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CRISES-SENSITIVE EDUCATIONAL PLANNING IN THE DIGITAL AGE AND STUDENTS ACQUISITION OF EMPLOYABILITY SKILLS IN THE UNIVERSITY OF YAOUNDE I

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Option: **Educational Management**

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By

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DECLARATION

I hereby declare that this dissertation is my original work and has never been submitted to any University or institution of higher learning for an academic award.

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Date: …….

CERTIFICATION

This is to certify that this work entitled: ***Crisis-Sensitive Educational Planning in the Digital Age and Students Acquisition of Employability Skills in the University of Yaounde I***. was carried out by ANIM CHOU-CHOU NADEGE TEWOM (Registration No 19Y3488) under my humble supervision.

.....

Prof. MGBWA VANDELN

Faculty of Education

University of Yaoundé I

To

my Mother Mrs Tewom Elizabeth

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ABBREVIATIONS AND ACCRONYMS

AFGEQ:	Academic Factors and Graduate Employability Questionnaire
BMD:	Bachelor Master Doctoral
COVID-19	Corona Virus Disease of 2019
CT:	Curriculum Theory
EP:	Educational Planning
ESSP:	Education Sector Strategic Plan
FALSH:	Faculty of Arts Humanities and Social Sciences
FENASCO:	National Federation for College and University Sports
FMSB:	Faculty of Medicine and Biomedical Sciences
FS:	Faculty of Sciences
FSE:	Faculty of Sciences of Education
GEMP:	Graduate Entry Medical Program
GESP:	Growth and Employment Strategy Paper
HEI:	Higher education institutions
HTTC:	Higher Teachers Training College
IBL:	Integrated Business Learning
ICT:	Information and Communication Technology
IDP:	Internally Displaced Person's
IIEP:	international Institute for Educational Planning
IIUM:	International Islamic University Malaysia
ILO:	International Labour Organisation
IMF:	International Monetarily Fund
IOM:	International Organisation of Migration
IP:	Interactive planning
LMD:	Licence Master Doctoral
MINEPAT:	Minister of state Planning and Regional Development
MINSEUP:	Ministry of Higher Education
NEF:	National Employment Fund
NGOs:	Non- Governmental Organizations
NIS:	National Institute for Statistics
NW:	North West
SDG:	Sustainable Development Goal
SND:	National Development Strategy
SW:	South West
UIS:	UNESCO Institute of Statistics
UN:	United Nations
UNESCO:	United Nations Educational Scientific and Cultural Organization
UNO:	United Nations organisation
USAID:	United States Agency for International Development
ZPD:	Zone of Proximal Development

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ABSTRACT

This study examines the effects of crisis-sensitive educational planning on graduate's employability skills. The problem of this study emanated from the observed lack of employability skills by graduates complicated by the heat of COVID 19 pandemic. The main objective of this study was to examine the impact of crises-sensitive educational planning on graduates' acquisition of employability skills. The main research question raised: how does crises-sensitive educational planning influence graduates' acquisition employability skills? and the main hypothesis was; **Ha:** There is a relationship between crisis-sensitive educational planning and graduates' acquisition of employability skills. Five main theories were adopted for this study; the Interactive planning model by Russell (2001), the human capital theory by Becker (1974), the Curriculum theory by MacDonald (1971) the Connectivism theory by Siemens (2004) Hollland's Vocational theory by Holland (1985). This study employs the descriptive survey design. The simple accidental sampling techniques was adopted and the data was collected using the structured questionnaire. The Krejcie and Morgan table was used to get a sample size of 147 participants. The data was analysis via SPSS V,23 using the spearman's correlation coefficient and presented in frequencies and percentages. Findings revealed that on RHa1, Ha was retained, based on spearman's correlation value $r = 0.573$, the level of significance is 0.000 less than 0.05, (alpha) which is the standard error margin: $r = 0.515$, $P = 0.000 \leq 0{,}05$. RH2: Ha was retained spearman's correlation value $r = 0.474$, the level of significance 0.000 less than 0.05, (alpha) which is the standard error margin: $r = 0.474$, $P = 0.000 \leq 0{,}05$. RH3: Ha was retained, due to the spearman's correlation value $r = 0.403$, the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: $r = 0.403$, $P = 0.000 \leq 0{,}05$. Based on the findings, we therefore recommend that; the university of Yaounde I should embrace digital technology, forecast and identify the areas of curriculum that can be left out in case of a crises. And train teachers on online teaching methods. Graduates are called upon to take more skill-based specific short courses in order to improve on their skill sets and employability.

Key Word: **Crisis-sensitive, educational planning, employability skills**

RÉSUMÉ

Cette étude examine les effets d'une planification de l'éducation sensible à la crise sur les compétences des diplômés en matière d'employabilité. Le problème de cette étude émane du manque observé de compétences en matière d'employabilité chez les diplômés, compliqué par la chaleur du covid19. L'objectif principal de cette étude était d'examiner l'influence d'une planification de l'éducation sensible à la crise sur l'acquisition de compétences d'employabilité par les diplômés. La principale question de recherche était la suivante : comment la planification de l'éducation sensible aux crises influence-t-elle l'acquisition de compétences d'employabilité par les diplômés ? et l'hypothèse principale était la suivante : Ha : il existe une relation entre la planification de l'éducation sensible aux crises et l'acquisition de compétences d'employabilité par les diplômés. Quatre théories principales ont été adoptées pour cette étude : le modèle de planification interactive, la théorie du capital humain, la théorie du curriculum et la théorie du connectivisme. Cette étude utilise un modèle d'enquête descriptive. Les techniques d'échantillonnage accidentel simple ont été adoptées et les données ont été collectées à l'aide d'un questionnaire structuré. Le tableau de Krejcie et Morgan a été utilisé pour acquérir un échantillon de 147 participants. Les données ont été analysées via SPSS V,23 en utilisant le coefficient de corrélation de Spearman, et présentées sous forme de fréquences et de pourcentages. Les résultats ont révélé que pour RHa1, Ha a été retenu, sur la base de la valeur de corrélation de Spearman r = 0,573, le niveau de signification est de 0,000 inférieur à 0,05, (alpha) qui est la marge d'erreur standard : r = 0,515, P= 0,000 ≤ 0,05. RH2 : Ha a été retenu Valeur de la corrélation de Spearman r = 0,474, niveau de signification 0,000 inférieur à 0,05, (alpha) qui est la marge d'erreur standard : r = 0,474, P= 0,000 ≤ 0,05. RH3 : Ha a été retenu, en raison de la valeur de la corrélation de Spearman r = 0,403, le niveau de signification est de 0,000 qui est largement inférieur à 0,05, (alpha) qui est la marge d'erreur standard : r = 0,403, P= 0,000 ≤ 0,05. Sur la base des résultats, nous recommandons donc que ; l'université de Yaoundé I adopte la technologie numérique. Prévoir et identifier les domaines du programme d'études qui peuvent être laissés de côté en cas de crise. Former les enseignants aux méthodes d'enseignement en ligne. Les diplômés sont invités à suivre des cours de courte durée davantage axés sur les compétences afin d'améliorer leurs compétences et leur employabilité.

Monde clé : ***Sensibilité aux crises, planification de l'éducation, compétences en matière d'employabilité.***

GENERAL INTRODUCTION

In recent years, crisis-sensitive educational planning has become a priority for education authorities in many countries affected by crises. The crises facing the world today are complex and ever-evolving. Conflicts, natural hazards, climate change, as well as pandemics and epidemics can have severe consequences on the economic and social development of affected countries and threaten the future of a generation of learners. Effects on education include the destruction of school infrastructure, the use of schools as temporary shelters, a reduction in the number of teachers, diminished wellbeing among teachers and learners, an increase in gender disparities and other forms of inequity and an overall system dysfunction. Furthermore, more and more countries, particularly in protracted crises, are faced with multiple risks at once. Additionally, it is estimated that 128 million primary and secondary aged children are out of school in crisis-affected countries (UN, 2020). The detrimental effects of crisis on education systems and school-aged children cannot be underestimated and planning for education in crises context is therefore key to ensure educational continuity and strengthen the resilience of education systems, education personnel and learners.

According to UN (2020), before the COVID-19 pandemic, the world was already facing formidable challenges in fulfilling the promise of education as a basic human right. According to UNESCO Institute of Statistics, (UIS, 2018), despite the near universal enrolment at early grades in most countries, an extraordinary number of children – more than 250 million – were out of school and nearly 800 million adults were illiterate. Moreover, even for those in school, learning was far from guaranteed. Some 387 million or 56 per cent of primary school age children worldwide were estimated to lack basic reading skills (UN, 2020). From a financing point of view, the challenge was already daunting before COVID-19. The early 2020 estimate of the financing gap to reach Sustainable Development Goal 4 – quality education – in low and lower-middle-income countries was a staggering $148 billion annually (UIS, 2018). It is estimated that the COVID-19 crisis will increase this financing gap by up to one-third.

Sufia (2014) opines that employability skills involves the skills, knowledge and competencies that enhance a worker's ability to secure and retain a job, progress at work and cope with change, secure another job if he/she so wishes or has been laid off and enter more easily into the labour market at different periods of the life cycle. Individuals are most employable when they

have broad-based education and training, basic and portable high-level skills, including teamwork, problem solving, information and communications technology (ICT) and communication and language skills. This combination of skills enables them to adapt to changes in the world of work (Sufia, 2014).

Employability skills can be categorized based on three factors: Communication Skills, Technical/ Professional Skills, Core Employability Skills or Personal Attributes. Even though the Core Employability Skills are the most important they can only be measured in relative terms through psychometric analysis abilities of the interviewer. Communication Skills and Professional Skills are the ones which are measured easily during the recruitment process (Sufia, 2014).

This study is presented in five chapters; chapter one is titled the problem, chapter two the related literature review and theoretical framework, chapter three is titled the research methodology, chapter four is the presentation and interpretation of findings and chapter five is titled the research discussion of findings.

CHAPTER ONE:
THE PROBLEM

Chapter one examines the historical, contextual, conceptual and theoretical background to the problem. It presents the problem, the objectives, research questions, hypothesis, justification, the significance, scope, and defines key concepts. This forms the foundation on which the study stands.

1.1.Background to the study

1.1.1. Historical background

The history of educational planning is not new. In fact, it was more than 2,500 years ago the Spartans planned their education to fit their well-defined military, social and economic objectives (Coombs, 1970). Not only until 1923, some 87 years ago, that the former Soviet Union structured a five-year education plan, which aimed at eradicating two-thirds illiterates during the planned period. However, in those periods the educational plans were non-integrative; in the sense that educational activities were planned autonomously and that there was little or no links between education and other sectors. Since then, the pattern of integrative educational plans has been designed and developed in various nations. The comprehensive investment planning for education that incorporated nationwide capital planning for education is an effective example of the integrative plan that France developed in 1946. However, it was not until the 1960s when educational planning became very popular in most countries, especially in the developing countries (UNESCO, 2003). These convictions strengthen the notion that planning in education has been seen as an extra step in eradicating various forms of deficiencies of a country, notwithstanding rich or the poor, democrats or the socialists. It is into this context this study also relates to the educational planning process from Communist countries like China and Democratic country like the United Kingdom and Republic of Korea and would reflects on educational planning process of our nation, and in the end would suggest our position in regards to our educational planning.

The reforms in educational planning in some European nations like the Republic of Korea happened recently. It is into the March of 2001 only that the Republic of Korea allowed schools to decide how to use the money allocated by provincial authorities. Earlier, schools had little or no voice in matters related to educational financing. Schools were seen and viewed as the places where students learn and teachers teach. The responsibility for financing was borne by the provinces of

education under the belief that schools don't have adequate manpower and skills to do on its own. Those provinces also set up the school budget and administered the complete process of those budgets. They never trusted the morality of school administrators too. In this regard, those old plans could not reflect the specific requirements of each school.

The reforms in education after 2001 have seen most countries getting into the act of decentralization in every sector including education. Parents and teachers are getting more involved in the overall management of schools. The creation of School Council, a decision-making body of a school comprising of parents, teachers, and community leaders and a head teacher, is an example of those involvements. Similarly, most countries are introducing the new school-based financing system in order to increase the efficiency of school financing and guarantee the autonomy of each school in the process of planning and managing the school budget. The end result has seen provincial office of education allocate a kind of block grant except teacher salary to each school, considering the number of students, the location of school, and specific requirement of school. It has provided each school certain level of freedom in planning and managing school curriculum and budget, which could then be deliberated and monitored by School Council. All these efforts were made in order to better equip schools through decentralization and participatory planning approach.

In Cameroon, around 1962, Higher Education adopted new methods of planning that went operational following the creation of the University of Yaoundé I with a mission void of future ambitions and changes in the national and international world. The lone University institution was independent of the job market (employers) except for the few vacancies offered by the state after independence. This mismatch between higher education and the job market was exercised as the highest concentration of students was found in the Faculty of Law and Economics and the lowest in Agriculture. This is so surprising for a country in which more than 80% of the population is made up of agriculture (Fonkeng, 2006)

Educational planners faced difficulties in the projection of the fast-growing youth's population vis-à-vis the University's accommodation, employment and growth in population, technological changes among others. For instance, by 1992, (30 years after) the creation of the University of Yaoundé, the population reached 40,000 students whereas the school was ready for just 5000 students (Samfoga, 2012). In the same vein, (Fonkeng and Ntambe 2012) captured this geometric growth in enrolments and related its consequences in the following lines;

> *This dramatic growth in student's enrolment was not accompanied by any increase in infrastructure resulting to overcrowded lecture halls and other facilities. This rendered lectures difficult with high staff-student ratio. The high enrolment equally stressed the equipment for laboratory and library. These contributed to the inefficiency of the system as they affected student's motivation and performances.*

According to the above quotation, the increase in enrolments was not followed up with infrastructures. Consequently, lecture halls became over crowded, limited facilities, most students dropped out, inefficiency and many others that limited the acquisition of knowledge in the university. These portray the institution's limitation in the ability to train the secondary school graduates as a result of poor planning.

Presently, the whole world is affected by a pandemic termed the COVID-19 and Cameroon specifically is affected by many different crises in different regions; from the Northern Region to Eastern Region to Southwest and Northwest Regions. To tackle this, the nation of Cameroon openly welcomes individuals, non-governmental organisations (NGOs), humanitarian actions and help from other nations. For instance, the international organization of Migration IOM, the United Nation Organization, UNESCO, the World Bank amongst others have been active in the remediation process and proposing solutions to ensure continuous education, migration and safety. The IOM Cameroon embraces the humanitarian-development-peace nexus vision in its strategic approach for two key pillars of the mission's interventions: emergency response to crisis and peacebuilding and recovery. To this end, IOM Cameroon provides tailored lifesaving assistance and protection, complemented by efforts to build community-based approaches for the attainment of durable solutions, seeking to prevent forced displacement and favour reintegration by addressing the drivers of crises, supporting mechanisms of conflict management and reduction, and building resilience in communities.

According to the Cameroon Crisis Response Plan 2021 – 2022, IOM Cameroon applies integrated approaches that respect humanitarian principles and support transition and recovery efforts and sustainable development. The varied nature of the on-going crisis in Cameroon, from the Lake Chad Basin's Far-North region, to the North-West, South-West (NW-SW) Anglophone regions, to the East region's refugee crisis, requires the nation, IOM and other partner organisations to adapt response strategies to these specific contexts, strengthening resilience and ensuring no one is left behind. Specifically, probably there is no effective plan put in place to ensure education

within this crises period in Cameroon. This makes many students still living in the crises zones, migrated or become too poor to have access to education in Cameroon.

1.1.2. Contextual background

In Africa, particularly in the Sub-Saharan region, nationwide school closures due to COVID-19 came at a time when a very large number of schools had already been closed for several months because of severe insecurity, strikes, or climatic hazards. In the case of Cameroon, the North west and South west regions were already in socio-political unrest, in the extreme north, total insecurity from constant attacks kept many students out of schools at all levels, (UN, 2020). COVID-19 is worsening the situation of education in Sub-Saharan Africa where, prior to the pandemic, 47 per cent of the world's 258 million out-of-school children live (30 per cent due to conflict and emergency).

In an education system like that of Cameroon with its bilingual heritage, this interruption of schools since 2016 have disproportionate negative impact on the most vulnerable learners, teachers and the entire communities. In Cameroon, the individuals highly affected are those whose conditions for ensuring continuity of learning at home are limited due to unstable electricity, limited computers, android phones, high cost of internet and general insufficient finances. Their presences at homes radically complicate the economic situation of their parents, and placed them on the obligation to find solutions to provide care or compensate for the loss of school. The situation of Cameroon in the midst of socio-political unrest, also with the COVID-19 indicates a growing concern that if these learners are not properly supported, they may never return to school. This would further exacerbate pre-existing disparities, and risk reversing progress on Sustainable Development Goal (SDG) 4 as well as other SDGs as well as aggravating the already existing learning crisis and eroding the social and economic resilience of refugees and displaced persons in and out of Cameroon.

Cameroon, like most independent countries since the 1960s, saw the urgent need to invest in higher education to produce a high-level work force with the immediate aim of replacing colonial staff (Njeuma *et al*, 1999; Fonge, 1997). Against this backdrop, the Cameroon government in 1967 created its first University Centre currently known as the University of Yaoundé I. As of 1994, more government universities were created and presently there are privately owned tertiary institutions in Cameroon (Ngwana, 2001). The importance of higher education can be analysed by

what it bestows on an individual and the nation. To the nation, higher education acts as a catalyst that promotes economic growth, reduced poverty and ensures sustainable development, while for the recipients, educational analysts point to increased income earnings (Psacharopoulos, 1991).

Furthermore, in Cameroon, as in many other developing countries, higher education institutions are the key institutions with the capacity to conduct the scholarship and scientific research that guide national development policies. Tertiary education institutions also have the responsibilities of teaching, nation building, training of high-level skilled staff, especially teachers at other educational levels (Fonkeng and Ntembe, 2009; Njeuma *et al*, 1999; Bloom *et al*, 2006; World Bank, 2002). Despite the importance of higher education in socio-economic development, Cameroon is affected by problems that plague most higher education systems in Africa (UNESCO, 2003; Ngwana, 2001).

The university of Yaounde I is the oldest of all the higher education institutions in Cameroon. It is a public university in Cameroon, located in the capital Yaoundé. It was formed in 1993 following a university reform that split the country's oldest university, the University of Yaoundé, into two separate entities: the University of Yaoundé I and the University of Yaoundé II. The University of Yaounde I, consists of: The Faculty of Arts, Humanities and Social Sciences (FALSH), the Faculty of Sciences (FS), the Faculty of Medicine and Biomedical Sciences (FMSB), Faculty of Education (FSE), the higher teacher's Training College of Yaounde (HTTC), The National Advanced School of Engineering, the Higher Teacher's Training Technical School of Ebolowa, and the main university complex is Ngoa-Ekelle with several satellite campuses elsewhere. This bilingual institution is under the leadership of a rector or vice chancellor.

Its moto is *Sapientia - collativa – cognition.* Just like any other university in Cameroon, the university of Yaounde 1 upholds to the terms of the 1998 education orientation, it respects the different educational orientation including the Degree-Masters-Doctorate system, it is aimed at training citizens to become better and take over the management of the nation and beyond, it is worth achieving the SDGs specially the SDG 4 and the SND 30 for the nation. The coming of COVID-19 was a huge undesirable challenge on the management of the universities around the world. Classes were stopped and several attempts were made to keep learning continual and effective. Apparently, there was never a crises-planning strategy previously put in place. This implies that the teaching –learning process suffered a great deal. For the past four years, learners

have probably not had a good or convenient learning environment because of the inadequate planning strategies that mitigates the crises out-break in the nation. However, some lecturers used WhatsApp fora, email and in send notes to students while other staff were recycled via online on how to teach online. Within these time, many students abandoned school, some failed and the training process was disrupted, keeping the skills acquisition in fiasco, thus graduates are probably the most regrettable youths in the centre region.

1.1.3. Conceptual background

According to Coombs (1970) educational planning is "concerned not only with where to go but with how to get there and by what best routes". In doing so, educational planning should be able to help see more clearly the specific objectives in question, the various options that are available for pursuing these objectives, and the likely implications of each. Further adding to this statement, the Working Party Report of the UNESCO (1963) mentions that education planning should not be an isolated activity; in fact, it must be undertaken in the framework of comprehensive development planning and must be viewed in the target context of all the steps required for effective educational development (UNESCO, 1963 as cited in Prakash, 2008 p.2). This statement from UNESCO also underpins the importance of educational planning in the overall development of a nation.

Crises-sensitive educational planning

Crises-sensitive educational planning also entails analysing capacities and existing resources for risk reduction and the emergency response in the education sector, including the capacities of teachers, school leaders and other education personnel, as well as education stakeholders at the central and sub-national levels. Education, when planned in a crisis-sensitive and risk-informed manner, can contribute to preventing and mitigating disaster. When equal access to all levels of education is assured, schools can provide safe learning environments, encourage social cohesion, enhance the safety and well-being of teachers and learners, and help build a peaceful society. Educational planning which is sensitive to the causes and triggers of pandemics, and which addresses potential natural hazards, can reduce – and sometimes prevent – the effects of disasters on education, saving lives in the process. In addition, conflict-sensitive and risk-informed planning can be cost-efficient, protecting investments in infrastructure, equipment, and supplies. (IIEP-UNESCO, 2015). Crisis-sensitive planning is mindful of the bidirectional relationship

between education, on the one hand, and conflict and disaster risks, on the other. It also considers how conflict and disaster can themselves be interrelated.

Curriculum modification

A curriculum is the totality of student experiences that occur in the educational process (Wiles and Jon, 2008). The term often refers specifically to a planned sequence of instruction, or to a view of the student's experiences in terms of the educator's or school's instructional goals. A curriculum may incorporate the planned interaction of student with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives Adams, et al. (2003). During crises period, there is a need for the curriculum to be tempered with. This process is examined in three level; curriculum trimming, curriculum reorganization and curriculum recovery plan

Curriculum trimming involves creating space for enhancing learning, with a view to catering more effectively for students' needs and abilities during crises. Curriculum trimming implies removing less important and out-dated content, identifying core and extended parts of the curriculum, flexible modes of organizing study content, and using the open curriculum framework of learning targets. In the cases of curriculum trimming, schools do not discard content trimmed in the current year but transfer it for integration into the following year's program. Curriculum reorganisation involves reorganisation and refocusing of the curriculum to make the content more manageable. For this intervention, this will be done through the re-packaging and integrating subjects or topics, embedding particular knowledge and skills foci and balancing depth and breadth as key strategies to reduce overload. This implies that curriculum reorganisation in this context will be about merging fragmented and compartmentalised discipline-based content from related sub-topics into integrated topics of learning. This approach will facilitate hybridisation of content and knowledge in both knowledge construction and pedagogy, enabling learners to make connections among related themes and conceptual knowledge across disciplines (DBE, 2020)

The process of identification of curriculum recovery plan is designed to obviate the loss of time due to the national response to the crises like COVID-19 pandemic. In particular, it analyses two strategies, the first to overcome time lost and the second, to reorganize the curriculum, (Mahabeer, and Amin, 2021). The Cameroon education system did not plan for the crises, that is

why there is no recovery plan to cover up the time lost when education was stopped due to covide-19. This implies that the graduates will have a considerable gap on that skill and knowledge.

