Said:

√ competency based

objective based

- 11) How do we measure the degree of effectiveness between what the children learn in class and the stated objectives.
- **Case 1:** we measure it through summative evaluation
- **Case 2:** it is measured through formative evaluation
- Case 3: we do measure it at the end of the teaching learning process.
- 12) Bearing in mind that the country's vision is to get an emerging Cameroon by 2035, From the new curriculum for primary schools can we confidently conclude that the competences acquired by the learners can help them to resolve their daily life problems encountered? Justify your response

The class 5 teacher of Government English primary school Etoug-Ebe Group I Case 2 Case 2

Name: Busah comfort

Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5years

Class taught: six (6)

Level of education: A/L

said:

"From the lessons taught which are based on integrated themes, I can say that all the children have their different things learnt or acquired during the teaching learning process. For example, with the introduction of the new curriculum where the children now sit and do their works in groups, it is very rare to find a child who goes back home with an empty head some acquire the competences, others acquire skills, some just the knowledge, others behaviours or attitudes and some acquire values, but some acquire all. So, it all depends on the individual children and their different capacities to acquire".

Another responded on the measurement of the level of education acquired by the learners. The class 6 teacher GEPS Group II Etoug-Ebe

Name: Mr MBU

Sex: male

Grade: IC2

Longevity in service:12 years

Longevity in the present class: 5 years

Class taught: six (6)

Level of education: GCE A/L

said:

"We measure their level of acquiring knowledge, competences, skills, attitudes and values through evaluation. For example, the new curriculum which now states that the children should be evaluated in groups, they are given some projects to do and these projects come because of the problem situations which might have been given to them to search for the possible solutions. When we evaluate our learners, we are always waiting on what they effectively understand from the lessons taught and what we are expecting from them, is mostly a change in their behaviour. The scripts are constructed basing on a life problem situation which sends the learners not only to what they learn from school but also sends them to what they live back in their daily lives at home and in the society. Hence, it is obvious that evaluations help us to be able verify if our stated objectives that were planned at the beginning of the lessons have been attained or not so that we can be able to carry out a remediation".

Case 3

Name: Bonjem Elvis

Sex: male

Grade: PTA

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: BA Degree holder in history

Said:

"looking at evaluation in the context of the competence based approach used which has an impact on the knowledge, skills, competences, attitudes, behaviours and values acquired by the learners and their own objectives, that is, finding out to know if the objectives of the evaluation have been well defined and the items of the script, this will be easy according to the instructions, the duration allocated to the scripts and the real capacities of the child to be able to treat the paper. Evaluation can faithfully take in to account the competences that are linked to the academic tasks which permits the transposition of the daily aims."

A class five teacher in the Government English Primary School Etoug- Ebe

Name: Madam Muna Patience

Sex: female

Grade: IC 2

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

said:

"I measure the level of the competences acquired by my learners through evaluation which is done in the form of projects and no project can exist on its own without resulting from a problem situation or it is from a problem situation that we can have a project. For instance, if you look round the school compound you will find that trees have just been planted all-round the school compound and there is also a vegetable garden. This is to solve the problem of drainage and to serve as sheds when it is very hot especially during the dry season. The roots will help to reduce the water that is always on the campus which causes the compound to be very muddy and so making it difficult for us to move. These same trees planted by the children will also help in blocking the buildings from being destroyed by the wild winds and storms that disturb during the rainy season. The fact that the children are the ones who did the planting project, already shows that they have acquired long life learning skills that will help resolve a problem which they have been facing".

A different teacher but this time from the Goelands Nursery and Primary School also gave a convincing response to the fact that evaluations has an impact in the children's learning. This is in the sense of the effectiveness of this learning and the learner's autonomy.