Teaching method

Pedagogy implies the teaching methods used in class for lesson transmission. The outbreak of COVID-19 crises experienced the dramatic changes that came with unprecedented transition to distance delivery and remote instruction. Many university institutions shifted to online instruction as a means to reduce the spread and continues education. Although there are major barriers to online teaching (Keengwe and Kidd, 2010). During the online teaching, classes were regularly scheduled times to mimic the in-class experience. The delivery was mostly a mix of slides and discussions, sometimes using the chat feature and breakout rooms. Synchronous lectures were recorded on Panopto and uploaded to Moodle for students who were unable to attend live meetings. That way, students were not mandatory to be present during synchronous sessions, especially for those who had additional jobs or who could not attend due to time constraints and other reasons.

Significant component of the online pedagogy was the use of a discussion forum. Based on each week's course readings, the lecturers posted one focused question and students were given a two-to-three-day window to submit their responses. The same questions, including student responses, were revisited during synchronous lectures. Maintaining an overarching theme/question enabled students to address the learning outcomes for the course. This method also was used to replace in-class discussions by giving students the opportunity to participate virtually, (Christopher, Thomas, and Tallent-Runnels, 2003).

During the online teaching, students were given the option to upload their papers through Turnitin, whatsapp or email. Most lecturers preferred receiving papers as word documents via email so that they could use the "track changes" function to edit and grade. This was an easier option because lecturers find some Turnitin editing and commenting features to be unwieldy. The final exam a combination of three- to five-sentence conceptual definitions and five 150-word short essay questions was altered to a take-home exam format. Students were provided a template with the final-exam questions two weeks in advance. Papers were to be returned on an assigned due date during the scheduled final-exam period. At the end of the lecturers, some lecturers employed a Feedback tool on Moodle to compile their evaluations that asked students basic questions on course content in addition to the main tools they preferred in remote learning. Most students were pleased

to have the option of both synchronous meetings and recorded lectures. But this was probably not the case with Cameroon higher education. the abrupt nature of the crises met many teachers without the knowledge of online lectures. A few of them could send via what's app fora and students will read and that was it.

Redesigning examinations

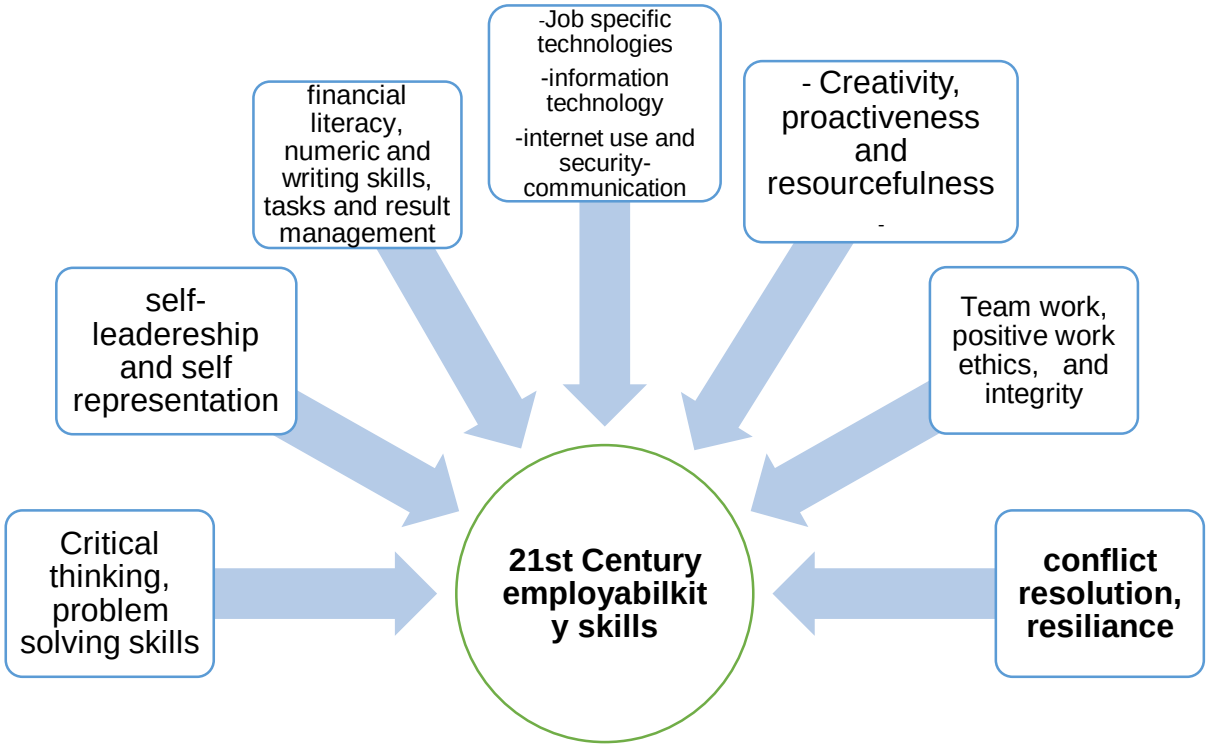
Examination redesign is a solution to several challenges associated with the shift to remote online assessment as a result of COVID-19 crises. It encompasses many different types of adaptations that can be combined to create appropriate examination models for the specific context of institutions, faculties, students or courses, (Alruwais, N., Wills and M. Wald, 2018). According to Diaz-Varela (2016), the health crisis may also accelerate the development and adoption of digital and online technologies that open up promising prospects for student assessment. They allow assessing progression on a variety of skills and offer numerous opportunities to foster and demonstrate learning in new ways as compared to traditional paper-and-pencil tests (Wills and Wald, 2018). This potential remains largely untapped in higher education. While numerous initiatives have been launched in Cameroon universities over the last decade to integrate digital technologies in teaching and learning activities, examinations probably still mostly rely on traditional methods (Guàrdia, Crisp and Alsina, 2016).

Many existing online program use exam centres for their online examinations. This is not a possible solution in a context of shutdown with strict social distancing measures. The recent shift to online course delivery in higher education requires additional solutions to be developed to measure and certify students' acquisition of knowledge and skills from a distance. Several practical solutions can be considered to adapt on-site examinations to remote online settings, (Audet, 2011). Beyond these adaptations, this crisis allows for deeper reflection on how examinations could be conducted in the future. Looking at the reality of university education in Cameroon, no specific method was employed to test learner's competence accusation during the crises.

Acquisition of skill is a type of learning in which repetition results in enduring changes in an individual's capability to perform a specific task. With enough repetition, performance of the task eventually may become automatic, with little need for conscious oversight. Any behavior that needs to be learned and that is improved by practice can be considered to be a skill. A description of how skills or knowledge is acquired in school must, at a minimum, focus on the curriculum to

be taught, the method by which information is communicated, and the teacher's role in fostering the acquisition of knowledge and skills so that classroom instruction is interesting, comprehensible, and pleasant. Apart from job creation and the auto-employability abilities which graduate need, 21st-century employers hire both university students and graduates who know how to use their talents, strengths, and interest. The skill needed at the workplace that can close-up the big gap or mismatch between what students are learning in schools and the skills they need to be successful in life and explore in their chosen careers could be classified briefly in figure 1.

Figure 1: *A blueprint of 21st Century career readiness skills*

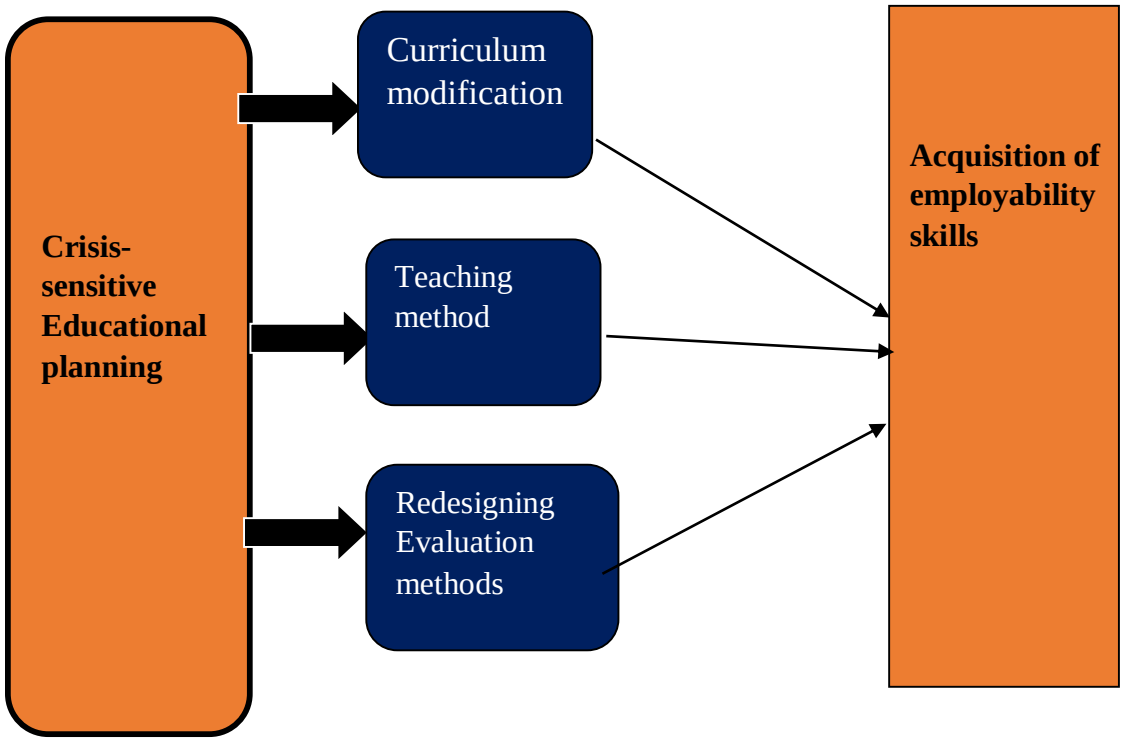


Source: *Adapted from A Landscape Review; 21st Century Skills: What Potential Role for the Global Partnership for Education, (2020)*

According to figure 1, a career ready graduate possesses all or most of these soft skills, accompanied by other competences that make them valuable in the society. In the 21st century, the individual graduate is increasingly expected to possess and demonstrate the above requisite skills to complement their interest to serve in respective services, uphold valuable self-esteem and self-confidence to take any job in their area of specialisation and further maintaining the job. The importance of the learners to acquire the above skills before accessing the job market can be

explained by the fact that the growing attention on graduate's employability is not just focused on the job-specific skills or competencies necessary for the first job but on the construction of a broader knowledge base and a set of more generic competencies useful for long term graduate employability, (UNESCO 2018. p. 92). The theoretical relationship between crises-sensitive planning and graduate's employability skills acquisition is presented on figure 2.

Figure 2: *The theoretical relationship between crises-sensitive planning and graduate's employability skills*



Source: *Researcher (2021)*

Figure 2 presents a demonstration of the theoretical relationship between educational planning in the crises-sensitive period and graduates competence acquisition in the University of Yaoundé 1. Its helps to show the connection between the concepts of the study. However, this theoretical relationship is yet to be examined.

1.1.4. Theoretical background

In light of the far-reaching consequences of the COVID-19 pandemic on education systems around the world, with 89% of the world's student population affected by COVID-19 school closures as of 1 April 2020, governments and partner organizations have ramped up efforts to facilitate the continuity of learning (UNESCO, 2020). It is important to acknowledge that the current crisis has not completely ended. It still exists but man has discovered vaccination and other local methods of handling the affected persons. The pandemic has kept long-lasting consequences in terms of loss of human life, displacement, and trauma, modification of education systems in terms of pedagogy, access, quality and management, which are likely to persist. Furthermore, risks of disasters, conflict and violence, are becoming more frequent, pointing towards the increased need to strengthen risk reduction capacities in the education sectors, including through prevention, preparedness and mitigation activities.

While recognizing the urgency of immediate action to minimize educational disruption, UNESCO advocated for rapid response efforts to be underpinned by a mid- and longer-term, multi-risk and sustainability-oriented approach. Initiatives that were put in place as part of an immediate response to the COVID-19 pandemic should ideally build and strengthen local strategies to sustain responsiveness and engagement at all levels of the education system. Designing crisis-sensitive educational policies and programs that aim to reduce risks, strengthen preparedness and response capacities at individual, school, community, national and sub-national and government level, including through contingency planning based on different scenarios for length of school closures, and expecting timing of school reopening (USAID. 2019).

In this light, higher institutions of learning like the University of Yaounde 1, engaged and totally embrace digitalization. The university urgently trained lecturers on the techniques of online teaching, they created a centre for multimedia in the campus with high debit internet connection and further created and exploited several online platforms like zoom, google classroom, WhatsApp and even email to lecture and give lessons to learners from the comforts of their homes. However, this was not in all a success. The upsurge of the pandemic took everyone by surprise, many lecturers never had the skills of online teaching, the school did have expertise in managing the media system, the students did not have powerful computers, talk less of high cost of internet connection. Lecturers training were limited and also online, very few could immediately apply.

1.2.The problem

Before the unprecedented COVID19 crisis (pandemic) many African educational systems and Cameroon in particular had demonstrated a lukewarm attitude on the digital movement. Most universities had not started online teaching and the teachers were not yet trained on online lectures, there were limited digital libraries and irregular internet services on school campus, the teaching learning process was still purely traditional and the crisis sprouted out. During this crisis, many university institutions adopted diverse measures to accommodate the learners and ensure the teaching /learning process was maintained. Many universities locked-down for different periods depending on their ability to contain and manage the unprecedented situation. Universities were expected to modify their curriculum to avoid knowledge mismatch, improve teaching methods to contain online teaching and redesign evaluation styles to ensure competences. All these occurred in the period when the fast-growing societies were calling on universities to train skilled-based graduates. The society needed graduates with requisite skills to easily create jobs or be self-employed.

Unfortunately, research show that, most graduates who schooled during the COVID19 pandemic are unemployed because they lack requisite skills either to become self-employed or to gain employment in existing structures. This is blamed on lack of curriculum modification or adaptation by universities. During the health crisis, the university did not modify its curriculum, they kept using the old traditional curriculum that gave little or no room for online learning. This curriculum was too cumbersome and theoretical; thus, impeding the learning process. The teaching methods also plunged the lecturers and students into confusion. Many lecturers did not master the online teaching methods, some did know the different platforms available and also lack the ICT skills and tools needed. The students also did not have the tools and there was general poor internet connection and constant power cuts. Assessment on its part was never redesigned. Little or no assessment was done to know which student is competent or not. Thus, everyone who answered present was pushed forward irrespective of performance. Today, some of these graduates are found wanting in the job markets. This has severe repercussions on the individuals, their families and the whole society. Indeed, the country's real economic growth fell sharply in 2020, from 4.03 to -1.2% (IMF, Staff Report May 2020) and according to ILO (2022), unemployment Rate in Cameroon increased to 3.90% in 2021 from 3.80% in 2020. This rate is relatively too high for a developing country.

As a result of the undulating situation, the graduates mostly gamble around in anguish, some engage into motor cycling, others turn to illegally migrate to unknown destinations in search of greener pasture. The crisis sensitive educational planning expected of most universities today is not matching the present situation as university planning are still being established at the ministries and imposed at the micro level for implementation. It is expected that the micro level planning uses the reality they are living to plan for a better education system. As far curriculum modification is concerned, teaching method and redesigning evaluation methods are involved, we ask if crisis sensitive educational planning has any influence on student's employability skills?

1.3.Research objectives

1.3.1. General research objective

To examine the influence of crises-sensitive educational planning on graduates' acquisition of employability skills.

1.3.2. Specific research objectives

To examine the influence of curriculum modification on graduates' acquisition of employability skills

To examine the influence of teaching method modification on graduates' acquisition of employability skills.

To examine the influence of redesigned evaluation methods on graduates' acquisition of employability skills.

1.4.Research questions

1.4.1. General research question

In what ways does crises-sensitive educational planning influence graduates' acquisition employability skills?

1.4.2. Specific research questions

How does curriculum modification influence graduates' acquisition of employability skills?

How does teaching method modification influence graduates' acquisition of employability skills?

How does redesigned evaluation method influence graduates' acquisition of employability skills?

1.5.Research hypothesis

1.5.1. General research hypothesis

Ha: There is a relationship between crises-sensitive educational planning and graduates' acquisition of employability skills.

1.5.2. Specific research hypothesis

Ha: There is a relationship between curriculum modification and graduates' acquisition of employability skills.

Ha: There is a relationship between teaching method modification and graduates' acquisition of employability skills.

Ha: There is a relationship between redesigned evaluation method and graduates' acquisition of employability skills.

1.6.Justification

Today, the job market is more competitive in an altogether different sense. Along with subject matter expertise, employers are now looking for employability skills as essential traits in their potential employees. Employability skills in this century are mostly transferable skills needed by an individual to make them employable. Employability relates to your knowledge, skills, and attitudes, how you use those assets, and how you present them to employers in today's context. These sets of job-readiness skills are, in essence, behaviours that are necessary for every job and are essential attitudes that enable you to grow in your career and also efficiently help you: connect with co-workers, solve problems, be a part of and understand your role within the team, make responsible choices for your job and your career, be independent and take charge of your career. The importance attached to these skills necessitates a succinct study of the calibre especially in a university where the youthful population are looking up to and trusting for transformation. Therefore, this study is verily indispensable as it looks at pressing issues concerning graduates.

Moreover, in a crises-sensitive period like the period that characterised the world since the outbreak of COVID-19, there is a need for the training institutions to re plan with consideration of the changes imposed on the learners and teachers by the crisis. This study is relevant as it brings

out the various planning strategies that all university institutions are expected to uphold during crises in order to make sure teaching and learning keeps going with the graduates acquiring the right skills. Importance are attached to these employability skills mostly because employers value these unique attributes in their potential employees as they are necessary for a productive and smoothly functioning workforce. Some enterprises use to spend a substantial amount of time and money developing these foundational and work-readiness skills in their employees. But in today's world, where jobs are limited, employers enjoy more options and would like to hire a technical expert who already displays well-rounded employability skills. Therefore, it is very necessary that the university of Yaoundé I trains learners and equip them with these skills.

This study is also contextually very imperative because it looks at the past context, the crises-sensitive context and a context with full of automatic changes. It looks at how the university institutions plan for these new changes in order to ensure maximum usefulness to the graduates. The new developments in curriculum, teaching method, and evaluation method calls for the attention of all educational planners to change the systems in order to help learners still acquire knowledge and competences irrespective of the barriers imposed on the community by the crises.

Furthermore, with the teaching method is compelled to go online (virtual learning), this study is poised in looking at how the university planned for the online swap and how it maintained the training process and procedure enabling the graduates to acquire the same employability skills as expected.

The unusual outbreak of covide-19 necessitated that immediate response should strengthen and build on strategies oriented to sustain responsiveness and engagement at all levels of the education system. While many African countries require international support, the governments, through their Ministries of Education remain responsible for education provision. Crisis-sensitive planning can help these ministries to institutionalize risk reduction and better plan and deliver education before, during and after the crisis; ensuring a more resilient education system. This study is important as it puts the options of the crises-sensitive planning to make sure that learning does not stop, as after the crises, many more jobs will need specific skills. Therefore, the university is compelled to keep training the leaners irrespective of crises.

Graduates who are not career-ready or have insufficient employability skills to penetrate the fast-evolving job market are more in the developing countries of Africa, Asia and Latin

America. Meanwhile, these countries have a fast-growing youthful population and require a high demand for human capital to foster development. In the case of Cameroon, graduates who do not have the skills required for job creation or job placement are fast turning the country into a hopeless home. The contribution of unemployed graduates in the evolution of the present socio-political unrest in Cameroon cannot be undermined. This unrest has caused our country and individuals immeasurable pains beginning from loss of human lives, economic resources, properties, general peace and integrity; rendering this study indispensable. Before this, young Cameroonian graduates loitered around the city doing menial jobs or nothing. Frustration and disappointment lured some into smoking, drunkenness, drug abuse, scamming, homosexuality, theft, poverty, misery, depression and pain. Indeed, in Cameroon, the undulating unemployment rate which stood at 5.6% in 2010, 3.80% in 2011, 3.80% in 2012, 4% in 2013, 4.3% in 2014 (National Institute for Statistics -NIS), too high for a developing nation endowed with natural resources. This study comes in at a time when Cameroon is going through challenges masterminded by high unemployment among youths, poverty rate and other socio-economic challenges.

Moreover, the Director of NIS in his report of June 2nd 2016 affirmed that Cameroon's population stands at 23.34 million with an unemployment rate of 9.3% and youths between 20 to 29 years are most affected, followed by women and graduates whirling in 36.5%. According to Cameroon Tribune of June 3rd 2016, the Minister of State Planning and Regional Development (MINEPAT) expressed with regrets that; *"*...the University degree is no longer a passport for getting employment...*",* also, universities are more incline towards the transmission of knowledge and not towards preparation for entry into working life (Bomda et al 2022). very problematic and disappointing status quo for graduates and students in the system. This study questions these program, examines the teaching methods, in order to give it a convenient way out. It is also frustrating to the government in their effort towards the achievement of SDG goal 4 (quality education) and SDG goal 8 (decent work and economic growth) of the sustainable development goals. This situation is a potential stumbling block to the achievement of 2035 emergence in Cameroon if care is not taken. A study of this calibre is purposeful as it focuses on the core of the unemployment crises especially with the influence of a crisis. It examines the issue at hand from the school system to the job market to identify what is working and what is not working for Cameroon realities.

1.7.Scope of the study

According to Ogula (2009), the scope of a research work specifies the boundaries of the study according to time spread, content, and discipline. The study is centralised on university of Yaounde I, a government-owned university institutions in Cameroon.

1.7.1. The Time Factor

This research project ran from the academic year 2019/2020 to 2022/2023. These four academic years were characterised by intensive seminars (classwork), and active fieldwork. This effective period helped the researcher to have an in-depth mastery of the different forms of challenges that impede the conception and implementation of crises-sensitive planning in today's universities.

1.7.2. Theoretical Scope

In the schema of this research work, a host of theories were employed to enable the researcher to explain and expatiate on the main concepts of crises-sensitive planning and employability skills. Among these theories, the human capital theory by (Becker) 1974, Holland's vocational Theory by John Holland (1985), Connectivism theory by George Siemens (2004) and the Curriculum theory (CT) by J.B. MacDonald (1971). These theories facilitate the understanding of events, behaviours/actions/situations that exist between the variables of the study.

1.7.3. Thematic Scope

This piece of work falls within the ambits of Educational management. Specifically, in educational planning. The concept of planning is studied in the department of educational management. The crises sensitive planning is fast taking the centre stage in today's educational system and the concepts of graduate's employability is becoming more peculiar and compelling.

1.8.Significance

The findings of this study will be significant to various stakeholders in the higher educational milieu, the Cameroon government, and scientific research in Cameroon.

To the University Authorities

The findings of the study will invariably help the university authorities to identify and implement the respective procedures that every institution needs to plan its system in the present crises-sensitive situation. In this study, we portray the specific elements that enhance planning in

such difficult and compelling times from the perspective of graduates' employability which is a burning issue with most institutions today.

To University Lecturers

Lecturers will also benefit from this study as it will unveil several several factors that impede the teaching and learning process in University institutions during crises period. Starting from curriculum to course outline, classroom management and evaluation in the context of career preparedness, teachers will find better ways forward. Moreover, as the school administrators adopt and implement some of the strategies to solve these problems, teachers will greatly benefit. Lecturers will benefit from this study as it further places importance on the need for in-service training, motivation, and collaboration among staff to acquire the needful skills now (online teaching strategies).

To the Cameroon Government and MINSEUP

The Cameroon government will benefit immensely from this study. It will analyse crises-sensitive planning strategies in the realities of Cameroon and from its literature and results, most of the institutions will begin creating applying this planning strategies during this challenging era in education. This work will also expose the missing link between studies in school and the exigencies of the job market, which have hitherto kept graduates wanting, and provide a better collaborative framework that places both parties on the same platform to serve each other.

The study will help to propose the various strategies of crises-sensitive planning techniques and further state the various career readiness competencies that graduates are expected to have. It will also help to address the huddles involve in crises-sensitive practices in Cameroonian universities and suggest practical solutions to the policymakers and educational planners.

To the University Graduates

The graduates are the final product on which the quality of an institution is justified, they will greatly benefit from this study. They will be charged to partake in the vision of the institution, planning of their courses, and gain more orientation before admission, during the year and at the end of the study. The students will also benefit from quality teaching and skill-based courses that will be taught. When the necessary recommendations shall be enacted, the students will become full participants in their institutions and before they graduate, they will be embedded with skills, they would have had professional contacts with employers in their domain of interest. Most

students will from this study gain inspiration for further research and become quality assurance personnel in Cameroon.

1.9.Definition of key concepts

Crises-sensitive education planning

Crisis-sensitive planning in education involves identifying and analysing existing risks of conflict and natural hazards and understanding the two-way interaction between these risks and education to develop strategies that respond appropriately, (UNESCO, 2018).

Curriculum modification

This is a modified content, instructions, and learning outcome for diveres students for different purposes. Or better still, it is the adapting or interpreting of school formal curriculum by teachers into learning objectives and units of learning activities judged most reasonable for an individual learners or a group of learners at a particular time. (Jabelo, 2009).

Teaching method

Teaching methods are techniques and strategies teachers use to help students succeed. Or better still, the teaching method is the strategy used to convey information for students to learn, it involves careful educational evaluation and assessments in ensuring the right knowledge is passed on to the students.

Evaluation

Evaluation is a systematic process to determine merit, worth, value or significance (Srinivasan, 2006).

Employability skills

Employability skills are the essential skills, personal qualities and values that enable you to thrive in any workplace, (Ismi, 2022).

CHAPTER TWO:
REVIEW OF LITTRATURE

The second chapter of this study is titled related literature review and theoretical framework. It reviews the Cameroon education landscape, it reviews conceptual framework, examines the theoretical framework and unveil the empirical literature. This helps to provide more insight about the concepts and further enable the researcher to avoid repetition.

2.1. Conceptual framework

2.1.1. Educational planning

Educational planning as "the process of preparing a set of decision for actions in the future in an organization, business or individual activity or the establishment of objectives and determination of best ways to accomplish them (Mbua 2002). In a related sphere, Coombs (1970) opines that educational planning (EP) as the application of rational and systematic analysis to the process of educational development with the aim of making education more effective and efficient in responding to the needs of the individual and the society. This definition although historical, lays the underpinning and ideal ideas that every educational system should consider before and during the planning process. Planning should be given the possibility for rational and systematic development of education with prior aim of achieving or responding to learners, employer's and the general society's needs. In our context, focus is on how educational planning can respond to the needs of the individual.

According to Farrel (2013), there are three ways in which the government can help improve the education-to-employment system of the country. Such ways like; to collect and disseminate data about graduate's outcomes such as success in finding jobs, their starting salaries and so on, second by initiation of sector-wide collaboration amongst the elements that make up the society and thirdly by creating an education-to-employment system integrator. This makes up the practical steps needed to apply in the planning process in order to respond to the needs of the individual which is the development of knowledge, skills and employment.

2.1.2. Crisis-sensitive educational planning

Crisis-sensitive planning in the education sector involves analyzing existing and potential crisis risks, including those related to other key sectors such as health, and understanding the two-way interaction between these risks and education to develop strategies that respond appropriately

(UNESCO, 2020). For example, in the context of COVID-19, children were unfamiliar with appropriate hygiene techniques or resistance to abiding by social distancing rules may exacerbate the spread of the virus. However, community-based life-saving messaging, the use of education as a vehicle to spread public health information, and investing in education as a way to foster innovation and skills that will be needed to address forthcoming crisis may prove useful to mitigate these risks. Crisis-sensitive planning therefore contributes to minimizing the negative impacts of risks on education service delivery and maximizing the positive impacts of education policies and programming on preventing future crises, including global health crises and pandemics.

According to UNESCO (2020), crisis-sensitive planning also entails analyzing capacities and existing resources for risk reduction and the emergency response in the education sector. In the context of COVID-19, this can include a review of existing distance and open learning programs and available resources to expand the delivery and accessibility of such programs. It is also important to understand the capacities of teachers, school leaders and other education personnel as they support students in navigating the world of distance and remote learning, often without sufficient training, support and resources. To reduce risks of conflict and violence, crisis-sensitive planning also requires identifying and overcoming patterns of inequity and exclusion in education, as well as harmful cultural and social practices. This is particularly important in the current pandemic context, as confinement and school closures may have longer-term consequences on the most vulnerable and marginalized populations, exacerbating already-existing disparities within the education system.

Crisis-sensitive planning in the context of COVID-19 should pay particular attention to equity, for example by tackling the digital divide and ensuring inclusive and gender-responsive learning solutions are put in place. Reflecting on specific impacts of school closures on girls, internally displaced persons (IDPs), refugees, learners in crisis affected contexts and other vulnerable groups and providing adapted solutions is also key. Without reaching the furthest first, gains made on the inclusion of marginalized and vulnerable groups into national education systems face regression. Moreover, crisis-sensitive educational planning aims to bring together all education actors, from both humanitarian and development perspectives, as they work to address the particular and complex set of challenges posed by the current pandemic. This includes ensuring complementarities and avoiding duplication to deliver an effective and sustainable education

response at multiple levels, including regional, district, community, and school levels (UNESCO, 2020).

Designing crisis-sensitive educational policies and programs that aim to reduce risks, strengthen preparedness and response capacities at individual, school, community, national and sub-national ministries and government level, including through contingency planning based on different scenarios for length of school closures, and expecting timing of school reopening. Contingency plans for the education sector at all levels (from central to school level) can help ensure education continuity and the safety and security of learners, teachers and education infrastructure. Such plans can be developed during an ongoing crisis, but should, ideally, be developed before crises occur. Contingency plans will be a key element to prepare for school reopening in the current COVID-19 crisis. Once schools reopen, and lessons resume, detailed guidance should be in place to outline how the education sector will respond at all levels to a specific emerging or anticipated crisis, prior to its occurrence.

This may include, for example, comprehensive standard operating procedures, protocols, and lines of decision-making and communication flow-charts, within the university as well as between the Ministries and partners. Contingency planning processes should also include resources to better understand the implications of public health emergencies/disease outbreaks on different population groups, so that preparedness and response plans can mitigate harm to women, girls, and other vulnerable groups. Ensuring dedicated risk management units within the universities are equipped to effectively steer, plan and coordinate the risk reduction efforts including emergency response initiatives in the education sector, in collaboration with Education Clusters working groups. Developing and integrating crisis-sensitive data collection tools and analysis into existing education information systems to ensure readily available and reliable data on the effects of crisis and the resulting needs of schools, teachers and learners, with the ultimate goal of strengthening prevention and mitigation capacities of the education system. Developing cost and financing frameworks for crisis-sensitive education sector plans, allowing for more predictable and equitable funding in crisis situations. These frameworks should include sustainable funding for education workforce salaries. Ensuring education is addressed in national disaster management plans.

2.1.3. Pandemics and endemics: The COVID-19

In December 2019, the coronavirus outbreak was declared in the Wuhan Province of the People's Republic of China. Over time, it gradually spread to Asia, Europe and Africa, resulting in the death or quarantine of several people. A few days later, the World Health Organization announced that the coronavirus has gone from an epidemic to a pandemic, with over 170,000 cases in 146 countries, and about 6,500 deaths, (United Nations Organization, 2020)

The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents. Closures of schools and other learning spaces have impacted 94 per cent of the world's student population, up to 99 per cent in low and lower-middle income countries (United Nations Organization, (2020). The crisis is exacerbating pre-existing education disparities by reducing the opportunities for many of the most vulnerable children, youth, and adults – those living in poor or rural areas, girls, refugees, persons with disabilities and forcibly displaced persons – to continue their learning. Learning losses also threaten to extend beyond this generation and erase decades of progress, not least in support of girls and young women's educational access and retention. According to UN (2020) some 23.8 million additional children and youth (from pre-primary to tertiary) may drop out or not have access to school next year due to the pandemic's economic impact alone. Similarly, the education disruption has had, and will continue to have, substantial effects beyond education. Closures of educational institutions hamper the provision of essential services to children and communities, including access to nutritious food, affect the ability of many parents to work, and increase risks of violence against women and girls.

As fiscal pressures increase, and development assistance comes under strain, the financing of education could also face major challenges, exacerbating massive pre-COVID-19 education funding gaps. For low-income countries and lower-middle-income countries, for instance, that gap had reached a staggering $148 billion annually and it could now increase by up to one-third (UN 2020). On the other hand, this crisis has stimulated innovation within the education sector. We have seen innovative approaches in support of education and training continuity: from radio and television to take-home packages. Distance learning solutions were developed thanks to quick responses by governments and partners all over the world supporting education continuity, including the Global Education Coalition convened by UNESCO. Educational stakeholders have

also been reminded of the essential role of teachers and that governments and other key partners have an ongoing duty of care to education personnel. But these changes have also highlighted that the promising future of learning, and the accelerated changes in modes of delivering quality education, cannot be separated from the imperative of leaving no one behind. This is true for children and youth affected by a lack of resources or enabling environment to access learning. It is true for the teaching profession and their need for better training in new methods of education delivery, as well as support. Last but not least, this is true for the education community.

2.1.4. Curriculum modification

The process of curriculum tinkering takes three possibilities: curriculum trimming, curriculum reorganization and curriculum recovery plan. Curriculum trimming involves creating space for enhancing learning, with a view to catering more effectively for learners needs and abilities. In the context of this study, curriculum trimming is regarded as removing less important and outdated content; identifying core and extended parts of the curriculum; flexible modes of organizing study content; and using the open curriculum framework of learning targets. This is in line with the current debates in the subject of the curriculum. Literature argues that decades of overload have shaped curriculum, textbooks, tests, and teacher expectations into an industry of superficiality. For instance, many teachers know, or at least suspect, how little their learners understand and are learning, but do not know how to transform the system. Therefore, curriculum trimming is about unburdening the curriculum, deciding what topics to keep and what to give up, to ensure that the load is manageable within the time available. (DBE 2020a, p. 15)

The juxtaposition of the two excerpts is vital for interpreting the logic of the recovery plan. It is clear that excising aspects of the curriculum is at the discretion of schools. The DBE in south Africa recommends that schools do not discard content trimmed in the current year but transfer it for integration into the following year's program. This means that, in reality, 2021 will present a more challenging situation than 2020. To clarify, the 2020 year constituted a 25% reduction of content due to a 25% loss of class time—while the 2021 year will, correspondingly, constitute an expanded curriculum of 125% without a concurrent increase in class time. In practice, this means that schools will promote students to higher grades although they will have less content knowledge and fewer skills, and will expect them to master more content and greater skills than is usually

intended for a year's study. Invariably, the 2020 crisis will extend to 2021 and beyond should the coronavirus lead to more disruption of education.

The perpetuation of poor education outcomes in most African countries is a major impediment to individual, social, and economic advancement. Consequently, the nation's interest in improving learner performance has centered on curriculum management and coverage (Schollar 2018). These include tensions between quantity and quality of curriculum coverage (structuring and pacing); the insufficient teacher pedagogy and content knowledge (Fleisch 2008); and the short time on-task, or curriculum coverage, and the scarcity of textbooks (Hoadley et al. 2009). Low work expectations among learners and teachers, and teachers' poor conceptual knowledge of the subjects they are teaching, add other complications to the already disturbing picture of poor performance and learning outcomes (Taylor 2019). The piecemeal and sluggish pace of curriculum coverage in classrooms causes many learners to lag behind each year (Taylor et al. 2003). Clearly, this complex relationship of teachers' insufficient content knowledge, inadequate curriculum coverage, and unfavorable learner performance persists.

The analysis of the two excerpts also reveals that the DBE is aware of the deficiencies of the present curriculum, which include irrelevant and outdated content. We argue that it makes more sense to remove outdated content completely than to teach it during the following year. Of equal concern is the awareness that lecturers "do not know how to transform the system" (DBE 2020a, p. 15). If that is the case, then what will inform the decisions that universities and lecturers make when trimming the curriculum? More importantly, how will universities address existing inequalities when the decision to trim the curriculum is left to lecturers who may not have adequate knowledge to do so? Evidence suggests that lecturers knowledge (of pedagogy, content, and pedagogical content) is inequitably distributed in most sub Saharan African countries (Taylor 2019). The nation's large cohort of unqualified or underqualified teachers adversely influences the quality of curriculum coverage and the delivery of content, and poses a serious problem for managing curriculum revision (Maphalala et al. 2018). Knowledgeable teachers are more likely to make prudent decisions when trimming the curriculum than less knowledgeable ones are; similarly, less prudent curriculum decisions are more likely to affect students from impoverished backgrounds over the long term (Carr-Hill et al. 2018). In times of crisis,

knowledgeable lectures might be best positioned to engage in making critical curriculum decisions since bureaucrats may lack those skills.

Curriculum reorganization

Curriculum reorganization involves reorganization and refocusing of the curriculum to make the content more manageable. For this intervention, this will be done through the re-packaging and integrating subjects or topics, embedding particular knowledge and skills foci and balancing depth and breadth as key strategies to reduce overload. This implies that curriculum reorganization in this context will be about merging fragmented and compartmentalized discipline-based content from related sub-topics into integrated topics of learning. This approach will facilitate hybridization of content and knowledge in both knowledge construction and pedagogy, enabling learners to make connections among related themes and conceptual knowledge across disciplines (DBE 2020a, pp. 15–16). The aim of curriculum reorganization is to manage content by repackaging and integrating subjects to reduce content overload. In this instance, "reducing content overload" is a theoretical idea. When curriculum developers combine content, then breadth and depth become intertwined, which, paradoxically, ends up generating complexity.

This paradox is viewed as integrating subjects results in content that is a dense, complex, and interconnected fusion of multiple disciplines. This complex content would require highly skilled teachers with deep insights in and aptitudes for curriculum design, selection, and hybridization. However, with expertise and resources constrained in times of crisis, teachers may not have the experience or training to have gained proficiency in content knowledge and pedagogy. Therefore, they need sufficient practice and education to meet the curriculum policy demands to improve their teaching efficiency and to be effective in teaching the curriculum in a way that would improve student learning (De Clercq et al. 2018). To disrupt the cycle of impoverished teaching and learning, teachers would have to possess advanced pedagogical and content knowledge to ensure that complex content is taught and learned effectively. It is conceivable that curriculum coverage might occur through accidental effects of other policies not linked to curriculum management (Schollar 2018), producing inconsistencies and unintentional repercussions when these policies intersect. In other words, coverage of the curriculum may not be deliberate; it could be accidental and therefore, unlikely to be replicated in future curriculum delivery, exacerbating educational inequalities.

Many young learners from penurious backgrounds do not have access to high-quality teaching and time to construct deep understanding (Harris and Burn 2011). This deprivation makes casualties not only of the students but of the subject disciplines as well. Statistics show that approximately 80% of learners perform below the minimum expected competency level for the grade in which they are registered, resulting in their ever-increasing lack of content knowledge as they move from one grade to the next (Schollar 2018). Seemingly, the more time teachers have to implement the curriculum, the more opportunities learners will have to practice and master new content in class. In a bimodal education system like South Africa's (Spaull 2012), children in wealthy schools will cope with complex content more easily than students from deprived contexts and poor households. In more impoverished schools, more time may be needed to teach complex content than needed in wealthier schools, contradicting the aim of the curriculum recovery plan to reduce teaching and learning time—especially in instances where teachers are incapable of teaching disconnected subjects effectively. Thus, we reveal the multiple, linked effects of impoverishment: the impoverishment of teachers and learners in impoverished settings serves to increase social and economic stratification.

Curriculum recovery plan

The curriculum recovery plan is explicit about what needs to be recouped: time and curriculum coverage**.** It decenters the students and teachers, particularly in its rhetoric of what to do and how to do it. Policy statements are generic in nature and address broad parameters of action, (Amin and Mahabee, 2021). Curriculum recovery plan is designed to obviate the loss of time due to the national response to the COVID-19 pandemic like national lockdown in schools. In particular, it analyses two strategies, the first to overcome time lost and the second, to reorganize the curriculum.

Contradictions and debates in the curriculum recovery plan

This analysis, which only covered two strategies of the curriculum recovery plan, clearly shows the contradictions and paradoxes of the recommendations to mitigate the loss of a substantial part of the academic year. The intentions are subverted because they are split between simultaneously making up for the lost time and trying to cover the curriculum—creating a situation of impossibility. Trying to accomplish the former compromises achievement of the latter, and vice versa. Shifting the excised components to the next year *expands* the problem rather than solving it,

(Garrison 2009). In reflecting on curriculum changes to rescue the academic year for schools, the government has a vital role in ensuring that the continuation of education programs is smooth and adequately supported. It is apparent that the unexpected appearance of COVID-19 has resulted in responses that are reactive, fragmented, and expedient due to political interests and other pressures (Carl 2002). While the state has a responsibility to make proclamations and to suggest solutions, these may not appeal to the many sectors with special interests (teachers, parents, administrators, political parties, teacher associations, and unions). Perhaps the government's response is one of panic as it has no precedents to inform decision-making in the face of the uncertainty and fatality associated with COVID-19. Nonetheless, there is also evidence of a governmental lack of vision in times of a crisis and an absence of courage to use the crisis to dismantle structural impediments built into curricula that counter successful teaching and learning.

Crisis require visionary leadership to navigate complex issues and to placate the fears of the public. With COVID-19, our vision of the future is clouded by the uncertainty around the evolution of the disease. So, what shape could visionary leadership take? It would require projecting multiple scenarios and a focus on that which is attainable, like improving the conditions of quintiles 1–3 schools. It means providing water and sanitation, proper classrooms, and improved learning facilities; and up skilling teachers to undertake, for instance, curriculum trimming in a knowledgeable way. The recovery plan does not offer bold measures that inspire confidence in schools in the lower quintiles. Some of the recommendations, like adding additional hours to the school day, ignore the ability of destitute communities to arrange for travel and safety as winter draws closer and daylight hours shorten. In explaining the recommendations, the curriculum recovery plan makes visible some of the factors that work against the efficient and effective provision of education, which would require undertaking valiant measures like reducing teacher absenteeism and removing ineffective school leaders—two important factors identified by Spaull (2012) as correlated to a bimodal education system.

Policy change or intervention.

Policy change and intervention as in this instance, is a reaction to a problematic situation (Wiseman 2012). As such, decision makers must understand the intricacies of political thinking, the historical government systems, the varied constructions of power, and those in positions of authority (Ball 2007). Specifically, this translates into using power positions to improve the lives

of students and the working conditions of teachers. As public intellectuals, curriculum decision-makers should be mindful of the contexts and constraints surrounding curriculum making. They should be competent enough to consistently challenge dominant hegemonic discourses and ideologies to expose relationships of power (Cooper 2005), especially the pressures to focus on excellence instead of equity (Sayed and Motala 2012). It is rather disturbing that policymakers formulate changes in education without judicious deliberation and without considering long-term ramifications, which could result in backtracking on key curriculum developments (McDonald and Van Der Horst 2007). Certainly, the inequality in most Africa universities is a product of the incompetency, bribery and corruption, nepotism and specifically, in south Africa it was caused by apartheid administration's insidious policies and of the post-apartheid state's neglected redress of such policies. Instead of transformative action, policy changes become surrounded by controversy, contradictions and contestations, and socioeconomic and political difficulties (Jansen et al. 2007) within and outside the policy itself.

Casualties of the curriculum recovery plan

The curriculum recovery plan is explicit about what needs to be recovered: time and curriculum coverage. It decenters the students and teachers, particularly in its rhetoric of what to do and how to do it. Policy statements are generic in nature and address broad parameters of action. In the case at hand, the curriculum recovery plan is just that: an interim set of measures to deal with the aftereffects of the closure of schools for more than two months and the resultant loss of contact time. However, the recommendations offer little, if any, direction for reducing inequalities. In fact, the revised curriculum ignores the contextual distinctions amongst schools (readiness to deliver technology-based education), glosses over pedagogical approaches (how to teach a compressed and complex curriculum), overlooks student diversity (how to accommodate differentiated needs), and is vague on the guiding principles for teachers (how to implement the recommendations). Under normal conditions, curriculum revision starts as a careful intention, supported by broad-based consultation and the collection of evidence; and informed by value systems, promulgated, and finally implemented, in the classroom situation (Marsh 2009). It is only then that one can identify the casualties of curriculum reform: those affected by the education system's inequalities are at the top of that casualty list.

Students comprise the first group:

- those from impoverished households whose needs and circumstances are marginally accommodated;
- slow learners who will have to respond to complex curricula with less time to incubate ideas and concepts, and
- upper-grade students who teachers will overload with take-home tasks but who have no support at home because their parents are semiliterate.

The second group of casualties are lecturers, particularly:

- those who are underqualified and unskilled for engaging with curriculum design;
- those working in impoverished communities;
- those inadequately prepared for complex teaching and learning; and
- those whose roles are largely care-driven because of the large number of school-goers in need of psycho-emotional support.

A third dimension is the silences in the curriculum itself. Some of the reasons for the extended lockdown period was to inhibit the spread of COVID-19, to increase public awareness of disease prevention, and to prepare the country for the peak expected in September 2020. It is, therefore, ironic that the recovery plan does not include content about COVID-19 in the curriculum. What is the value in recovering a curriculum but then to omit content that can prevent contracting or spreading the disease? Perhaps we need to heed Dewey's call for education to relate to students' current lives and not only to prepare them for the future (Paraskeva 2011). It is only by examining the "how" and "why" that we can understand the dynamic forces acting on policy development and advocacy (Haddad and Demsky 1995). A crisis in education requiring urgent curriculum reform is not a new phenomenon. History shows that the disconnect between the education system and society emerges in times of social and economic disaster: war, industrialization, famine, pandemics, and genocide prompt curriculum reform. In response to education crises, William Kilpatrick averred, education should focus on "life itself and not as a mere preparation for later living" (Kilpatrick 1918, p. 320).

Factors that drives the curriculum during crises.