Name: Membom Chritelle

Sex: female

Grade: PTA

Longevity in service: 8 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

said:

"my evaluations really have an effective impact on the learners learning. It is from the marks obtained by the pupils that I can then make a decision that is needed to conduct their learning, for these marks will help determine the quality of education obtained by the children and this can equally influence the child in his daily life be it at home or elsewhere and the parents too at this level have all the rights to check on the child's learning while verifying their marks all the time after each evaluation and thus, the children's autonomy too will also be acquired". Another teacher in the same line, believed that evaluation effectively renders into account the quality of learning achieved by the learner. But this will be possible if only they do remediation always in view of reinforcing what they have learnt. She said" I always orient my evaluations with instructions of the work which I have given them. After each evaluation phase which they have been doing, since they mostly do group works which I have prepared them for the upcoming evaluation given to them, a catch-up lesson is given to those who did not understand better the lessons. Hence, remediation also permits the teacher to put all the leaners at the same level and ameliorate their academic achievements".

A teacher who was more experienced said that if evaluations can render the learning effective, it means that it is more difficult to know whether these children even truly use these knowledge, competences, values and attitudes acquired in class to solve the problems encountered in their day to day life.

Name: Busah comfort

Sex: Female

Grade: IC 2

Longevity in service: 7 years

Longevity in present class: 5 years

Class taught: six (6)

Level of education: A/L

Said;

"it is true that evaluation aims at verifying the degree of knowledge acquired by the children and the level at which the stated objectives have been attained. In the context of the CBA, evaluation aims at finding out if there has been a realisation in the learning that has been taking place, it therefore means that the learner can resolve a problem situation on his own. It is no more an issue of staying on one point and do mental exercises such as counting, adding, subtracting, multiplying and dividing but it now has to do with the resolution of real life

problems that are concrete within and outside the school and not abstract but these has to be in congruence with the objectives of the lesson and which can help in the development of competences, attitudes, values and behaviours in the learners and facilitate the attainment of a sustainable education".

Name: Mr Tanlaka Thomas

Sex: male

Grade: IC1

Longevity in service: 5 years

Longevity as the classroom teacher of this class: 4 years

Class: five (5).

Level of education: GCE A/L

"yes from the results gotten from the evaluation whose aim was to find out if the children during the curriculum implementation process, which is the teaching learning process, acquired some competences and values which they could use in the resolution of problems encountered in their daily lives; that is the objectives of the lessons and it is certain that during an evaluation we will obtain both positive and negative results. it is true that evaluation aims at verifying the degree of knowledge acquired by the children and the level at which the stated objectives have been attained. In the context of the CBA, evaluation aims at finding out if there has been a realisation in the learning that has been taking place, it therefore means that the learner can resolve a problem situation on his own. It is no more an issue of staying on one point and do mental exercises such as counting, adding, subtracting, multiplying and dividing but it now has to do with the resolution of real life problems that are concrete within and outside the school and not abstract but these has to be in congruence with the objectives of the lesson and which can help in the development of competences, attitudes, values and behaviours in the learners and facilitate the attainment of a sustainable education"

In the Government Practicing Primary School of Melen 1 of Group I, the class five teacher there

Name: Mme Legoubou Cecile

Sex: female

Grade: IC3

Longevity in service: 10 years

Longevity in the present class: 4 years.

Class taught. Five

level of education: BAC

said:

"it is not easy to measure the degree of competences, values and behaviours of the learners which is our objective but from the little observations made I can say that the children have at least acquired something. For example, most of them had torn trouser but now from some of the lessons taught in needle work, majority are capable of stitching their own dresses".

Generally, considering all the points of views given by the different interviewees on the findings made considering our analyses, it turns out to be in a holistic manner that sustainable education remains a concept that is little or less known by some teachers of the primary school after when the concept was introduced in the educational system of many countries both in Europe and Africa. Also, since some seem to understand the importance of the sustainable education, where, there will be the lack of the will of political powers, teachers wished that, they double the limited number of seminars held by conforming the noneffectiveness of sustainable education in primary schools for it is only seen in the curriculum or official programmes, but it is not actually what is being practiced in the field. Nonetheless they are putting it into practice but at a very limited level. All the same it implicitly brings out certain values drawn out from certain disciplines, the object of the teaching/learning process and also serves as learning conducts for some teachers and even with the difficulties encountered, there are still some advantages that the teachers in the primary school still come across for the introduction of the new curriculum that has helped in ameliorating and rendering education effective and sustainable at the primary level, which even makes the children to become autonomous when it comes to decision making.