Curriculum, as a political expression, is based on the idea that knowledge cannot be impartial. Indeed, it is subjectively propelled by interests and agendas of which implementers and consumers often are not aware. Two options are available to curriculum designers: curriculum

change and curriculum continuity (Jansen 1990). It is by portraying the curriculum as an expression of the political interests, knowledge, and values of a dominant force that one has persuasive insights into curriculum predicaments and into new developments in curriculum reform (Jansen 1990).

Historically in some African countries like in South Africa, invisible and faceless "white male interests, white male aspirations and white male politics" controlled the educational bureaucracy and dominated the curriculum (McClintock 1993, p. 68). At that time, curriculum decision-making was imperceptible, and, once decided, imposed on South Africans. However, in recent times we can name the decision makers and identify the individual(s) responsible for key curriculum decisions and implementation. In terms of the National Education Policy Act no. 27 of 1996, Section 3 (4), the Minister determines the national curriculum policy framework, core syllabuses, education programs, learning standards and examination, and so on. In terms of the regulations, power is vested entirely with the minister to develop, revise, change, or dismantle such policies (DBE 2020b).

In times of crises, as exemplified by the current COVID-19 pandemic, curriculum decisions and policies have to be made swiftly and prudently, and legislated within a rapid turnaround time. Time pressures impel curriculum makers to meet progression requirements and to save the academic year. Thus, we see that urgency and speed cause an unusual circumstance, in which curriculum decisions are unfolding whilst the crisis is ongoing. A curriculum is only as feasible as its context; hence, internal and external factors that influence the curriculum's effectiveness must be confronted concurrently with the revision process (Jansen 1990). Confronting curriculum choices is feasible when there is sufficient time; however, when time is limited, the limitations of the recovery plan pass through unchallenged.

2.1.5. Redesigning examinations

Examination redesign is a solution to several challenges associated with the shift to remote online assessment. It encompasses many different types of adaptations that can be combined to create appropriate examination models for the specific context of institutions, faculties, students or courses. The following list highlights the most frequently encountered solutions in the literature and in recommendations issued by higher education institutions to help faculty members cope with the implications of the COVID19 crisis.

Oral examinations.

Examinations that were initially planned as written final exams can be redesigned as synchronous oral exams. These offer several advantages to limit student cheating, cope with the risk of technical failure and ensure that assessment and grading can, where appropriate, be adjusted to students' individual situations and constraints. Yet, oral exams often require a significant time investment from faculty members, in particular when they are in charge of assessing large groups of students. In such circumstances, alternative solutions could be considered such as relying on additional academic staff to assess students (e.g. teaching assistants or PhD students), reducing the length of examinations or, in domains where it is appropriate, conducting group oral examinations (e.g. in a foreign language course).

Flexible modes of examination

Introducing flexibility in the mode of examination is a way to accommodate students' individual specificities and address the issue of fairness. It involves giving students the ability to choose their preferred mode of examination between different options, for instance an oral exam or a proctored written test. These different modes of examinations should be comparable to ensure a fair treatment of all students (e.g. by having the same requirements and levels of difficulty). This flexibility can also be a way to reduce student anxiety with high-stakes examinations, which could in turn help reducing dishonest behaviours (Davis et al., 1992[16]; Hollinger and Lanza-Kaduce, 2009[17]).

Varying sets of exam questions

Administering different sets of exam questions to different students in a written online examination reduces the risk of student interacting with each other. This solution requires additional investment from exam developers as it implies designing and scoring a larger range of questions. Besides, it is important that the questions taken by different students measure the same constructs and have the same level of difficulty to ensure the reliability and fairness of the evaluation. An alternative solution is to use the same questions for all students but randomize their order in individual exams. When exams rely on multiple-choice questions, the order of response items within each question can also be randomized. Most applications for online assessments offer that possibility. Differentiating exam questions or randomizing their order is a way to address

possible dishonest behaviours without having to use proctoring technologies. Yet, it is only helpful in limiting student interactions and is not effective for other forms of cheating or plagiarism (e.g. copying and pasting text form the Internet).

Reduced time limits

Setting stricter time limits for the duration of written examinations is another way to prevent possible dishonest behaviours. While it does not prevent students from interacting with each other or looking for answers using unauthorized means, it can discourage dishonest behaviours when the time devoted to cheating competes with the time needed to answer exam questions. In this respect, exam durations can be set so that the highest performing students would have just enough time to complete the test within the time limits while average performers would only be able to answer between 60 to 80% of the questions. In this context, scoring methods could be adapted and students would need to be informed in advance of adaptations made to the examination. Besides, it is important to ensure a fair treatment of students in such online examinations, as they do not always take their exams under the same conditions (e.g. with regard to the speed of their Internet connections, the devices available to take examinations, their housing conditions, etc.). Assuming that these requirements are met, reducing the time limits of exams can be a way to address academic dishonesty without relying on proctoring technologies.

Open book written examinations.

Allowing students to access the course material and the Internet during an examination eliminates the risk of students cheating by consulting unauthorized resources. To prevent students from interacting with each other or asking someone else to take their exam for them, examiners could consider limiting response time or designing questions for which students need to reflect on their personal situation or their own experience with the course. Open book examinations are usually not appropriate when they comprise memorization questions whose answer can be directly copied and pasted from the course or book. Rather, they are more suited to assess students' mastery of the course content and capacity to think at higher cognitive levels (Eilertsen and Valdermo, 2000, p. 18, Olt, 2002, p. 19). Questions could, for instance, require students to write an essay on a controversial issue, analyses and interpret data, or solve a real world problem. Open-book questions can also rely on multiple-choice questions that are designed in such a way that students

need to apply their knowledge and engage in deep thinking to find the right answers (Haladyna, 2011; Kerkman and Johnson, 2014).

One advantage of multiple-choice questions is that they eliminate the risk of plagiarism. Substituting examinations with other forms of assessment Substituting final examinations with alternative models for student assessment is a fourth type of solution to the challenges associated with organizing remote examinations. Like examination redesign, it implies adapting assessment methods to better accommodate the conditions of online course delivery. Unlike examination redesign, it is not limited to a revision of the format of a specific exam but consists of rethinking the entire model of student assessment and examination in a course, for instance by replacing a final high-stake written exam with a semester-long student research project.

Using project assignments to certify students' knowledge and skills

There are numerous modes of assessment that can be considered by institutions and faculty members to replace final examinations. A large part of these consists of asynchronous and untimed project assignments that require students to generate an original product. Such assignments are generally open book and can be individual or collaborative. Sometimes they culminate with students performing a specific task to demonstrate their knowledge and proficiency. Common examples of asynchronous project assignments used in online courses include:

- Written assignments such as argumentative essays, synthesis papers, critical analysis, blog posts and student diaries.
- Online interactions between students through discussions on blogs, wikis or forums.
- Research projects for which students need to carry out fieldwork, collect data or conduct interviews. Such projects often end with a written report or the production of an artifact. Student presentations of the outcomes of asynchronous assignments.

These can be done synchronously in front of the class or asynchronously through podcasts, video recordings, or any other type of multimedia product. Asynchronous project assignments are particularly well adapted to online course delivery. In a study on 24 online course syllabi, Kearns showed that most courses rely on these types of assignments to assess and grade students (Kearns, 2012, p. 22). More precisely, only a third of the courses relied on tests and exams and, when they did, the average weights of these tests in final course grade was less than 50%. On the other hand, written assignments and online discussions were used in respectively 92% and 80% of courses to

assess and grade students in online settings. The advantages of using asynchronous project assignments for student assessment are multiple. As with open-book examinations, they eliminate de facto several benefits of behaving dishonestly. As students are required to produce an original output, there is no need to prevent them from using the resources of their choice or interacting with their peers. Peer collaboration and autonomous research are conducive to learning and asynchronous project assignments allow students to strengthen those skills. Besides, requiring students to present their work in front of the class can limit their ability to ask someone else to do their assignment for them (or at least allows this to be detected).

In addition, students have more flexibility to respond to evaluation requirements. As project assignments are asynchronous and untimed, students can choose to "take" them at the time and in the conditions that best fit their own individual constraints. In this respect, asynchronous project assignments can mitigate the risk of unfair treatment of students in online assessments. Plagiarism is still an important form of dishonest behaviour that can occur in the context of asynchronous project assignments. Several techniques can be used to limit the risk of plagiarism (Audet, 2011, p. 23): using a plagiarism detection software, focusing on topical issues or questions that are directly related to students' personal interest, imposing the use of a minimal number of recent resources, concluding assignments with a synchronous presentation followed by questions and answers from the instructor and the class, etc. Taking advantage of the features of online environments Beyond the types of student assessment, the transition to online course delivery calls into question the traditional model of assessment through high-stakes final examinations.

Online teaching and learning allows the implementation of a diversity of instruction approaches and leaves much more trace than face-to-face education. This creates new opportunities for a continuous assessment of students throughout academic semesters. Many instructors who started delivering online courses well before the COVID-19 outbreak took advantage of these new conditions by administering a variety of assignments and tests on a regular basis (Gaytan and McEwen, 2007, Martin et al., 2019). Several methods can be used to assess students regularly such as small timed quizzes, asynchronous discussions on forums, semester long projects with intermediate milestones, portfolios, peer-evaluations, etc. While these methods are well suited for online course delivery, they can also bring about important benefits for face-to-face courses. With careful planning so as to maintain an appropriate workload for both students and faculty, multiple

moments of assessment can be a powerful solution to address the challenges associated with the shift toward online course delivery (Swearingen, 2002, p. 26; Arend, 2007, p.27). A reasonable number of regular assessments are less likely to generate stress and anxiety among students than final examinations that have a considerable weight in the course grade, hence limiting the risk of academic dishonesty. The assessment framework and student-teacher relationships also reduce the possibility of students asking someone else to take their assessment for them. Besides, following student progress from the first weeks of a course allows faculty members to identify those who are coping with difficult studying conditions and explore solutions with them.

2.1.6. Teaching method

A teaching method comprises the principles and methods used by teachers to enable student learning. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has take into account the learner, the nature of the subject matter, and the type of learning it is supposed to bring about, (Westwood, 2008). The approaches for teaching can be broadly classified into teacher-centered and student-centered. In a teacher-centered (authoritarian) approach to learning, teachers are the main authority figure in this model. Students are viewed as "empty vessels" whose primary role is to passively receive information (via lectures and direct instruction) with an end goal of testing and assessment. It is the primary role of teachers to pass knowledge and information onto their students, (Burger et al 2015). In this model, teaching and assessment are viewed as two separate entities. Student learning is measured through objectively scored tests and assessments. In Student-Centered Approach to Learning, while teachers are the authority figure in this model, teachers and students play an equally active role in the learning process. This approach is also called authoritative. The teacher's primary role is to coach and facilitate student learning and overall comprehension of material. Student learning is measured through both formal and informal forms of assessment, including group projects, student portfolios, and class participation. Teaching and assessments are connected; student learning is continuously measured during teacher instruction.

In the traditional classroom setting, the most common teaching methods that has always been used were the lecture method, demonstrating, collaborating, classroom

discussion, debriefing, classroom research, group works etc. These worked well in the context of enclosed classroom. but with the upsurge of divers crises around the world, the method of teaching have been modified to suit the changing time. Technology has provided a broad, cheaper and easier way to teaching and learning where learners and teachers both play their rules in the confines of their homes. The new online teaching method came as the antidote to crises attack on educational system.

Resilient teaching methods adapted during covid-19 crisis

When designing online instruction, the underlying pedagogical philosophy and application of learning theories, including instructivism and constructivism, will influence decisions regarding what instructional strategies may be adopted (Dick, Carey & Carey, 2005, p. 4). Students are mostly required to learn a set of principles within a discipline area and integrate previously learned knowledge with new knowledge by employing techniques such as advanced organizers, worked-out examples, and elaborative questions. For example, a lecturer teaching how radar works may compare this with a ball bouncing off a wall (advanced organizer) through the use of Flash animations provided on the website. The lecturer may also integrate an instructivist approach by utilizing automated online learning activities to assist with teaching specific principles. A lecturer with postgraduate students completing a Masters degree unit may adopt a constructivist approach to teaching, where students are encouraged to construct their own meaning of the content through their own prior experiences. The varying underlying pedagogical approach may be represented along a dimension as illustrated in Figure …3...

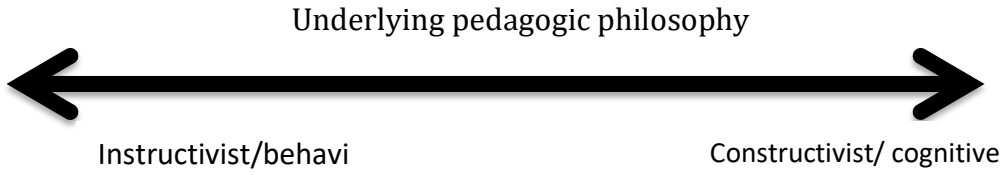


Figure 3: *Dimension for underlying pedagogical philosophy*

The development of online learning environments needs to draw upon the vast body of knowledge relating to instructional design models (e.g., Dick et al., 2005; Gagné, Briggs & Wager, 1992) for the analysis of instruction, the learners (background, prior knowledge,

motivation, etc.), the learning context, development of an instructional strategy, and evaluation. A lecturer requiring students to learn a particular set of concepts will take into account the online learning environment in which this understanding will be demonstrated, the students' characteristics (e.g., their prior knowledge and motivation to learn). The lecturer will then develop an instructional strategy which will draw upon online learning technologies to assist with achieving this instructional goal. This may include the use of computer-based simulations of the concepts to be taught, automated online interactive activities, the use of the class bulletin board, and links to other websites. The lecturer may aim towards a constructivist learning environment where students combine new learning with existing knowledge and the learning experiences are authentic depictions of existing practices. The lecturer will then develop formative evaluation to identify how to improve the instruction and summative evaluation to determine the overall effectiveness of the instruction. The level for which instruction incorporates an instructional design process of analysis, strategy development and evaluation may be represented along a dimension as illustrated in Figure 2.

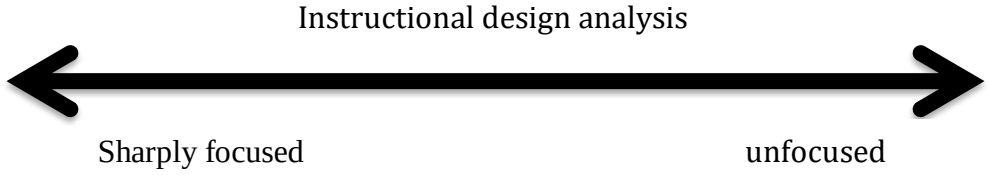


Figure 4: *Dimension for instructional design analysis*

How to Improve Your Online Teaching?

Online courses have become an incredibly popular way for students and employees to advance their education or professional development. Teaching an online course requires different methods from the traditional classroom, so it's important that teachers adapt or develop their skills to the online learning environment, to make their materials effective and engaging for learners. Let's look at 5 strategies you can implement to improve your online teaching and make your eLearning course a successful experience for both you and your learners (Burns, 2011).

Engage with Your Learners Online

Without your physical presence in the classroom, it's vital that you establish a virtual presence at the very beginning of the eLearning course. Online teachers need to be engaging and supporting students' right from the start and for the duration of the course, to maintain an effective learning community. By establishing your teacher presence, you'll show students that you're both visible and available. You'll also be welcoming them to their new learning community – just as you would in any traditional classroom. Let your students know what days or timeframes you will be online and how they can contact you outside of those hours. Engage with your learning community through online posts, forums or social media – when people see teachers putting time into discussions and engagement, they'll be more encouraged to participate themselves. Through this engagement, you'll also develop professional relationships with your students and make their experience far more personal and memorable.

Create A Supportive Learning Environment

As an online teacher, you have an opportunity to create a supportive online community for your learners. The best way to achieve this is through encouraging both teacher-to-student engagement and student-to-student interaction. Dr Judith V. Boettcher, PhD and author of *A Faculty Guide for Moving Teaching and Learning to the Web*, suggests the following strategies:

- At the start of your online course, get the ball rolling with a personal introduction post, and encourage participants to contribute their own short bio or introduction to the group.
- Create an open forum or discussion board where learners can post to request help and assistance from each other, developing peer-to-peer support.
- Set up small groups, similar to traditional study groups, for supportive mentoring of fellow learners.

These strategies will encourage learners to work together as an active learning community, which brings benefits to all individuals involved.

Use A Mix of Learning Tools for Better Engagement

These days, we're fortunate to have the technology to create virtual learning environments that allow us to collaborate and engage just as well as if we were in the classroom. As Dr Boettche says, "the variety of activities that are now possible online makes it possible to create many types of effective learning environments." The best online teachers use a combination of both synchronous and asynchronous activities, creating a blend of traditional online learning styles with newer, more collaborative audio and visual tools. Working with a mix of activities makes the content more interesting and exciting, increasing student engagement with both the teacher and other learners.

Provide Ongoing Feedback

Feedback is an essential component of all effective learning environments – including online. As an online teacher, your feedback will help to create an eLearning experience that is informative, engaging, and motivational for the learner. Your feedback should be continuous during the eLearning process, with constructive feedback offered as soon as possible so that students can clearly identify which behaviors or skills need to be improved. You can encourage group feedback through collaborative exercises, which also helps to promote peer engagement.

Make eLearning Content Mobile

It's wise to acknowledge the importance of mobile learning for online teachers, with students and employees now accustomed to using their mobile devices for learning. Mobile learning holds key advantages for learners, allowing them to access up-to-date course materials and relevant content anywhere, anytime. With bite-sized pieces of information available to be digested quickly and easily, learners can work through course materials at their own pace, assisting both performance and productivity. Make sure your eLearning content can be easily accessed via smartphones, laptops, and iPads to maximize your teaching methods. You'll also be demonstrating to your learners that you're in touch with the needs of today's modern workforce and its relevant technology. With these strategies in place you can feel more confident about your online teaching skills and eLearning materials. You'll also know that you're working to create a more positive and collaborative learning environment for your students.

2.2. Theoretical framework

This part of the work presents the theoretical framework of this study. That is, bringing out theories from books that are related to the work and interpreting them to suite the context of this work. Mbua (2003:589) defined a theory as “a set of interrelated concepts, assumptions and organisations that systematically describe and explain regularities in behaviour in educational organisation”. Moreover, Amin (2005:79) defined a theory as “a generalisation or a series of generalisations by which the researcher attempts to explain, understand and predict some phenomenon in a systematic manner”. According to Kerlinger, (1973) as cited in Amin (2005:10), a theory is “a predisposition that presents a systematic view of specifying the relationship amongst variables with the purpose of explaining and predicting the phenomena”. According to Zaden (2000) and Wujungbuen (2007), a theory is a set of interrelated statements that provide an explanation for a class of events. With cognizance to these definitions, educational planning has several theories guiding its functioning. For the need of a succinct elaboration of the variables in this study, the following theories are used in this work.

2.2.1. Interactive planning model

Interactive planning is a concept developed by Russell L. Ackoff, an American theorist, early proponent of the field of operations research and recognized as the pioneer in systems thinking. Interactive planning forwards the idea that in order to arrive at a desirable future, one has to create a desirable present and create ways and means to resemble it. One of its unique features is that development should be ideal-oriented, (Ackoff, 2001). Interactive planning is unlike other types of planning such as reactive planning, inactive planning, and preactive planning. This is because interactive planning is focused on systems thinking and is "based on the belief that an organization's future depends at least as much on what it does between now and then, as on what is done to it (Ackoff, 2001). The organization will then create its future by continuously closing the gap between its current state and its desirable current state. The overall result of a case-based approach conducted by Haftor suggests that IP is a powerful methodology in guiding organizational development (Haftor, August 2011).

Interactive planning (IP) is a procedure that prescribes how to develop and manage social systems, e.g. organizations, whether they are business or any other kind. Ackoff (1981) expresses the intention of IP in the following terms: "The objective of interactive planning is an effective

pursuit of an idealized state. The state is formulated as a design of that system with which the current system's stakeholders would replace it if they were free to do so. Such a system should be technologically feasible and operationally viable, and it should provide the system with an ability to learn and adapt quickly and effectively. Interactive planning promotes democratic control by allowing and facilitating the active participation of various stakeholders in the conceptualization and formulation of programs, projects, strategies and techniques. This empowering shift affords the stakeholders to become committed, engaged and grounded decision-makers. Interactive planning, therefore, according to Zeynep Ocak (2015), "expands participants' conception of what is possible and reveals that the biggest obstructions to achieving the future most desired are often self-imposed constraints.

Interactive planning also promotes ownership and hence enables the active engagement of stakeholders. It helps map the organization's current standing vis-à-vis its desired future state. As such, interactive planning enables the organization and its members to be reflexive and self-critical in its process of unfolding and becoming. This "interactive and interpretative process" is the essence of "collaborative planning" (Flacke, 2020). This method makes the plan itself an indispensable resource of the organization because of its groundedness and correspondence with the organization's building blocks, namely its policies, human capital, technologies and financial resources, among others. As a living document, it serves as a built-in mechanism to forge dialogue and discussion among the internal and external stakeholders of the organization. Interactive planning seeks to "facilitate exchange of knowledge between stakeholders, consensus building among them, and group-learning processes.

This collaborative approach in planning apprehends problems as interrelated realities and hence are not viewed as mutually exclusive. Considering the strong Systems Thinking influence in interactive planning, problems are viewed in their totality and in the context of their specific details in relation to the social environment where they are situated, (Flacke, 2020). Interactive planning has three unique characteristics:

- Interactive planning works backwards from where an organization *wants* to be now to where it *is* now.
- Interactive planning is continuous; it does not start and stop.

- Interactive planning lets the organization's stakeholders to be involved in the planning process.

Interactive planning as seen earlier is an all involving planning strategy. It brings together the efforts of all education stakeholders in order to plan ways to attain stated objectives. Interactive plans help in identifying critical constraints, assumptions, milestones and enables developing vital conduct of communication. It also enhances the knowledge and the scope of the project among the stakeholders. It promotes the participation of all the stakeholders which, in turn, increases the possibility of having the best solution possible. Interactive plans are largely flexible and are applicable to a variety of applications and purposes such as risk mitigation, project post-mortems, goal setting or any other aspect involved in project management. It helps explain the planning during crises period as it is flexible, interactive, and involved all stakeholder. This gives the planners the possibility to plan well taking into cognizance the role and the needs of all at that moment. For this theory, the interactive planning is ideal for crises period.

2.2.2. The Human Capital Theory by Becker (1974)

The human capital theory was founded in 1974 by Becker. As earlier mentioned it is an extension of the capital concept and posits that expenditures on education, job training, and health are capital investments that will yield economic and social returns at the individual and societal levels, (Netcoh, 2016). Education and training are assumed to lead to greater productivity, which is ultimately translated into economic returns such as higher wages, higher rates of civic participation, lower crime rates, better health outcomes, and increased gross domestic product. The theory assumes that education determines the marginal productivity of labour and this determines earnings (Marginson, 2017). According to Becker (1974), investments are made inhuman resources to improve their productivity and therefore their earnings. In this light, Tafah (2012) opines that human capital measured by education and health impacts significantly and positively on economic growth. In this vane, the type of education and the number of sacrifices in terms of cost, time and forgone opportunities which the student left to acquire more knowledge will latter influence their jobs and earning. This implies that the need to increase earnings, gain promotion and better jobs largely motivates students to continue schooling, some workers return to school either full-time or part-time and others take the online course.

In this study, this theory serves as a bridge between crisis-sensitive (independent variable) and graduates employability skills (dependent variable). By creating the connection between these two variables appreciate the importance of investment in human capital (education and health) with forecasted benefits of such investment in terms of skills, will enhance outcomes like job creation, employment, improvement in former job skills, promotion, and better living standards on the graduates. This has further impacts on the society as externalities from more educated (skillful) workers will be enjoyed by both the less educated, the family and improve development in the society.

This theory stipulates that increasing amount of schooling of students or employees, higher rates of their participation, better outcomes and effectiveness at work. Moreover, education and health determines productivity, this encourages many students and workers to enroll in higher education in order to acquire more employability skills that will permit them to be employed or gain promotion in their work places. This theory is the intermediary theory between school training and job market adaptation. The theory plays a connective role between these two entities.

2.2.3. Curriculum theory (CT) by J.B. MacDonald (1971)

Curriculum theory (CT) is an academic discipline devoted to examining and shaping educational curricula. There are many interpretations of CT, being as narrow as the dynamics of the learning process of one child in a classroom to the lifelong learning path an individual take. CT can be approached from the educational, philosophical, psychological and sociological perspectives. James MacDonald states "one central concern of theorists is identifying the fundamental unit of curriculum with which to build conceptual systems. Whether this be rational decisions, action processes, language patterns, or any other potential unit has not been agreed upon by the theorists, (MacDonald (1971). Curriculum theory is fundamentally concerned with values, the historical analysis of curriculum, ways of viewing current educational curriculum and policy decisions, and theorizing about the curricula of the future.

According to Pinar (2004), the contemporary field of curriculum theory as "the effort to understand curriculum as a symbolic representation. The first mention of the word "curriculum" in university records was in 1582, at the University of Leiden, Holland: "having completed the curriculum of his studies". However, curriculum theory as a field of study is thought to have been

initiated with the publication of The Yale Report on the Defense of the Classics in 1828, which promoted the study of a classical curriculum, including Latin and Greek, by rote memorization.

The curriculum theory is an academic discipline devoted to examining and shaping educational curricula. This study is significant in this study as it demonstrates that curriculum needs to examine and shaped. This holds on the fact that our study professes a curriculum modification, or change during crises. Once the crises occur, the stakeholders are expected to trim, reorganise and provide a recovery plan for the curriculum during the crises.

2.2.4. Holland's Vocational Theory by Holland (1985)

This theory was founded by John L. Holland in 1985. He is famous for his psychological theory of careers, including career choice, vocational preference, and taxonomy of personality types for occupations (Launsbury et al. 2009). As earlier mentioned, this theory states that the choice of people's careers is an expression of their personality and nothing more, (Brown 2002). Members of the same career path turn to have similar personalities traits, people in each group will respond to situations and problems similarly, career achievements, stability, and satisfaction depends on congruence between one's personality and job environment since personality is a combination of all your life experiences both in schools and in society.

Holland's theory aims to categorise people according to what type of work they are most interested in and then categorise occupations under the same scheme to measure their congruence (Holland, 1996). It is in this light that Holland came out with six vocational themes that categorise people into various groups: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC) (career key, 2008). Holland (1996 p. 400) Holland's actual scheme was based around a six-point hexagon which focuses on six types of person and job.

The theory is very instrumental to this study as it enables us to fully examine graduate's employability skills exposing it is specific and general realities and create road maps towards a more systematic approach to implementation in this work. This theory helps this work to portray that getting career readiness or employment-ready is a combination of you (life vision), your innate abilities, the knowledge and skills from school and society. In this light, educations you receive, the friends you keep, the books you read and the films you watch influence your career choice and your ability to excel in the career. People flourish in their work environment when there is a good

fit between their personality type and the characteristics of the environment. Lack of congruence between personality and environment leads to dissatisfaction, unstable career paths, and lowered performance, (Holland, 1996, p. 397). This, therefore, confirms the purpose of training and skill acquisition to the career preparation of graduates. Most graduates hardly land their dream jobs due to the lack of congruence between the personality, skills and the job or environmental expectations.

2.2.5. Connectivism theory by George Siemens (2004)

Connectivism is a theoretical framework for understanding learning in a digital age. It emphasizes how internet technologies such as web browsers, search engines, wikis, online discussion forums, and social networks contributed to new avenues of learning. Technologies have enabled people to learn and share information across the World Wide Web and among themselves in ways that were not possible before the digital age, AlDahdouh, et al. (2015). Learning does not simply happen within an individual, but within and across the networks. What sets connectivism apart from theories such as constructivism is the view that "learning (defined as actionable knowledge) can reside outside of ourselves (within an organization or a database), is focused on connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing". Connectivism sees knowledge as a network and learning as a process of pattern recognition. Connectivism has similarities with Vygotsky's zone of proximal development (ZPD) and Engeström's activity theory. The phrase "a learning theory for the digital age" indicates the emphasis that connectivism gives to technology's effect on how people live, communicate, and learn. Connectivism is an integration of principles related to chaos, network, complexity, and self-organization theories.

This theory explains the teaching methods used in teaching during their crisis-sensitive period. This theory is very essential in this study as it is a democratic and open-source approach to knowledge. It can be used as an alternative to traditional teaching methods. Connectivism is not limited by time or space, meaning the learner has access to all information at any point in their life. Therefore, it helps the study to profess the importance of online study as an eminent strategy to constant learning in the crises period.

2.3. EMPIRICAL SHADES AND REVIEW OF RELATED LITERATURE REVIEW

2.3.1. Cameroon education landscape

In Cameroon, the educational system from basic to universities owe its origins to the latest European colonial background as a former French and British Colony. These two colonial maters ruled Cameroon, created schools from 1919 until 1960. Consequently, the system is dominantly a hybrid of the French and British educational systems and thus, a 'bicultural' system of education (Samfoga, 2015). And it can also be observed that Pre-university education lasts for approximately 13 years distributed as follows: 6 years of primary education, 5 years of secondary education and 2 years of upper secondary education. However, not all students can afford nursery education and it is not compulsory in Cameroon. Higher education in Cameroon consists of various forms of educational institutions beyond high school education. These institutions include conventional universities which offer courses in both the sciences and humanities, polytechnics which provide advanced vocational training, professional schools for management, public administration, and higher teacher training. Higher education in Cameroon dates back to the early years of post-independence. (Fonkeng, et al. 2009).

The higher education in Cameroon began from the creation of the National University Complex to its transition to the Federal University of Yaoundé in 1962 but started in 1961 with the creation of the National Institute for University studies with the aim of preparing students for university degrees in Law, Education, Economics and Arts (Njeuma et al., 1999). Since most students from the other side had serious problem of language balance, methodological and curricular issues, it was only during the 1993 University Reforms in Cameroon that these issues were taken into consideration. Two universities were consequently conceived solely in mono-cultural traditions as per Decree No.92/074 of 13th April 1992; the Universities of Ngaoundere and Buea in the Francophone and Anglo-Saxon traditions respectively (Samfoga, 2015). The French and English languages are the languages of instruction in higher education and other institutions in Cameroon and both languages are used in the Bilingual Universities for teaching and learning depending on the first language of the teacher or student.

With the identification of other demands for human capital to meet administrative needs, various Higher Education Institutions (HEIs) were created. The post-independence period in Cameroon between the early 1960s and early 1990s has witnessed a higher education system

plagued with as many problems and challenges as in most African and Third World Countries. The obvious problems encountered have been those of accessibility for students, infrastructure, autonomy of the institutions, language barriers, and the use of curricula (designed in the 1960s) which have become obsolete for use in the 1990s. These problems have been compounded by an inability to respond to both the academic as well as socio-economic needs of the local and regional population. There was also a critical need to accommodate the rapidly growing student numbers in the lone University of Yaoundé which between 1984 and 1991 had risen from 17,000 students to 39,151 (Ngwana, 2003).

The Cameroon higher education system is composed of eight (8) state owned universities and a private sector of over 163 institutions (as at September 2014; MINESUP portal of private higher education institutions in Cameroon). Private higher education constitutes only about 15 per cent of the entire student and staff population in Cameroon higher education (SUP INFOS 2010a). These students pay the full cost of their education through tuition fees, which may be as much as 5 to 20 times of what their students in the public sector pay (Samfoga, 2015). According to Ngwana (2003), higher education system in Cameroon which operates within the framework of the 1993 reforms was considered 'sick' and seen to have lost the impetus of quality needed to meet government demands of human capital training, as well as contribute to development. What was dearly needed was a major policy change which was the government's response in Decree No. 92/74 of 13 April 1992 and its corresponding Decree of implementation No. 93/034 of 19 January 1993, instituting some major reforms in the HEI system. According to Samfoga (2015), the objectives addressed by these decrees included amongst others: a) to encourage the participation of the different partners in the management and financing of Higher Education Institutions (HEIs), b) Enhance autonomy in academic, administrative and management issues, c) professionalize the higher education system d) de-concentration and decentralisation, and e) increase inter-university and international co-operation.

Following the above mentioned policy document, five new universities were created over the national territory. The higher education system in Cameroon saw the dawn of a new era as the overly used University of Yaoundé (later known as University of Yaoundé I) benefited from the assistance of the newly created universities. These universities were: The University of Yaoundé II, University of Dschang, University of Ngaounder, University of Douala and the only English-

medium university; the University of Buea. Other major reforms that came with the creation of these universities were the broadening of the participation to other stakeholders as well as the introduction of tuition fees for students (Ngwana, 2003). The Ministry of Higher Education (MINESUP) in Cameroon is the main governance body for the state universities as it is seen to be in charge of defining policies for both the state and private higher education sectors. The Ministry (MINESUP) is also headed by a Minister who is assisted by a Secretary General, a General Inspectorate for academics and service control as well as various directors of departments (MINESUP, 2012). The universities in Cameroon are headed by rectors or vice-Chancellors in the French and Anglo-Saxon universities respectively and are all assisted by rectors and deputy vice-chancellors respectively as the case may be.

The changing perspective of the role of higher education institutions has also played a great role in shaping the events around higher education in Cameroon. With the emphasis being laid on the role of HEIs in local and regional socio-economic development and poverty reduction, higher education policy in Cameroon has shifted significantly to locate higher education institutions in the global picture of responding to societal needs. According to Bloom et al. (2005) in their World Bank report on Higher Education and Development in Africa, the poverty reduction policy document in Cameroon has significantly acknowledged the role of higher education in poverty reduction as well as in human capital creation needed for development.

The difficulties in reconciling graduates and their impacts on society has led to considerable discussion of the purposes of education in the post-modern age as we talk of school (university) graduates being able to meets the needs or the demands of the labour market. This term is widely, and differently used (Connor, 1989; Jameson, 1992; Smart, 1993; Tomlinson, 2001) but has been comprehensively outlined by Kumar (1995) as cited in Derek G, Sue L & Andrea Y. (2002) that it is a time of movement from a society which dependent upon highly managed and centralised industrial development to one in which decentralisation, delegation and information based transactions predominate in a world of rapidly changing culture, economy and political frameworks. This is as a result of the world which is fast growing from computer age to post modernism which Africa and Cameroon in particular need not be left behind. Poster (1990) as stated in Derek et al (2002) who argues that the greater the ability we have to access information the greater the chance that this will be emancipatory and lead to the deconstruction of systems

which characterized the industrial age. Before 2008, the higher education system in Cameroon comprised of two degree structures according to the French and Anglo-Saxon (or Anglo-American) systems (Samfoga, 2015). To ensure mobility between the two subsystems and in response to the pressures of regional integration and globalisation, the degree structures were harmonized according to the Bachelor, Master and Doctoral structure. The Francophone structure today is called the LMD system (Licence, Master and Doctoral cycles of 3+2+3 years each) corresponding to BMD (Bachelor, Master and Doctoral cycles) which existed in the Anglophone system. This new and comparable degree structure went operational from 2008.

According to information from the World Bank 2008, Higher Education plays a pivotal role in preparing individuals to enter the labor force as well as equip them with the skills to engage in lifelong learning experience. These graduates are a product of the system whose faith is determined by the examinations the write. This means that when you write and pass exams, you graduate and your performances in the job market either facilitate your access into the job market or retard depending on your results. This undoubtedly, proves that a successful education system screening of candidates collaborates with the employers or job market because they are focused on the best students and this is most often seen from the certificates at first hand. In this light, the World Bank makes it clear that "planning of the educational system focusing on graduate's employment seeks to adhere to basic cognitive and numeracy skills" (World Bank, 2008; p. 20) these skills are much waited in the job market to enable graduate's employment. These graduates will apply the skills, know-how and abilities in the jobs, improving the outputs, economic growth and their standards of living. To achieve these, school curriculum, internships, government policy and resources put in are to be oriented towards aspirations and the needs of the job market. By so doing the school-to-job night mare would be eliminated but it is rather unfortunate as it is probably the reverse in Cameroon Higher Education Planning system.

According to Samfoga (2015), besides education and general government strategy papers, there have been revisions and additions to the 1993 reforms which relate to higher education. Some of these include:

- Law No. 005 of 16th April 2001 (LOHE) on the orientation of higher education in Cameroon. It defines the orientation of higher education in terms of teaching, research, and contribution to development, bilingualism and cooperation.

- Decree No. 2005/383 of 17th October 2005 on New University Governance lays down the financial regulations applicable to universities.
- The 9th August 2008 decree creating the University of Maroua.
- Decree No. 2010/372 of 14th December 2010, creating a second Anglo Saxon state university, the University of Bamenda.
- The University-Industry Charter signed on 20th December 2010 expressing the values that should be upheld and the rules and regulations in university-industry relations.
- The 2006-2009 Education Sector Strategic Plan (ESSP).
- The 2010-2014 Growth and Employment Strategy Paper (GESP).

The job markets increasingly need skill workers, the youths need jobs as well, but they have limited conformity in terms of skills. This has increased the unemployment rate in Cameroon to 30% while underemployment rest at 70%, as stated by the International labour Organization (ILO) report (2013). It is of interest to know that out of the 24.5 million people, the working population in Cameroon is about 12 million and only a little over 200,000 people work in the public service. With this, the remaining population not absorbed by the government is our call for concern. Unemployment and underemployment affect different university graduates in diverse ways such as, sex, age, marital status, ethnic group, field of study amongst others. The University of Bamenda created in 2010 after the celebration of the 50th anniversary of the Army with the Decree nº 2010/371 of December 2010 is an Anglo-Saxon university that offer courses exclusively in English with 05 special high schools that graduate thousands into the job market yearly and of course they do not fuse with the available skilled and technological oriented jobs available, thus unemployment is bound to be on rise. It is good to know that, graduates from these university turn to enrol for specialization in some private institution with colossal sum of money as fees while others register with the ministry of employment and vocational training (National Employment Fund) from where they can get more training which is not done in school, meanwhile others travel abroad for greener pasture as many had believed to be, and some engage in non-pedagogic teaching in lay private sectors from where the pay package is very minimal as its at times between 500 to 1000 FCFA per hour, leaving the weaker ones and/ those who cannot make it out become drug addicts, thieves, loiters, scammers and producers of fake documents and what they called 'pick pocket'.

A question that challenges academics, policy-makers and curriculum developers in education is deciding upon the sort of teaching and learning that students will need to meet the

profound social, environmental, economic and political challenges of the 21st century and to meet up with the skills needed by the job market. Indeed, this critical question for higher education was reflected in the decision of the United Nations to declare the Decade of Education for Sustainable Development (UNDESD 2005-2014). The UN's DESD highlighted the critical role of education at all levels as a driver behind the transformation of society from an unsustainable, to a sustainable path of development using education as a pathway.

2.3.2. Cameroons response to COVID-19

The COVID-19 out-break in the world took many nations by surprise and the risk of contamination were high. Consequently, on the instructions of the Head of State, an inter-ministerial consultation was held on 17 March 2020, to assess the situation and identify appropriate actions to be implemented.

At the end of this meeting, the President of the Republic instructed the following measures

As from Wednesday 18 March 2020, till further notice:

1. Cameroon's land, air and sea borders will be closed: consequently, all passenger flights from abroad will be suspended, with the exception of cargo flights and vessels transporting consumer products and essential goods and materials, whose stopover times will be limited and supervised: Cameroonians who wish to come back home should contact our diplomatic representations.

   The issuance of entry visas to Cameroon at the various airports shall be suspended

3. All public and private training establishments of the various levels of education, from nursery school to higher education, including vocational training centres and professional schools, will be closed;
4. Gatherings of more than fifty (50) persons are prohibited throughout the national territory;
5. School and university competitions, like the FENASSCO and University games are postponed;
6. Under the supervision of administrative authorities, bars, restaurants and entertainment spots will be systematically closed from 6 p.m.;

7. A system for regulating consumer flows will be set up in markets and shopping centres;
8. Urban and inter-urban travel should only be undertaken in cases of extreme necessity;
9. Drivers of buses, taxis and motorbikes are urged to avoid overloading: law enforcement officers will ensure they comply;
10. Private health facilities, hotels and other lodging facilities, vehicles and specific equipment necessary for the implementation of the COVID-19 pandemic response plan in Cameroon may be requisitioned as required, by competent authorities;
12. Public administrations shall give preference to electronic communications and digital tools for meetings likely to bring together more than ten (10) people;
12. Missions abroad of members of Government and public and para-public sector employees are hereby suspended;
13. The public is urged to strictly observe the hygiene measures recommended by the World Health Organization, including regular hand washing with soap, avoiding close contact such as shaking hands or hugging, and covering the mouth when sneezing.

These were difficult but necessary measures to ensure the protection of each and every one and to limit the spread of this pandemic. In case of need, the public was invited to call the toll-free number 1510 set up for the mobilization of rescue teams. The Government calls on the public not to panic, but to show discipline, solidarity and a sense of responsibility at a time when the whole world is going through difficult times.

2.3.3. Curriculum responses to COVID-19 and beyond

Curriculum conceived in the "new normal" has to provide students with the platform to understand unprecedented change and erratic times that allow them to connect with reality as they know it. Furthermore, it should also provide direction for curriculum policy and practice, and offer timely topics, informed by traditional school subjects, when confronted by a volatile and disturbing phenomenon like COVID-19. By being more responsive to learners' needs that extend beyond the classroom, a curriculum becomes relevant to dealing with change in contemporary times (Toquero 2020). Toquero (2020) recommends that schools: use evidence-based research to inform curriculum policy, provide accessible mental health and medical support services, incorporate

environmental and hygiene practices into revised curriculum policies, migrate to online learning, and upgrade teacher training for online-learning instruction. Specific to times of crises, curriculum change and development call for expert knowledge and skills—a repertoire that might be lacking among bureaucrats—which would involve substantial time and cooperation from teachers (Toquero 2020). On the bright side, COVID-19 has forced curriculum makers to critically reevaluate each subject in the school curriculum, though they may delay action until after the crisis subsides. Nevertheless, it is heartening to note that some states have identified irrelevant content and recommended the reduction of excessive assessment demands. It makes sense to maintain the aforementioned changes to the curriculum after the crisis has passed.

It is evident that schools are more likely to trim subjects in the humanities and social sciences, like history, geography, and literature, philosophy, among others, while leaving intact the high-status subjects like mathematics, science, and the languages. However, policymakers have overlooked content important to the lives of learners—such as life orientation and life skills—that educators could easily integrate into other subjects. To underscore our point: privileged subjects such as mathematics and science are timetabled more frequently than those that have more direct bearing on students' lives, such as life orientation and life skills (DBE 2020c, pp. 19, 22). It is imperative that educators outline clear and comprehensive guidelines for realizing the goals of the revised plan. Transparency and clear lines of communication are key to support the teachers, students, schools, and subject advisors (DBE 2020a).

Undoubtedly, teaching, learning, and assessment are at the center of curriculum changes during crisis times, too. Clearly, what matters is *who* makes these decisive curriculum decisions and to what purpose (Shay 2011). In a crisis, decisions about reforms and implementation of curricula tend to be vague and distorted, as they are outcome-based and political. We argue that, *especially* in times of crises, educators must make carefully considered and caring curriculum decisions. If they compromise key areas (planning, implementing, and attaining) of curriculum reform, and do not deliberate prudently on such changes, their decisions can result in compromised and misleading curricula.

Debarger et al. (2016) find decisive curriculum adaptation in crises can be an effective strategy to reform, adapt, and adopt a curriculum aligned with new visions to attain and sustain effectual teaching and learning goals. They further assume that changes in the curriculum and

pedagogy are moderately “evolutionary”, not “revolutionary”, i.e., they are not a radical departure from existing policies (2016, p. 69). Evolutionary reforms require a longer period for policy change and ask us to be patient. We have to take into account that some of the inequalities endemic to education have tested the patience of those who continue to exist from day to day without a fundamental change in sight to improve their lives.

2.3.4. Implications for curriculum revision

Despite the explicit intention to deal with the loss of education of millions of children through curriculum tinkering, the recovery plan does not offer much besides a reduction in content and in the number of assessments, and shifting content into the 2021–2022 school year. Although the plan mentions such principles underpinning the curriculum as equity and inclusion, there is no “plan” for effectuating the principles—the status quo remains and, in impoverished schools and communities, deepens inequality. We can trace the omission of an action plan to the failure to link curriculum design to residents’ demographic profiles. Educational attainment, after all, is strongly tied to social and cultural demography, the economy, and capital. COVID-19 has forcefully exposed some major weaknesses of the education system in Africa and in Cameroon in particular: some schools are unconducive to safe and effective teaching and learning; the absence of appropriate infrastructure, underqualified and inexperienced teachers complicate teaching and learning; and overcrowding is commonplace. The requirements for social distancing and prevention of disease spread may make schooling conditions better, temporarily, for teachers and students in overcrowded classrooms and schools.

Against the backdrop of poverty and massively unequal wealth distribution, it becomes clear that a one-size-fits-all recovery plan has the potential to intensify inequality. On the upside, the revision of the DBE policy forced curriculum makers to evaluate the curriculum critically. The policy’s revisions—those of curriculum trimming and curriculum reorganization—give an idea of how to begin to negate inequalities. For example, the COVID-19 crisis has forced a rethinking about what teachers teach. Immediate actions deriving from the trimming and reorganizing exercise should be the removal of outdated curricula and the insertion of relevant content, skills, and competencies. Short-term actions should focus on upskilling teachers so that they are able to make judicious curriculum decisions. Because most teachers do not have curriculum decision-making experience or capacity, the role of a school principal as curriculum leader becomes crucial.

However, in South Africa, an incumbent with a minimum of three years of teaching experience can apply for a leadership position, which means that curriculum selection and decision making are the functions of a novice. Successful curriculum revision will also require changes in the criteria for appointing school leaders.

While the curriculum reflects the historical power-inequalities that is experienced in some nationals like the dual educational system, apartheid in south Africa, the longer- term possibilities will require a turn to the notion of "powerful knowledge" to reduce educational inequalities. Young (2008, p. 12) refers to new socioeconomic divisions between the "knowledge haves" and the "knowledge have-nots", and between "knowledge of the powerful" and "powerful knowledge". In his words, "Knowledge of the powerful is defined by who gets the knowledge in a society" (p. 14), while powerful knowledge "refers not to the backgrounds of those who have most access to knowledge or who give it legitimacy" but "to what the knowledge can do or what intellectual power it gives to those who have access to it" (Young 2008, p. 14).