INDIVIDUAL LESSON NOTE ON MATHEMATICS FOR MONDAY 10^{TH} **SEPTEMBER 2018**

TOPIC: The Metric System

LESSON TITLE: Measurement of Distance Round a Classroom and a field

SPECIFIC OBJECTIVE: After presenting a measuring tape, rulers, by the end of the lesson,

pupils should be able to measure the distance round the classroom, school field

ENTRY BEHAVIOUR: pupils can say the metric table of length

DIDACTIC MATERIALS: Measuring tape, rulers.

REFERENCES: National syllabuses; first aid in mathematics by Ngasu, p. 119

Stages	Rational	Main point of contact	Teacher's activity	Pupil's activity	Duration
Revision	To say the metric table of length	Say the metric table. 10mm=1cm 10cm=1dm 10dm=1m 10m=1Dm 10Dm=1Hm 10Hm=1km	Asks pupils to say the metric table of length	They say the metric system of length	5minutes
Presentation of didactic materials	To observe and read silently	Paul was asked to go around the classroom. Using your rulers or the measuring tapes, what distance will he cover in meters.	Presents a problem for observations	They observe and read silently.	5minutes
Research	To find the possible answers	-What can we use to measure the distance? -How many lengths and widths has a classroom? -How many metres is the length and width? -What is the class distance	-Asks guiding questions -Guides pupils to find answers	-Find answers -Find answers under teacher's guidance	5 minutes
confrontation	To present and verify answers	-Rulers, measuring tape. -Two lengths, two widths -L=12m,W=8m 12m+8m+12m+8=40m	-Calls up pupils to present answers -Select correct answers	-Presents answers -Verify answers	7minutes
consolidation	To reinforce understanding	Metric system of length (distance) The basic units of measuring distance is the meter for which 1000mm=1m 100cm=1m To measure very long distances, we use the km. Joan was asked to run round the field. using your tape, find out the distance she covered.	Explains and gives similar problems Marks and corrects where necessary	Listen and solve similar problems -Take correction	6minutes
Evaluation	To measure the distance round the school field	An athlete went round the field of the dimension 100m by 60m. what distance will he cover?	-Gives a practical exercise. Marks and corrects	-Do the exercise Take to correction	12minutes

AN INDIVIDUAL LESSON PLAN ON ENGLISH LANGUAGE FOR MONDAY SEPTEMBER 3RD ,2018.

TOPIC: Listening and speaking

LESSON: The past tense

INTEGRATED LEARNING THEMES: The school

NATIONAL CORE SKILLS TO BE DEVELOPED. Listening skills, communication

skills, writing skills

EXPECTED OUTCOME: From the sentence strips, flash cards, illustrations, by the end of the lesson, learners should be able to identify, read, and use the verbs in the past tense to tell stories.

CLASS; 5

ENROLMENT: 120 DURATION:40 minutes

Stages	Content/Matter	Facilitating Activities	Learner's Activities	Teaching /Learning Materials
Introduction	Verbs are action words in a	-Puts pupils in	-Work in	Slates
	sentence	teams or groups	teams	
	Write 5 verbs on your	-Asks questions	-Answer	
	slates (cook, play, sing,	-Corrects answers	questions on	
	etc)		their slates	
			-Present	
			answers	
Presentation	The past tense of ver bs	-Write sentences in	-Observe	Sentence
	Last week, Mary came late	the form of a story.	-Read as	strips
	to school. She was	-Asks pupils to	instructed	
	punished. She cried and	read	-Answer	
	begged the teacher that she	-Asks questions	questions	
	will never come late again.	-Guides and	-Tells short	
	- which words are in bold	corrects	stories	
	letters? (came, punished,	-Asks pupils to tell	individually	
	cried, begged)	short stories using	-Listen to	
	In which tense are they?	past tense	corrections	
	Past tense	-Corrects		
	-write more words and			
	their past tenses			
	Write wrote			
	Eat ate			
	Give gave			
	Play played			
Conclusion/	Change the verbs in the	-Gives exercises	Do exercises	
evaluative	sentences in the past tense	for pupils to do in	as individuals	
	1.John (kick) the ball	their books	in their books	
	2.I (wash) the dresses	-Marks and		
	yesterday	corrects		