In other words, individuals from poor socioeconomic backgrounds need not lead a life of permanent existence on the margins—curriculum revisioning that is planned around the notion of "powerful knowledge" can reduce knowledge and socioeconomic inequalities. Accessing powerful knowledge is a fundamental right for all students and not a privilege for the children of the elite; the knowledge that is not available at home is the knowledge that should be acquired at school (Young 2008). Accessing powerful knowledge is about giving all learners from poorer schools, through curriculum revision, access to trustworthy knowledge of the world and opportunities to succeed in school and thereafter.

2.3.5. Curriculum modification and graduates acquisition of employability skills

A related study was conducted by Meyer et al. (2016). According to this study, the effects of educational interventions on the transition experiences of new graduates of Prelicensure programs is unclear. This study investigated the effect of curriculum revision on transition to practice of nursing graduates. The nursing curriculum can have a positive influence on professional and job satisfaction at 3 months' post-graduation, but the practice environment becomes the dominant force after that. Graduates who demonstrated poorer transition to practice at 3 months were more likely to leave their first positions by 12 months.

Another related study was conducted by Jamil, et al (2020). According to this study, for a country to support the transition of all economic sectors to a knowledge-driven one, attract foreign investment, and drive labor productivity, it is necessary to have access to skilled workforce. However, there is currently an insufficient talent supply and the workforce demand does not match the talent supply because of low graduate employability stemming from the low quality of higher education in Malaysia. To address this issue, this study proposed a conceptual framework to illustrate the perception of graduates towards the impact of curriculum design, the curriculum vision, the operationalization of the curriculum vision, the curriculum delivery, and curriculum evaluation, on employability competency. A sample of 299 employed graduates participated in this research. Smart Partial Least-Squares (SmartPLS) version 3 software was used to evaluate the hypotheses of the survey. The findings of this study reveal that curriculum design positively and significantly influenced employability competency. Hence, this study contributes important insights into the implementation of effective curriculum design, striking a balance between practical and theoretical bases, in private and public Higher Education Institutions (HEIs).

Another related study, was conducted by Ngulube in (2020). According to him, graduates with employability skills are considered as assets by employers because they are dynamic and adapt easily to today's work environment. Thus, higher education globally is under pressure to produce graduates who are employable and able to continue learning and remain employed. This study examined the extent to which the undergraduate economics curriculum in South Africa equips economics graduates with employability skills. This was achieved through a qualitative approach using a content analysis design. Data analysed from advertisements extracted from the Sunday Times for four consecutive years and data from six undergraduate economics study guides indicated that there was a disjuncture between undergraduate economics skills and those required by the industry. The analysed study guides only cover about 29.4 % of the needed skills in the labour market. It is imperative for higher education institutions to produce employable graduates because evidence demonstrates that employers today do not hire employees solely based on academic qualifications. Recommendations are that there should be an alignment between employability skills required in the labour market and those offered by the academic institutions. Curricula and pedagogy should also be adjusted to enhance graduate skills outcomes.

Another related study was conducted by Bridget and Smut, (2012). According to this study, the University of the Witwatersrand (Wits) changed its medical curriculum in 2003 from a traditional, six-year curriculum to an integrated, problem-based, four-year Graduate Entry Medical Program (GEMP), preceded by two years of basic and medical sciences at university level or a suitable undergraduate degree. The objective was to compare the preparedness for internship of Wits graduates from the old and new curricula on fifty-seven items grouped into nine categories which were identified during the development and validation of a Model of the Competent South African Intern. A stratified random sample of interns was drawn from the last graduates of the traditional curriculum and a matched sample of interns from the first graduates of the GEMP. Both quantitative and qualitative methods were used. For each sampled intern a supervisor, colleague and patient were selected by convenience sampling. A questionnaire was completed by interns, supervisors and colleagues followed by an interview to qualify responses at the extremes of the Likert-type scale and link them to curriculum learning opportunities. A semi- structured interview was conducted with patients and a global score allocated. The Cochran-Mantel-Haenszel Statistic for ordinal data was used. Comparisons were drawn between the competence of graduates from the traditional and GEMP curricula from the perspectives of interns, supervisors, colleagues and patients. Interview data were analysed using thematic analysis technique.

The findings showed a Significant difference were reported by interns in six of the nine categories. In one category, “fundamental theoretical knowledge” the GEMP graduates rated themselves significantly less prepared in the basic medical sciences (Pathology, Microbiology and Pathophysiology, $p=0.01$; Pharmacology, $p<0.0001$) but highly significantly better prepared in the theory of interpersonal communication, $p<0.000001$). The GEMP graduates rated themselves significantly better prepared in the other five categories, “medical problem solving” ($p=0.009$), “holistic patient management” ($p=0.0004$), “community health” ($p=0.0002$), “communication skills” ($p=0.02$) and “self-directed learning” ($p=0.0001$). Supervisors reported significant differences in “teamwork” ($p=0.045$) and “personal attributes” ($p=0.045$) giving fewer low scores to the GEMP graduates.

There were no significant differences between the category scores for colleagues. Qualitative analysis included vertical summaries of interview data and horizontal or comparative interpretations with quotations in order not to lose the voice of the interns, supervisors, colleagues

and patients. GEMP graduates rated themselves better prepared in those areas which had been identified as reasons for curriculum change but less prepared in specific basic medical sciences. Although these were not reported as significantly different by supervisors or colleagues they require attention. Other than this, according to the judgements of the informants, the competence of GEMP graduates was similar to that of traditional graduates in certain areas and significantly better in others, which appears to justify the major medical curriculum change undertaken at this University.

2.3.6. Teaching methods and graduate's employability skills

A study was conducted by Jane and Tabi (2013) wherein measuring the impacts of pedagogy on employability (2012) on employability policy and practice in higher education institutes was examined. The objective of this impact study was to determine whether (and how) Pedagogy for employability (2012) has influenced employability policy and practice in HEIs and, if so, at what level: individual, departmental or institutes. This impact study was conducted through a combination of desk research, consultations (face to face, telephone, and email) and via an online survey. The consultations were undertaken during February and March 2013, with the online survey being 'live' between 3 and 28 March 2013. The desk research included: data on Pedagogy for employability (2012) downloads via the HEA website; requests received by the HEA for hard copies of Pedagogy for employability (2012) and online research to identify where Pedagogy for employability (2012) has been cited and/or referenced. The results of the study showed that a majority of survey respondents believed that pedagogy for employability (2012) had influenced/impacted the employability policy or framework at their institution. Moreover, pedagogy helped to inform curriculum design in most institutions, leading to the embedding of employability development within programs. Furthermore, researchers confirmed that pedagogy for employability is an important source of information on important ideas about employability development within the higher education sector.

Moreover, Erik (2014) conducted an innovative perspective on teaching and learning in higher education in the 21st Century. The current perspective on our society as a learning society implies that education must focus more than has been traditionally the case on fostering in student's adaptive competence, this implies that the ability to apply meaningfully learned knowledge and skills flexibly in a variety of contexts. Based on the available research this article first discusses

the question: What should students learn to acquire adaptive competence in a domain? It is argued that developing adaptive competence requires the acquisition of several cognitive, affective, and motivational components, namely a well-elaborated domain-specific knowledge base, heuristic methods, met knowledge of one's cognitive functioning, motivation and emotions, self-regulation skills for regulating one's cognitive, motivational and emotional processes, and positive beliefs about oneself as a learner and about learning in different domains. Next, the questions are addressed: What are the characteristics of productive learning processes for acquiring adaptive competence? In this respect, the view of learning is presented as a Constructive, Self-regulated, Situated, and Collaborative (CSSC) process of knowledge and skill-building. From a teaching perspective, this leads to the question.

Again in Edinyang et al. (2015), academic factors and graduate's employability in Nigeria. The researchers carried out this study with the main purpose to investigate the influence of academic factors on graduate employability in Nigeria, specifically the case of Calabar, Cross River State. To achieve this objective, the researchers formulated two null hypotheses to guide the study. They further adopted the ex-post facto research design for the study. An accidental or convenient sampling technique was exploited in the selection of the samples. They made use of a total of 150 respondents in the study. The major instrument for data collection was a four-point Likert scale questionnaire titled Academic Factors and Graduate Employability Questionnaire (AFGEQ). It was designed by the researcher with the aid of five research experts to establish its validity and reliability. The split-half method of reliability was used to test reliability. Pearson product-moment correlation coefficient and Spearman-Brown Prophesy Formula coefficient derived after correlating the outcomes were 0.789 and .882 respectively.

2.3.7. Evaluation redesign and graduate's employability

A related study was conducted by Abumalloh, (2018). According to this study, graduate employability is a critical issue in Higher Education. Employers are expecting not only the subject knowledge from the students to compete with the current industry demands, but also additional skills to face corporate battles and challenges. The aim of this research is to identify the skills demanded by the employers and to incorporate them in the learning outcomes of higher education. This research aims to review and analyses all the papers published from 2010 until now regarding the evaluation of graduate students from employers' perspectives. This subject has been rarely

touched in literature and needs more focus regarding to its importance for both education institutions and employers. Papers were collected from different databases and carefully analyzed by the authors. Different classification methods were done. The results were analyzed. The results indicate that there is a gap between the learning outcome and the employability skills

According to Papadopoulos (2013) evaluation of an ICT skills program enhanced graduate capabilities and employability. This paper reports on the impact and benefits of integrated business learning (IBL) on student learning in vocational Information Communication Technology (ICT) courses. Student reactions to learning experiences located in workplaces and those that model work-practices are explored through experiential learning theories and employability models. Using surveys, in-depth interviews, and focus groups, the student's voice is captured and triangulated with teacher and industry practitioner observations of student capabilities and employability. The findings showed that students highly value and benefit from IBL program provides meaningful connections to the real world of work. Learners are motivated by structured and tailored experiences that provide a strong alignment between the curriculum and professional practice, providing opportunities for both personal and professional development.

Pieto (2020) verified if a broad programs evaluation enhances the employability of graduates. Using data on a large sample of recent Italian graduates, this paper investigates the extent to which participation in study abroad programs during university studies impacts subsequent employment likelihood. To address the problem of indigeneity related to participation in study abroad programs, the researcher combined the fixed effects and instrumental variable estimation where the instrumental variable was exposed to international student exchange schemes. The results of these estimates showed that evaluating abroad program has a relatively large and statistically meaningful effect on the probability of being employed three years after graduation. This effect is mainly driven by the impact that studies abroad programs have on the employment prospects of graduates from disadvantaged (but not very disadvantaged) backgrounds, though positive but imprecise effects are also found for graduates from advantaged backgrounds.

Radhwa et al. (2016), evaluated the internship program in improving graduate’s skills and marketability among Arabic language students in International Islamic University Malaysia (IIUM) from the perspective of Malaysian job market. This study was focused on the investigation

of the performance of an internship training program in the Department of Arabic Language and Literature, at IIUM. Methodologically, this study was conducted to congregate the opinions and experience of internship program among Arabic language and literature students. The participants were purposively selected from 57 students who have completed their three months' internship either in the public or private sector from June to September 2015 by using an online survey and open-ended questionnaires. General findings from this study showed that internship training programs had essentially improved their soft skills and increased their work-place literacy and well-being.

According to another study by Somalrot, (2009) tiled an evaluation of the curriculum of a graduate program in Clinical Psychology Abstract Introduction. The objective of this study was to evaluate the Master's Degree program in Clinical Psychology, offered by the Department of Psychiatry, Faculty of Medicine, Siriraj Hospital, Graduate Study, Mahidol University. He employs the CIPP Model to evaluate the program. The sample consisted of 44 lecturers, 36 current students, 56 graduates and employers of 56 graduates. Data was collected using questionnaires and by an informal interview. Content analysis and descriptive statistics were used for analysis. The results state shows that research findings in the context evaluation indicated that the curriculum objectives were clearly stated, practice oriented and corresponded to social needs. The curriculum structure was well designed. The instructional and evaluation activities corresponded to the curriculum objectives. The input evaluation showed that the students who attended the program found the selection criteria appropriate. The graduates' readiness was found to be high. The results show that the working committee and lecturers could conduct the course successfully. The educational resources were available to serve the teaching and learning process. However, some of the resources were not adequate. With regard to the process evaluation, the operation instruction and evaluation process were very good. Product evaluation suggests that graduates have achieved the general and specific competencies as mentioned in the program objectives.

SUMMARY OF THE LITERATURE

The literature examined for this study is presented in four phases. The examination of the higher education system in order to create a familiar framework that identifies studies related to the reality of the area. The higher education landscape was examining so that it will guide the researcher in the literature that relates to the characteristics of the system. It is followed by the main

concepts that surrounds the study. these concepts were crises-sensitive educational planning and its components (indicators). It shows that in planning for crises-sensitive education, the experts are expected to priorities the curriculum, teaching method and evaluation styles. A succinct explanation of and connection of the theories to the study is done and followed by the empirical studies. Here the related studies of earlier researchers were examined and summarized as a base on which the present study has to settle.

CHAPTER THREE
RESEARCH METHODOLOGY

Research methodology describes the procedure to be followed in realizing the goals and objectives of a research (Ogolo, 1995). This chapter is focused on the description of the methods and instruments used to collect information for this research work. It treats the research design, the area of study, population of study, target population, accessible population, the sample and sampling techniques, instruments used for data collection, techniques of analyzing data, the variables, the indicators and recapitulative table.

3.1. Research Design

A research design is the procedures for collecting, analyzing, interpreting and reporting data in research studies (Creswell & Clark, 2007). It sets the procedure on the required data, the methods to be applied to collect and analyze these data, and how all of this is going to answer the research question (Grey, 2014). This study adopts survey research design. A survey looks at the individual, groups, institutions, methods and materials to describe, compare, contrast, classify, analyse and interpret the entities and events in the field, (Cohen et al, 2007). The survey is employed in this study to enable the researcher study a large population and have a greater statistical power. Moreover, it gives the researcher the ability to collect a large amount of information and having the availability of validated models. The type of survey used in this study is descriptive survey. The descriptive survey is chosen because it enables the researcher to collect data at a particular point in time to describe the nature of the existing phenomenon; identify standards against which this existing phenomenon can be compared. It also helps us to scan a wide field of issues, population, institutions and programs to describe or measure any generalized features. It further helps us to assure objectivity and generalization of findings.

3.2 Area of the Study

The area of the study refers to the geographical location of the population to be studied. It may also imply the time or period of the research work. This study was limited to the Centre Region. This region was used because it forms the seat of education in Cameroon. It breads several higher institutions and the oldest among all the universities in Cameroon. It is also endowed with many teaching learning institutions from nursery through primary, secondary to tertiary education. It gives opportunities for everyone to learn at any level at any time. The University of Yaoundé I

(French: *Université de Yaoundé I*) is a public university in Cameroon, located in the capital Yaoundé. It was formed in 1993 following a university reform that split the country's oldest university, the University of Yaoundé, into two separate entities: the University of Yaoundé I and the University of Yaoundé II. The University of Yaoundé I, consists of: the Faculty of Arts, Humanities and Social Sciences, the Faculty of Sciences, the Faculty of Medicine and Biomedical Sciences. The higher teacher's Training College of Yaoundé HTTC. The National Advanced School of Engineering. The Higher Teacher's Training Technical School of Ebolowa. The main university complex is Ngoa-Ekelle with several satellite campuses elsewhere. Our study is focused on the main university complex is Ngoa-Ekelle.

3.3 Population of the study

A research population is a set of all the unites (people, events, things) that possess variable characteristics under study and for which the findings of the research can be generalized (Shukla, 2020). The population of this study involves all graduates of the University of Yaoundé I. Criterial for participation; you must be a graduate from the university, you must have stayed in the job market for at least six months and you graduated from the university during or after the Covid19 crises. A situation that permits them to have a mastery of the phenomenon. From 2019/2022 academic year.

…

The population threshold

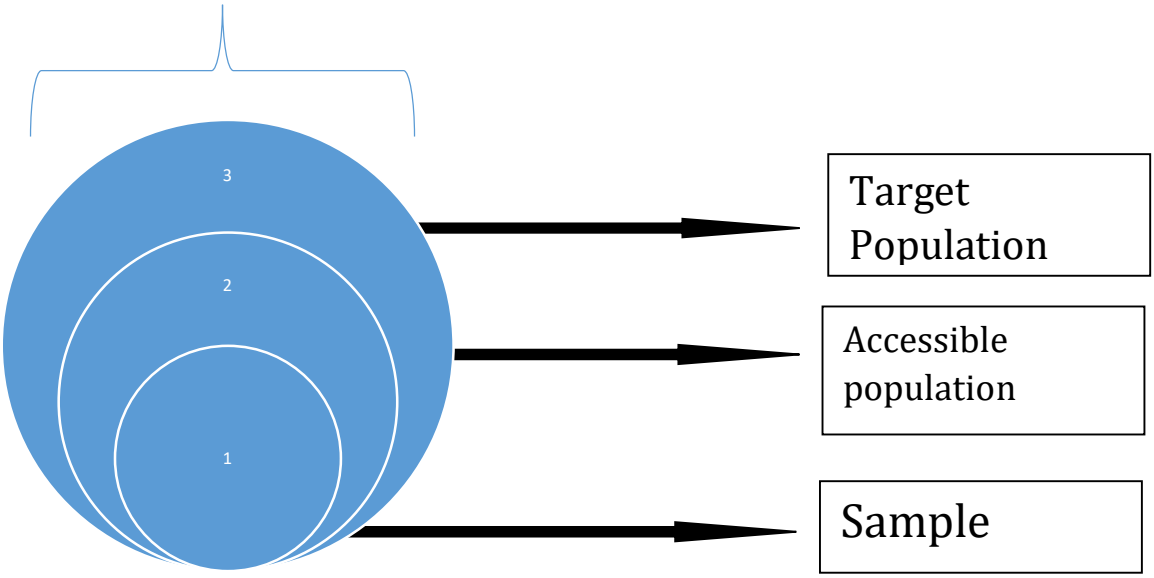


Figure 5: Diagrammatical Representation of Population, Accessible Population and Sample of the Study

Source: Adapted from Amin (2005, p. 236)

Figure 2 is a demonstration of the respective population levels, sub-divided in order to make sure the right participants are met. These three levels are examined below.

3.3.1. Target population

Fraenkel and Wallen (2006) opined that the target population is the actual population to which the researcher would like to generalize its findings, (it is the researcher's ideal choice). In the University of Yaoundé, I, 03 Faculties were target. These 3 were the Faculty of Science (FS), Faculty of Arts, Letters and Social Sciences (FALSH), and the Faculty of Education (FSE). We selected these 3 Faculties because the graduates from these faculties were the most available in the job market. Moreover, the willingness and readiness of these departments to collaborate for the study. Incidentally, the population of these 3 selected Faculties make up about 80% of the entire population of the whole university.

…

Table 1: Presentation of target population

	Faculty	Graduates	Total
1	Faculty of Education (FE)	110	110
2	Faculty of Arts letters and social sciences (FALS)	164	164
3	Faculty of Science (FS)	151	151
	Total	**425**	**425**

Source: Field work, 2023

3.3.2. Accessible population

Accessible population refers to the portion of the target population to which the researcher has reasonable access and from which sample can be drawn (Onen, 2020). The accessible population of this study was made up of the graduates from the 3 Faculties who were present at the National Employment Fund (NEF) at the Regional Office (Fouda) and sub-office (Mvolye) in Yaoundé searching for jobs and others taking some training programs for job placement. We used the NEF because it is the existing state center for short training and job placement in Cameroon highly recommended to graduates. Graduates from all level therefore turn to them in search of jobs.

Table 2: Presentation of accessible population

S/N	FACULTY	GRADUATES		TOTAL
		MALE	FEMALE	
1	Faculty of Education	45	49	94
2	FALSH	30	39	69
3	FS	51	33	84
	TOTAL	**126**	**121**	**247**

Source: field work, 2023

3.4. Sample size

Onen (2020), opined that a sample is the selected elements (people or objects) procedurally chosen for participation in a study to represent the target or accessible population). Hence it is the

reduced number of schools and teachers from the accessible population for the current study. This is because it is not possible to collect data from the whole targeted and accessible population. From the accessible population, the researcher used the Krejcie and Morgan table to select this sample, from where we came out with a sample of 147 participants for this study**.**

3.4.1. Sampling Techniques

Sampling technique is the manner in which an appropriate sample size is selected for the wider study (Bryman, 2012). In this study we adopted the accidental sampling technique. This is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. Here the research chose the samples based on convenience. In the process, the researcher identified the population and decided on the sample size, next the researcher also decided on the criteria that were used for selection. Here, the criteria for selection were; the participants must be graduates from the university of Yaoundé I, who learnt in the university during the crisis, who have been in the job market for at least six months, living in the city of Yaoundé.

3.5. Instrumentation

To show that the assumption made in this study is built on solid ground and to accomplish the research aims, questionnaires were designed for graduates. The principal instrument of data collection in this research are questionnaires administration.

Questionnaire

A questionnaire is a series of questions ask to an individual to obtain statistical useful information about a particular topic (Satya, 2012). To add to this definition, a questionnaire can be typed or printed in a definite order or form and can be distributed directly or mailed to respondents who are expected to read, understand the questions, then write down the reply in the space meant for the purpose in the questionnaire itself. The questionnaire was design to meet the demands of some of research questions underpinning this study. The tool was chosen for the simple reason that it creates room for the respondents graduates to express their opinions in terms of the way examination malpractices take place and how it could affect school quality. Moreover, it is to some extent a fast means of obtaining sizable information.

Description of Questionnaires

The questionnaires were conceived for graduates. It consisted of 22 items. They were all constructed along the pattern of a four point Likert scale: Strongly agree (SA), Agree (A), Strongly disagree (SDA), Disagree (DA), based on the research variables as was presented (see Annex). We used the four point Likert scale because it enables convenient data input and analysis, it further does not permit participant who have no idea to partake in the study because such participants do not have a numerical value. Every questionnaire was made up of closed-ended questions and was anonymous. They were designed into five sections as follows:

Section A: comprised of questions based on the identification of informants. Under this section, the researcher asked questions relating to personal profiles such as: name, level of education, employment Status, gender, age, et cetera. **Section B**: was comprised of questions relating to curriculum modification. **Section C:** comprised of questions relating to modification of teaching methods. **Section D** comprised of questions relating to evaluation methods and **Section E** comprised of questions relating to employability skills.

Table 3: Presentation of variables and corresponding items on the questionnaire

HYPOTHESES	ITEMS
Curriculum modification	4-9
Modification of teaching method	10-14
Redesigning Evaluation	15-19
Graduates employability skills	20-22

Source: Present Research (2023)

3.6 Validity of the research instruments

The validation process was done in two phases: the first phase sealed off the presentation of the questionnaires and the interview guide to the research supervisor. After a thorough inspection of this instrument, he brought in some corrections and modifications before giving his approval for them to be administered. The second phase of it consisted of doing the necessary corrections following the instructions of the research supervisor, that which was done, before they were ready to serve the purpose for which they were intended.

Face validity

To ensure face validity was enhanced, the instruments were presented to senior students, friends who gave their views and the final version was presented to the researcher's supervisor for a cross examination and scrutiny to which some items were rephrased and some dropped. This was done to ensure clarity of questions to enable the respondents answer with ease. Amin (2005) considers face validity to be at the lowest level of validity.

Content validity

The researcher also made use of content validity. After operationalizing the independent and dependent variables, the researcher used the indicators to construct the questionnaire and interview guide which was handed over to the supervisor who examined the validity of its content. Thus content validity which was ascertained by the different corrections made by the research supervisor upon design by the supervisor upon design of the questionnaire and pre-administered to a group of students.

Reliability

Reliability is the degree to which an instrument consistently measures whatever it is supposed to measuring (Amin 2005). This study adopts the pilot test to verify the reliability of the tool

The Pilot Test

A pilot study can be defined as a 'small study to test research protocols, data collection instruments, sample recruitment strategies, and other research techniques in preparation for a larger study' (Zailinawati, Schattner & Danielle, 2006). A pilot study is one of the important stages in a research project and is conducted to identify potential problem areas and deficiencies in the research instruments and protocol prior to implementation during the full study. It can also help members of the research team to become familiar with the procedures in the protocol, and can help them decide between two competing study methods, such as using interviews rather than a self-administered questionnaire. The pilot study can reveal the ambiguity, and poorly elaborated questions.

Questions that are not understood and unclear can indicate whether the instructions to the respondents are clear. The outcome of this pilot study enabled the researcher to eliminate and refine certain items in the questionnaire. A pilot test was carried out by the researcher using graduates from the university of Yaoundé II SOA. The researcher obtained permission through an attestation of research from the head of department and the Dean of the Faculty before going to the field. At

the field graduates were chosen because they also had online teaching especially during the COVID-19 period and their experiences gave them the knowledge to respond to the questions conveniently. These graduates were chosen using the snow ball sampling technique where one was identified and from her, we could get in contact with other who met up with our research criteria. From their responses, it was indicated that the questionnaires were up to what it was intended to measure except for some very few that were readjusted. According to Saughmessy and Zechmeister (1990), an instrument is reliable when it measures what it is intended to measure consistently. Hence the reliability of the instrument was verified. The reliability is the degree to which the instrument consistently measures whatever it is supposed to measure.

Table 4: Scale: all variables

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

a. List wise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.823	20

3.7 Administration of Instruments

Questionnaire Administration

The researcher collected the research authorisation from the dean. When we presented the research authorisation to the directors of the national employment fund. He validated and handed us over to the chief of service in charge of training and job placement. He gave us the permission to meet with the graduates who come visiting in search for jobs. The questionnaires were distributed to 147 participants (graduates). We used the face to face method, in which case, we distributed the questionnaires to our sampled research population who were then expected to fill them and return to us. In fact, this exercise helped us to have statistical or measureable data that

contributed enormously in giving this work the scientific credibility that it deserves.

3.8 Ethical Consideration

In contemporary education studies, all researchers are expected to apply, respect ethical principles and guidelines when research involves human subjects (international commission for world health organization CIOMS 2002). This is because other researchers and those reviewing or supervising research would also find such helpful to themselves (Bailey, 1988). According to Gustafsson, Hermaren and Peterson (2005), areas of ethical concerns are lack of informed consent, plague with inversion of privacy, deception and harm to participants. Ethical issues have to do with respect for lives, persons, human dignity and justice. According to (Amin, 2005),

> *Ethics refers to well based standards of right and wrong that prescribe what humans ought to do usually in terms of rights, obligations, benefits to society, fairness, or specific virtues… ethical standards support the virtue of honesty, compassion and loyalty and include standards relating to rights such as the right to life, the right to freedom from injury and the right to privacy (p. 28)*

This takes place in four different stages of the research process; the choice of the topic, data collection, analysis, interpretation and thesis writing. In this study, we ensure ethics in these four parts; in the research topic, all cautionary motives were taken into consideration, in order to avoid stumbling on a topic that could harm or put both the university community and research participants in any inconveniencies. In order to achieve this, an explorative study was conducted to test the suitability of the topic and to find out if it is sensitive to the scientific world or not.

At the level of data collection, the methodology, techniques and tools used were chosen with reasons, and further pretested during the explorative study before they are finally employed in the study. This was purposefully to avoid straying into research participant's privacy in one way or the other. While in the field, the main instrument that was used to give every informant their rights in the informed concerned form. This form was presented in two parts, part A presented the information about the research work and B presented information on participant's engagement on the whole exercise. The document was handed to participants and some verbal explanations were made after which they fixed day and place for the interview according to their convenience. On data analysis, our tools did not give any gap for the participants to put their names, so all responses were unanimous.

Data analysis technique

Debriefings were made immediately after every field working day. Here, data collected was categorized into sub-themes; carrying different, but related nomenclatures. The sub-themes in question will be constructed around the research variables; be they independent or dependent and general or specific. However, this research action is co-relational in nature; treated in a socio-constructivist's perspective. Two analytical approaches were adopted; that is, *content analysis* which concerns itself with the description and explanation of highly qualitative data and the *Pearson statistical* technique was used to analyse quantitative data. In this light, the theory of Education was considered. In effect, the *comprehensive paradigm* which has to do with the adoption of the phenomenological attitude in the interpretation of reality were adopted.

With the use of these approach and paradigm, only the essentials will be sorted and dealt with so as to arrive at the testing of the departure hypotheses and to the accomplishment of the objectives of the present research project. In that light, responses will be coded numerically and written down in relation to our specific objectives as provided by the different research participants. In some cases, however, percentages will be used to demonstrate the magnitude of certain opinions for visibility and comparative reasons. It is also worthy to point out that information from qualitative data here contained is directly reported.

Quantitative data that dominated in this work was analyzed statistically in the form of ratios, proportions, frequencies and percentages. Tables, pie charts histograms and graphs will also be provided to reflect research participants' responses to each of the items of the research objectives.

Method of Data Analysis

Both descriptive and inferential statistics are used to analyze the responses and verify the hypotheses. Tables, percentages, charts, mean, standard deviations will be used to analyze the data. Also the Statistical Package for Social Sciences (SPSS) version 21.0 will be used for data analysis.

In this particular study, data analysis consisted of a combined statistical tool to analyze the data obtained from the experiment and the survey. To organize and give meaning to our data, we use various statistical tools: descriptive statistics, mean, standard deviation, the Pearson P Correlation Coefficient. To describe our data analysis techniques, we will follow the steps by

explaining what we did and the statistical tools involved. Quantitative data analysis of this study involved two major steps:

Data preparation in which data was logged, checked for accuracy, and entered into the computer using SPSS, which is designed to analyze, display, and transform data (Trochim& Donnelly, 2007). Data organization was developed and documented in a database structure that integrates the various measures present in the data (Trochim& Donnelly, 2007). The survey consisted of questionnaire administration in the various school of our sample. Surveys are the primary source for data collection of this nature. In so doing, the results from the 4-point Likert scale questions of the survey were analyzed using SPSS software. Frequencies of distribution such as frequency tables (Trochim& Donnelly, 2007) were used to describe multiple variables such as standardized test scores and demographic data. The central tendency of a distribution "is an estimate of the centre of a distribution of value" (Trochim& Donnelly, 2007, p. 266) used to determine and describe the median of sets of values of the data that require this approach. Ranges, which are measures of dispersion in a frequency distribution (Trochim& Donnelly, 2007) were also used to describe the variability of data values. To do this, researchers summarize the data, so that readers can construct a mental picture of the relationship between the data and the phenomena under study.

Descriptive Statistics

According to Muijs, (2004), constant interest in data analysis is to efficiently describe and measure the strength of relationships between variables. In this regard, descriptive statistics describe such relationships.

The Pearson moment correlation test

The correlation coefficient was used to test our research hypotheses. The purpose was to measure the degree of association between the independent variables in our research hypotheses and student's performances, symbolize by the correlation coefficient. The correlation coefficient is a simple descriptive statistic that measures the strength of the linear relationship between two variables (Amin, 2005). The value of the correlation coefficient r ranges from -1 for a perfect negative correlation, to +1 for a perfect positive correlation. The degree of association between two variables is described by the coefficient of correlation, which indicates the strength of this association. In this study, to determine existing relationships between two variables, the researcher

used the Pearson's r correlation coefficient because the purpose of this study is to predict the dependent variable from the independent variable.

In so doing, the Pearson Product Moment Correlation coefficient was used because the data in this study are parametric, that is, its interpretation does depend on the population fitting a parameterized distribution. This means that the quantitative data in this study numerical interpretation. The researcher also preferred to use parametric statistics because there is generalization of the results of this study to a larger population.

Interpreting Pearson's Product Moment Correlation Coefficient

The usefulness of the correlation depends on its size and significance (Muijs, 2004). If r reliably differs from 0.00, the r-value is statistically significant, that is, does not result from a chance occurrence, implying that if the same variables were measured on another set of similar subjects, a similar r-value would result. If r achieves significance, it is possible to conclude that the relationship between the two variables was not due to chance. According to Muijs (2004), the size of any correlation generally evaluates as follows:

Table 5: Table showing correlation values and their interpretations

Correlation value	Interpretation
0.00	No relationship
0.01 to 0.19	Very Low
0.20 to 0.39	Low
0.40 to 0.59	Moderate
0.60 to 0.79	High
0.80 to 0.99	Very High
1.00	Perfect

Source: Class work (2020)

On the other hand, it is important to state that correlation does not imply causation. In this regard, just because one variable relates to another variable does not mean that changes in one cause changes in the other. In other words, other variables may be acting on one or both of the related variables and affect them in the same direction. Cause-and-effect may be present, but correlation does not prove cause (Fraenkel and Wallen, 2000). In this study, the researcher was not

interested in verifying if the occurrence of one variable caused or increased the occurrence of the other variable. The researcher was only interested in determining the strength of the correlation between the variables.

***Coefficient of Determination (r^2)*:** The relationship between two variables can be represented by the overlap of two circles representing each variable. If the circles do not overlap, no relationship exists. The area of overlap represents the amount of variance in the dependent (y-variable) than can be explained by the independent (x-variable). The area of overlap called the percent common variance, calculates as r^2*100.

As far as interview is concern, the researcher interviewed the respondent and took down pertinent points based on the objective of the research. At the end of the interview the content was analysed qualitatively.

Variables and operational definitions

The major variables employed in this study are the dependent and independent variables.

Dependent variable

The dependent variable is also known as the criterion variable. The researcher's goal is to examine how the dependent variable effects the independent variable; explain its variability and make predictions. In our study, the dependent variable is graduates employability skills.

Independent variable

An independent variable on the other hand is also known as the predictor variable or explanatory variable. It is the one that influences the dependent variable and it is the presumed cause of the variation in the dependent variable(s). It thus explains or accounts for variation (s) in the dependent variable. The independent variable in this study is crises sensitive educational planning.

Table 6*: *The recapitulative table of the hypotheses, variables, indicators, modalities, measurement scale and statistical test.

The General Hypothesis	The Research Hypotheses	The indicators	The modalities	The Dependent Variable	The Measurement scale	Statistical test
Ha0: There is a relationship between crises-sensitive educational planning and graduates acquisition of employability skills	**Ha1:** There is a relationship between curriculum modification and graduates' acquisition of employability skills	Curriculum modification	content knowledge, the method of instruction, and student's learning outcomes, through the alteration of materials and programs. extraction of some content, focus on competences	Graduates acquisition of employability skills	4-points Likert scale	Spearman rank correlation
	Ha2: There is a relationship between teaching method modification and graduates 'acquisition of employability skills.	Teaching/learning material	Text and exercise books, pens, pencils, math sets, computer, projectors, internet connection, accessibility, usability, space, equipment,	Graduates acquisition of employability skills	4-points Likert scale	Spearman rank correlation
	Ha3: There is a relationship between redesigned evaluation method and graduates' acquisition of employability skills	redesigned evaluation	Online assessment, computer assessment, oral	Graduates acquisition of employability skills	4-points Likert scale	Spearman rank correlation

Table 1: The recapitulative table of the hypotheses, variables, indicators, modalities, measurement scale and statistical test

Source: This study (2023)

This chapter presents the areas of the study, research design, population, instruments, validity and reliability and the dada analysis technique. This chapter presents the methodology that enables us conduct this research. It ushers us to chapter four.

CHAPTER FOUR
PRESENTATION OF RESULTS AND DATA ANALYSIS

This chapter is divided into 2 main parts: the first part deals with the presentation of descriptive statistics in percentages and frequency tables, the second part deals with the verification of the hypotheses postulated. The verification of hypotheses includes the choosing of an appropriate statistical test. In the case of this study, the spearman rank correlation will be used to test the hypotheses of this study.

4.1. Data analysis frequency tables

4.1.1. Analysis of General Information

Table 7: Presentation of Respondents' Personal Information

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	100	68.0	68.0	68.0
	Female	47	32.0	32.0	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

From the above table, it reveals that 100 participants were male, making 68.0 percent participation, 47 participants were female making 32.0 percent participation. These culminates to 147 participants, making 100 percent participation of the sample size.

Table 8: Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	120	81.6	81.6	81.6
	Masters	17	11.6	11.6	93.2
	PhD	10	6.8	6.8	100.0
	Total	147	100.0	100.0	

Source: field data (2023)

From the above table, 120 participants had bachelors' degree, making 81.6 percent participation, 17 participants had master degree, making 11.6 percent. And 10 participants had doctorate degree holders, making 6.8 percent participation. These culminate to 147 participants, making 100 percent participation of the of the sample size.

Table 9: Faculties

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FSE	46	31.3	31.3	31.3
	FALSH	59	40.1	40.1	71.4
	FS	42	28.6	28.6	100.0
	Total	147	100.0	100.0	

Source: field work 2023

From the table, 46 participants were from the FSE, making 31.3 percent participation, 59 participants were from FALSH, making 42 percent participation and 42 participants were from FS, making 28.6 percent participation. This culminates to 147 participations, making 100 percent participation of the sample size.

4.1.2. Analysis of the Independent Variable

Table 10: All outdated parts of our curriculum were removed during the crises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	70	47.6	47.6	47.6
	Disagree	72	49.0	49.0	96.6
	Agree	2	1.4	1.4	98.0
	Strongly Agree	3	2.0	2.0	100.0
Total		147	100.0	100.0	

Source: field data (2023).

Table 10 is designated that all outdated parts of our curriculum were removed during the crises. According to this table, 70 participants strongly disagree that all outdated parts of our curriculum were removed during the crises, making 47.6 percent participation. 72 participants disagree that all outdated parts of our curriculum were removed during the crises, making 49.0

percent. 2 participants agree that that all outdated parts of our curriculum were removed during the crises, making 1,4 participants and 3 participants strongly agree that that all outdated parts of our curriculum were removed during the crises, making 2.0 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 11: The extended parts of the curriculum were removed from the program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	50	34.0	34.0	34.0
	Disagree	93	63.3	63.3	97.3
	Agree	2	1.4	1.4	98.6
	Strongly Agree	2	1.4	1.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 11 is designated that the extended parts of the curriculum were removed from the program. According to this table, 50 participants strongly disagree that the extended parts of the curriculum were removed from the program, making 34.0 percent participation. 93 participants disagree that the extended parts of the curriculum were removed from the program, making 63.3 percent. 2 participants agree that that the extended parts of the curriculum were removed from the program, making 1.4 participants and 2 participants strongly agree that that all outdated parts of our curriculum were removed from the curriculum, making 1.4 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 12: Only the core parts of the curriculum was left for us to focus during the crises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	59	40.1	40.1	40.1
	Disagree	81	55.1	55.1	95.2
	Agree	6	4.1	4.1	99.3
	Strongly Agree	1	.7	.7	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

From the above the table, 59 participants strongly disagree that only the core part of the curriculum was left fort us to focus during the crises, making 40.1 percent participation. 81

participants disagree that only the core part of the curriculum was left for us to focus during the crises, making 55.1 percent. 6 participants agree that only the core part of the curriculum was left for us to focus during the crises, making 4.1 participants and 1 participant strongly agree that only the core part of the curriculum was left for us to focus during the crises, making 0.7 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 13: A very flexible teaching model was designed for us to covered the program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	53	36.1	36.1	36.1
	Disagree	88	59.9	59.9	95.9
	Agree	4	2.7	2.7	98.6
	Strongly Agree	2	1.4	1.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

From the above table, 53 participants strongly disagree that a very flexible teaching model was designed for us to covered the program, making 36.1 percent participation. 88 participants disagree that the a very flexible teaching model was designed for us to covered the program, making 59.9 percent. 4 participants agree that the a very flexible teaching model was designed for us to covered the program, making 2.7 participants and 2 participants strongly agree that a very flexible teaching model was designed for us to covered the program, making 1.4 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 14: My school curriculum reorganized to suit the 21st C. employability skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	64	43.5	43.5	43.5
	Disagree	76	51.7	51.7	95.2
	Agree	5	3.4	3.4	98.6
	Strongly Agree	2	1.4	1.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

From the above table, 64 participants strongly disagree that my school curriculum reorganized to suit the 21st C. employability skills, making 43.5 percent participation. 76

participants disagree that my school curriculum reorganized to suit the 21st C. employability skills, making 51.7 percent. 5 participants agree that my school curriculum reorganized to suit the 21st C. employability skills, making 3.4 participants and 2 participants strongly agree that my school curriculum reorganized to suit the 21st C. employability skills, making 1.4 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 15: The curriculum was planned to be covered for the four semesters

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	99	67.3	67.3	67.3
	Disagree	46	31.3	31.3	98.6
	Agree	2	1.4	1.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

From the above table, 99 participants strongly disagree that the curriculum was planned to be covered for the four semesters, making 67.3 percent participation. 46 participants disagree that the curriculum was planned to be covered for the four semesters, making 31.3 percent. 2 participants agree that the curriculum was planned to be covered for the four semesters, making 1.4 participants. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 16: Lecturers used student centered teaching methods in all the courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	46	31.3	31.3	31.3
	Disagree	95	64.6	64.6	95.9
	Agree	6	4.1	4.1	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 16 is designated that lecturers used student centered teaching methods in all the courses. According to this table, 46 participants strongly disagree that lecturers used student

centered teaching methods in all the courses, making 31.3 percent participation. 95 participants disagree that lecturers used student centered teaching methods in all the courses, making 64.3 percent. 6 participants agree that lecturers used student centered teaching methods in all the courses, making 4.1 participants. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 17: The digital teaching methods were employed for all courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	41	27.9	27.9	27.9
	Disagree	102	69.4	69.4	97.3
	Agree	3	2.0	2.0	99.3
	Strongly Agree	1	.7	.7	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 17 is designated that the digital teaching methods were employed for all courses. According to this table, 41 participants strongly disagree that the digital teaching methods were employed for all courses, making 27.9 percent participation. 102 participants disagree that the digital teaching methods were employed for all courses, making 69.4 percent. 3 participants agree that the digital teaching methods were employed for all courses, making 2.0 and 1 participants strongly agree that the digital teaching methods were employed for all courses participants making 0.7 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 18: Lecturers used students-teacher's interaction method during lessons

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	63	42.9	42.9	42.9
	Disagree	77	52.4	52.4	95.2
	Agree	6	4.1	4.1	99.3
	Strongly Agree	1	.7	.7	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 18 is designated that the lecturers used students-teacher's interaction method during lessons. According to this table, 63 participants strongly disagree that the lecturers used students-

teacher's interaction method during lessons, making 42.9 percent participation. 77 participants disagree that the lecturers used students-teacher's interaction method during lessons, making 52.4 percent. 6 participants agree that the lecturers used students-teacher's interaction method during lessons, making 4.1 and 1 participants strongly agree that the lecturers used students-teacher's interaction method during lessons, making 0.7 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 19: The teaching methods used by lecturers motivated goal-orientated behavior among students and prepared

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	57	38.8	38.8	38.8
	Disagree	81	55.1	55.1	93.9
	Agree	8	5.4	5.4	99.3
	Strongly Agree	1	.7	.7	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 19 is designated that the teaching methods used by lecturers motivated goal-orientated behaviour among students and prepared. According to this table, 57 participants strongly disagree that the teaching methods used by lecturers motivated goal-orientated behaviour among students and prepared, making 38.8 percent participation. 81 participants disagree that the teaching methods used by lecturers motivated goal-orientated behaviour among students and prepared, making 55.1 percent. 8 participants agree that the teaching methods used by lecturers motivated goal-orientated behaviour among students and prepared, making 5.4 and 1 participants strongly agree that the teaching methods used by lecturers motivated goal-orientated behaviour among students and prepared, making 0.7 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 20: All our lessons were upload online for us to access from anywhere

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	73	49.7	49.7	49.7
	Disagree	68	46.3	46.3	95.9
	Agree	4	2.7	2.7	98.6
	Strongly Agree	2	1.4	1.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 20 is designated that all our lessons were upload online for us to access from anywhere. According to this table, 73 participants strongly disagree that all our lessons were upload online for us to access from anywhere, making 49.7 percent participation. 68 participants disagree that all our lessons were upload online for us to access from anywhere, making 46.3 percent. 4 participants agree that all our lessons were upload online for us to access from anywhere, making 4.7 and 2 participants strongly agree that the teaching methods used by lecturers motivated goal-orientated behaviour among students and prepared, making 1.4 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 21: We wrote and submitted our exams online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	75	51.0	51.0	51.0
	Disagree	52	35.4	35.4	86.4
	Agree	14	9.5	9.5	95.9
	Strongly Agree	6	4.1	4.1	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 21 is designated that we wrote and submitted our exams online. According to this table, 75 participants strongly disagree that we wrote and submitted our exams online, making 51.0

percent participation. 52 participants disagree that we wrote and submitted our exams online, making 35.4 percent. 14 participants agree that we wrote and submitted our exams online, making 9.5 and 6 participants strongly agree that we wrote and submitted our exams online, making 4.1 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 22: Specific online examination centers were created for us nationwide

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	63	42.9	42.9	42.9
	Disagree	68	46.3	46.3	89.1
	Agree	12	8.2	8.2	97.3
	Strongly Agree	4	2.7	2.7	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 22 is designated that specific online examination centers were created for us nationwide. According to this table, 63 participants strongly disagree that specific online examination centers were created for us nationwide, making 42.9 percent participation. 68 participants disagree that specific online examination centers were created for us nationwide., making 46.3 percent. 12 participants agree that specific online examination centers were created for us nationwide, making 8.2 and 4 participants strongly agree that specific online examination centers were created for us nationwide., making 2.7 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 23: We could do practical in the examination centers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	65	44.2	44.2	44.2
	Disagree	74	50.3	50.3	94.6
	Agree	6	4.1	4.1	98.6
	Strongly Agree	2	1.4	1.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 23 is designated that we could do practical in the examination centers. According to this table, 65 participants strongly disagree that we could do practical in the examination centers, making 44.2 percent participation. 74 participants disagree that we could do practical in the examination centers, making 50.3 percent. 06 participants agree that we could do practical in the examination centers, making 4.1 participant and 2 participants strongly agree that we could do practical in the examination centers., making 1.4 percent. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 24: Our exams were focused only on the program covered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	70	47.6	47.6	47.6
	Disagree	66	44.9	44.9	92.5
	Agree	9	6.1	6.1	98.6
	Strongly Agree	2	1.4	1.4	100.0

Source: field data (2023).

Table 24 is designated that our exams were focused only on the program covered. According to this table, 70 participants strongly disagree that our exams were focused only on the program covered, making 47.6 percent participation.66 participants disagree that our exams were focused only on the program covered, making 44.9 percent. 9 participants agree that our exams were focused only on the program covered, making 6.1 participant. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 25: The online platforms used were free of charge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	65	44.2	44.2	44.2
	Disagree	69	46.9	46.9	91.2
	Agree	8	5.4	5.4	96.6
	Strongly Agree	5	3.4	3.4	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 25 is designated that the online platforms used were free of charge. According to this table, 65 participants strongly disagree that the online platforms used were free of charge, making 46.9 percent participation. 8 participants disagree that the online platforms used were free of charge, making 5.4 percent. 5 participants agree that the online platforms used were free of charge, making 3.4 participant. These culminate to 147 percent participation and 100 percent participation of sample size.

4.1.3. Analysis of the Dependent variable

Table 26: Redesigned curriculum influence student's employability skills during crises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	2.0	2.0	2.0
	Disagree	11	7.5	7.5	9.5
	Agree	82	55.8	55.8	65.3
	Strongly Agree	51	34.7	34.7	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 26 is designated that redesigned curriculum influence student's employability skills during crises. According to this table, 3 participants strongly disagree that redesigned curriculum influence student's employability skills during crises, making 2.0 percent participation. 11 participants disagree that redesigned curriculum influence student's employability skills during crises, making 7.5 percent. 82 participants agree that redesigned curriculum influence student's employability skills during crises, making 55.8 participant and 51 participants strongly agree that redesigned curriculum influence student's employability skills during crises, making up 34.7. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 27: A modified teaching method improve student's employability skills during crises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	3.4	3.4	3.4
	Agree	76	51.7	51.7	55.1
	Strongly Agree	66	44.9	44.9	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 27 is designated that a modified teaching method improve student's employability skills during crises. According to this table, 5 participants disagree that a modified teaching method improve student's employability skills during crises, making 3.4 percent participation. 76 participants agree that redesigned curriculum influence student's employability skills during crises, making 51.7 participant and 66 participants strongly agree a modified teaching method improve student's employability skills during crises, making up 44.9. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 28: Redesigned infrastructure can improve student's employability skills during crises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	8	5.4	5.4	5.4
	Agree	74	50.3	50.3	55.8
	Strongly Agree	65	44.2	44.2	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 28 is designated that redesigned infrastructure can improve student's employability skills during crises. According to this table, 8 participants disagree that redesigned infrastructure can improve student's employability skills during crises, making 5.4 percent participation. 74 participants agree that redesigned curriculum influence student's employability skills during crises, making 50.3 participant and 65 participants strongly agree that redesigned infrastructure can improve student's employability skills during crises, making up 44.9. These culminate to 147 percent participation and 100 percent participation of sample size.

Table 29: Redesigned assessment strategy effects learner's acquisition of employability skills during crises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.4	1.4	1.4
	Disagree	9	6.1	6.1	7.5
	Agree	72	49.0	49.0	56.5
	Strongly Agree	64	43.5	43.5	100.0
	Total	147	100.0	100.0	

Source: field data (2023).

Table 29 is designated that assessment strategy effects learner's acquisition of employability skills during crises. From the table, 2 participants strongly disagree that assessment strategy effects learner's acquisition of employability skills during crises., making 1.4 percent participation. 9 participants disagree that assessment strategy effects learner's acquisition of employability skills during crises, making 6.1 percent participation. 72 participants agree that assessment strategy effects learner's acquisition of employability skills during crises, making 49.0 participant and 64 participants strongly agree assessment strategy effects learner's acquisition of employability skills during crises., making up 43.5 percent participant. These culminate to 147 percent participation and 100 percent participation of sample size.

4.1.4. Verification of Research Hypotheses.

Research hypothesis 1

HR1: Curriculum Modification have a significant impact on Employability Skills

Ha: There is a strong correlation between Curriculum Modification and Employability Skills.

Ho: There is a weak correlation between Curriculum Modification and Employability Skills.

Table 30: Correlations between Curriculum Modification and Employability Skills.

			Curriculum Modification	Employability Skills
Spearman's rho	Curriculum Modification	Correlation Coefficient	1.000	0.573**
		Sig. (2-tailed)		0.001
		N	147	147
	Employability Skills	Correlation Coefficient	0.573**	1.000
		Sig. (2-tailed)	0.000	.
		N	147	147

Source : Field work, 2023

The correlation table above shows the spearman's correlation value ***r*** = 0.573, which indicates a moderate correlation between Curriculum Modification and graduates Employability Skills. This is equally based on the fact that the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: ***r*** = 0.573, ***P***= 0.000 ≤ 0,05. The correlation falls within the range of a strong correlation since it is moderate and moves towards 1. This permits us to confirm Ha: There is a strong correlation between Curriculum Modification and Employability Skills, while Ho is rejected. Thus, at an error margin of 5%, HR1 is confirmed. Therefore, the unsatisfying Employability Skills event observed is strongly blamed on Curriculum Modification.

Research hypothesis 2

HR2: There is a significant relationship between Teaching Methods and Employability Skills

Ha: There is a strong correlation between Teaching Methods and Employability Skills.

Ho: There is a weak correlation between Teaching Methods and Employability Skills.

Table 31: Correlations between Teaching Methods and Employability Skills.

			Teaching Methods	Employability Skills
Spearman's rho	Teaching Methods	Correlation Coefficient	1.000	0.474**
		Sig. (2-tailed)		0.000
		N	147	147
	Employability Skills	Correlation Coefficient	0.474**	1.000
		Sig. (2-tailed)	0.000	
		N	147	147

Source: Field work, 2023

The correlation table above shows the spearman's correlation value ***r*** = 0.474, which indicates a moderate correlation between Teaching Methods and Employability Skills. This is equally based on the fact that the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: ***r*** = 0.474, ***P***= 0.000 ≤ 0,05. The correlation falls within the range of a strong correlation since it's moderate and moves towards 1. This permits us to confirm Ha: There is a strong correlation between Teaching Methods and Employability Skills, while Ho is rejected. Thus, at an error margin of 5%, HR2 is confirmed. Therefore, the disturbing Employability Skills event observed is statistically related to the way Teaching Methods was experienced.

Research hypothesis 3

HR3: There is a significant relationship between Redesigning examination and Employability Skills

Ha: There is a strong correlation between Redesigning examination and Employability Skills.

H0: There is a weak correlation between Redesigning examination and Employability Skills.

Table 32: Correlations between Redesigning examination and Employability Skills.

			Redesigning examination	Employability Skills
Spearman's rho	Redesigning examination	Correlation Coefficient	1.000	0.403**
		Sig. (2-tailed)		0.000
		N	147	147
	Employability Skills	Correlation Coefficient	0.403**	1.000
		Sig. (2-tailed)	0.000	
		N	147	147

Source: Field work, 2023

The correlation table above shows the spearman's correlation value ***r*** = 0.403, which indicates a moderate correlation between Redesigning examination and Employability Skills. This is equally based on the fact that the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: ***r*** = 0.403, ***P***= 0.000 ≤ 0,05. The correlation falls within the range of a strong correlation since its low and moves towards 1. This permits us to confirm Ha: There is a strong correlation between Redesigning examination and Employability Skills, while Ho is rejected. Thus, at an error margin of 5%, HR3 is confirmed. Therefore, the manner in which Redesigning examination was handled highly predicts Employability Skills worries observed.

Table 33: Recapitulation of results.

Hypotheses	**Alpha**	**Degree of significance**	**Correlation coefficient**	**Decision**
RH_1	0.05	0.000	0.573**	H_a retained and H_o rejected
RH_2		0.000	0.474**	H_a retained and H_o rejected
RH_3		0.000	0.403**	H_a retained and H_o rejected

Conclusively, since all three specific research hypotheses have been confirmed, this confirms the main research hypothesis and the study as well. Therefore, the disturbing Employability Skills situation is strongly blamed on Crises-sensitive Educational Planning in the digital age in the university of Yaounde I

CHAPTER FIVE

DISCUSSION OF RESULTS, RECOMMENDATIONS AND PROPOSALS FOR FURTHER STUDIES

This section is based on the description of each hypothesis based on findings which is backed by the views of other authors with respect to the relevant theories and the researcher's perception on the reality on ground. The findings have gained grounds based on results from research instruments.

5.1. Summary of the Findings

This study was conducted to find out the influence of Crisis-sensitive Educational Planning in the digital age and students' acquisition of employability skills in the university of Yaounde I. Four research hypotheses were drawn which help to guide this research work. After the analysis, all the four research hypotheses were validated and are presented as follows:

Ha: There is a relationship between curriculum modification and graduates' acquisition of employability skills in the university of Yaounde I

Ha: There is a relationship between teaching method and graduates' acquisition of employability skills in the university of Yaounde I

Ha: There is a relationship between redesigned evaluation method and graduates' acquisition of employability skills in the university of Yaounde I

5.2. Discussion of Findings according to the Demographic information

During the study, it was revealed that in the university of Yaounde I, there are less female unemployed graduates than males. According to this table 5, 100 participants were male, making 58.9% of the participant and 47 participants were female making 55.7 percent. We decided to find out why that difference and we found out that apart from the natural situation that presents more women than men in the society, most of the female suffer more unemployment than male in the locality. Moreover, the male was more ready to sacrifice few minutes on their research work than women.

The study also verified participant's level of education and it was also revealed that According to the table, 120 participants had bachelors' degree, making 81.6 percent participation, 17 participants had master degree, making 11.6 percent. And 10 participants had doctorate degree holders, making 6.8 percent participation. These culminate to 147 participants, making 100 percent

participation of the of the sample size. This indicates that all the participants were graduates with at least a first degree, this reassures the objectivity of the findings of this study. This implies that the cohort chosen was educated enough and could reason objectively to respond bases on what they know and have lived.

The study also examines the various faculties from which the participant graduated. It was revealed on table 7 that 46 participants were from the FSE, making 31.3 percent participation, 59 participants were from FALSH, making 42 percent participation and 42 participants were from FS, making 28.6 percent participation. This culminates to 147 participations, making 100 percent participation of the sample size. Majority of the participants were from FALSH. This depicts the reality on ground at the university. It is the largest faculty and most populated. However, all the targeted faculties participated. This enhances the objectivity of the findings of this study as all the departments which were targeted participated.

Table 34: Presentation of summary discussion of findings

Variables	**Indicators**	**Hypothesis**	**Confirmation of results:**	**Relevant theory**
Ha: There is a relationship between crisis-sensitive planning and graduates' acquisition of employability skills in the university of Yaounde I	Curriculum modification	**Ha_1**: There is a relationship between curriculum modification and graduates' acquisition of employability skills in the university of Yaounde I	Ha retained (There is a significant relationship	Curriculum theory
	Teaching method	**Ha_1**: There is a relationship between teaching method and graduates' acquisition of employability skills in the university of Yaounde I	Ha retained (There is a significant relationship	The Human Capital theory

	Ha_1: There is a relationship between redesigned evaluation method and graduates' acquisition of employability skills in the university of Yaounde I	Ha retained (there is a significant relationship	Connectivism theory
	Ha: There is a relationship between infrastructure and graduates' acquisition of employability skills in the university of Yaounde I	Ha retained (There is a significant relationship	Holland's Vocational Theory

Source: Researcher (2023).

5.3. Discussion of findings according to hypothesis

Research hypothesis 1

Research objective 1: to examine the influence of curriculum modification on graduates' employability skills

HR1: Curriculum Modification have a significant impact on Employability Skills

Ha: There is a strong correlation between Curriculum Modification and Employability Skills.

After the data analysis, it was revealed that, Ha was retained and Ho rejected. The correlation table above shows the spearman's correlation value $r = 0.573$, which indicates a moderate correlation between Curriculum Modification and graduates Employability Skills. This is equally based on the fact that the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: $r = 0.515$, $P = 0.000 \leq 0{,}05$. The correlation falls within

the range of a strong correlation since it is moderate and moves towards 1. This permits us to confirm Ha. Based on the above results, we therefore accept that there is a significant relationship and that the curriculum changes during crises period influence the graduate's level of employability by 51 percent.

These findings are significant but does not exist in isolation. Earlier researchers have conducted similar studies from different geographical locations from diverse perspective and have had similar results. For instance, Meyer et al. (2016), conducted a study on the effects of educational interventions on the transition experiences of new graduates of prelicensure program is unclear. This study investigated the effect of curriculum revision on transition to practice of nursing graduates. The findings showed a positive influence on graduates. Moreover, Bridget and Smut, (2012). conducted another related study in when the University of the Witwatersrand (Wits) changed its medical curriculum in 2003 from a traditional, six-year curriculum to an integrated, problem-based, four-year Graduate Entry Medical Program (GEMP). The findings showed significant differences on graduate's employability skills.

The theory that expatiates this phenomenon is the curriculum theory and the human capital theory. The curriculum theory is an academic discipline devoted to examining and shaping educational curricula at different times. It demonstrates here that the curriculum needs to examine and shaped depending on environmental changes or evolution in the society. The human capital theory focuses on training and health being the strongest indicators of productivity and employment. Therefore, the curriculum modification in the university level should pave a lee way for the graduates to access the job market easily.

The study holds that most graduates do not find it easy since the curriculum changes was not effectively done, irrespective of its considerable influence on the graduates. It demonstrates the extent to which graduates are affected by the crises. During the unprecedented crises, most universities in Cameroon and Sub-Saharan Africa were not prepared to embrace the new teaching learning approach (the online learning or blended learning). Considering the centralised nature of the system and the traditional administrative bottlenecks, many universities could not make any changes within the time. The students went through the traditional programs, the online teaching methods were not effective enough since it was only via WhatsApp and emails, and worst of all

the curriculum was never completed and the students were released to the job market. This group of students have limitations and most probably are not employable.

Research hypothesis 2

Research objective 2; To examine the influence of teaching Methods on graduates' employability skills

HR2: There is a significant relationship between Teaching Methods and Employability Skills

Ha: There is a strong correlation between Teaching Methods and Employability Skills.

After the data was analysed, it was discovered that Ha was retained and Ho was rejected. This is based on the correlation table that shows the spearman's correlation value $r = 0.474$, which indicates a moderate correlation between Teaching Methods and Employability Skills. This is equally based on the fact that the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: $r = 0.474$, $P = 0.000 \leq 0{,}05$. The correlation falls within the range of a strong correlation since it's moderate and moves towards 1. This permits us to confirm Ha: based on this analysis, we therefore affirm that there is a relationship between teaching methods and graduates' employability skills. In other words, the high unemployment rate among graduates from the university of Yaounde I is blamed on the teaching method used during the crisis, considering that among other aspects, the teaching method influence graduates employability skills by 47 percent.

These findings are positive, and does not exist in isolation since many earlier researchers have conducted studies in these areas. The earlier researchers from different counties and with divers' perspectives have conducted different studies and related findings have been reached. For instance, Jane and Tabi (2013) conducted a related study wherein measuring the impacts of pedagogy on employability (2012) on employability policy and practice in higher education institutes was examined. The objective of this impact study was to determine whether (and how) Pedagogy for employability (2012) has influenced employability policy and practice in HEIs and, if so, at what level: individual, departmental or institutes. The results of the study showed that a majority of survey respondents believed that pedagogy for employability (2012) had influenced/impacted the employability policy or framework at their institution. Moreover, pedagogy helped to inform curriculum design in most institutions, leading to the embedding of

employability development within program. Furthermore, researchers confirmed that pedagogy for employability is an important source of information on important ideas about employability development within the higher education sector. Again, in Edinyang et al. (2015), academic factors and graduate's employability in Nigeria. The researchers carried out this study with the main purpose to investigate the influence of academic factors on graduate employability in Nigeria, he revealed that teaching method or academic factor influence graduates' employability significantly.

This concept is explained by the human capital theory in this study. Considering the standpoint of the human capital which states that the more training you have the more productive you become, and earn more (paid more). This accession is highly controversial in the reality of the context of this study. This implies that instead of having graduates from the university of Yaounde I all employed and being well paid, they are found loitering hopelessly because there are no jobs. They cannot create jobs for themselves.

This situation of unemployed graduates from the university of Yaounde 1 might be the same with other universities in Cameroon and even in whole sub-Saharan Africa. This is highly blamed on the teaching methods used during the crisis period. Africa was one of the continents which did not create technology and had challenges in embracing it. They were still in the process of trying to understand the intricacies of technology and how its influence education when the covid19 spark. When schools were closed down, it was the final stop to most schools, some took much time to install internet connection in schools, others who did master online method resulted to short message services and the whole procedure was a fiasco. Based on our study conducted by World Bank, 88% of the surveyed students said that their school had discontinued in-person classes because of COVID-19. Most prominently, only 29% of African higher education institutions were able to quickly move teaching and learning online, compared to 85% in EuropeThe learners on their part were not ready, hey lack the updated devises like smart phones, computers and even internet connection. In most areas, the learners were distressed by epileptic energy supply. Thus, poor training and subsequent graduation.

Research hypothesis 3

Research objective 3: to examine the influence of redesigning examination of employability skills

HR3: There is a significant relationship between Redesigning examination and Employability Skills

Ha: There is a strong correlation between Redesigning examination and Employability Skills.

After the data analysis, it was revealed that Ha was retained and Ho was rejected. This was based on the spearman's correlation value r = 0.403, which indicates a moderate correlation between Redesigning examination and Employability Skills. This is equally based on the fact that the level of significance is 0.000 which is largely less than 0.05, (alpha) which is the standard error margin: r = 0.403, P= 0.000 ≤ 0,05. The correlation falls within the range of a strong correlation since its low and moves towards 1. This permits us to confirm Ha: from this analysis, we therefore affirm that redesigning examination significantly influence graduates' employability skills in the university of Yaounde I. this implies that the increasing graduate's unemployment is blamed on poor examination method. Moreover, redesigning examination in the university of Yaounde I influence graduates' employability skills by 40 percent.

This finding is positive and strong and does not exist in isolation. Earlier researcher from different geographical locations have conducted similar studies with the same perspective and the have reached similar findings. Papadopoulos (2013) evaluation of an ICT skills program enhanced graduate capabilities and employability. The findings showed that students highly value and benefit from the new examination methods on the program provides meaningful connections to the real world of work. Also, Pieto (2020) verified if a broad program evaluation enhances the employability of graduates. The results of these estimates showed that evaluating abroad program has a relatively large and statistically meaningful effect on the probability of being employed three years after graduation. Again, Radhwa et al. (2016), evaluated the internship program in improving graduate's skills and marketability among Arabic language students in International Islamic University Malaysia (IIUM) from the perspective of Malaysian job market. General findings from this study showed that internship training program had essentially improved their soft skills and increased their work-place literacy and well-being.

The theory that is used to explain this concept is Connectivism theory. theoretical framework for understanding learning in a digital age. It emphasizes how internet technologies such as web browsers, search engines, wikis, online discussion forums, and social networks contributed to new avenues of learning. This theory indicates that among these technological learning methods, there are evaluation methods that are effectively used. But this method was not use in the university of Younde I during crisis, there by sending out unprepared graduates. This

brings a controversy on the claims of human capital theory, that the more educated, the more productive and more pay. However, other process and procedures come into play in the training process.

Abumalloh, (2018). According to this study, graduate employability is a critical issue in Higher Education. Employers are expecting not only the subject knowledge from the students to compete with the current industry demands, but also additional skills to face corporate battles and challenges. When developing country like Cameroon produces les productive graduates in an era where the nation is looking up to the realization of the 2035 vision, it poses a very considerable challenge to the system put in place. The first element that ensues the attainment of 2035 vision in Cameroon is the human capital. Unfortunately, the universities cannot provide. This places the achievement of the countries vision on a doubt.

Recommendations

Based on the objectives of the study, we recommend that;

The university should fully engage the system with technology. Install speedy internet connection in the university campus. Train teachers on online teaching and learning and examination strategies.

The university should forecast and plan ahead of time by establishing which part of the curriculum could be sacrifice in case of a crisis.

Unemployed graduates should enroll in skill enhancing programs in order to acquire more timely skills to increase their employability skills.

Difficulties Encountered During the Research Process

Such a research venture could not go through without challenges. Among these challenges, the most significant cases were:

Documentation: It was not easy to find documents, books, articles, or even thesis written by Cameroonians on crisis sensitive issues and graduates' employability and its related concepts. Very few operational documents were found at the Ministry of Higher Education (MINESUP). The lack of scientific documents and text books written by Cameroonians in this field delayed the smooth running of the research process.

Administrative bottlenecks also delayed the study. Obtaining authorization for data collection was another hard knot to untie

Proposals for further studies

Another study could be conducted on the problem of crisis in Norwest and South west from a different state university in Cameroon

Another study could be conducted on the same problem but from a different state university in Cameroon.

GENERAL CONCLUSION

Education remains the back bone of every economy. The practice of education in the 21st century is accompanied by many stakes and challenges. Munazza captures this when he refers to the complexity of education when he refers to the complexity of education with the eruption of phenomena as globalization, transnationalism, internalization, technology and telecommunication. The role of education as he explains "is focused to prepare people to be flexible, multi-skilled, dynamic problem-solvers and creative explorers of resources with the ability to interpret reality from multiple perspectives and bring harmony between knowledge and creativity and employability skills.

From 2019, the educational system saw a dangerous wind that blew across the globe, taking lives and slowing down systems. The crisis disrupted several systems and put a stop of many institutions like companies and schools. At the peak of the pandemic, 45 countries in the Europe and Central Asia region closed their schools, affecting 185 million students. Given the abruptness of the situation, teachers and administrations were unprepared for this transition and were forced to build emergency remote learning systems almost immediately. School closures due to COVID-19 have brought significant disruptions to education across Africa. Emerging evidence from some of the region's low-income countries indicate that the pandemic is giving rise to learning losses and increases in inequality. To reduce and reverse the long-term negative effects, less-affluent lower-middle-income countries, which are likely to be even harder hit, need to implement learning recovery programs, protect educational budgets, and prepare for future shocks by "building back better.

Without effective crisis-sensitive planning in schools and in classroom, learning losses may translate into even greater long-term challenges. It has long been known that decreases in test evaluation methods are associated with future declines in employment. Conversely, increases in student achievement led to significant increases in future income, as do additional years of schooling, which are associated with an 8–9 percent gain in lifetime earnings. In the absence of any intervention, the learning losses arising from the COVID-19 pandemic are likely to have a long-term compounding negative effect on many student's future well-being. These learning losses

could translate into less access to higher education, lower labor market participation, and lower future earnings.

This study was conducted in light of the observed inadequate acquisition of employment skills found in some of the graduates that were in universities when the crisis hit. In the five-chapter study has proven that curriculum modification, teaching method modification and redesigned evaluation methods that were supposed to be affected were not done. These components have positive influence on graduates' employability skills, yet the system did not deem necessary to inculcate them at the ideal moment. This explains why the graduates are left stranded due to lack of employability skills.

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APPENDICES

APPENDIX I

UNIVERSITE DE YAOUNDE I
****
CENTRE DE RECHERCHE ET DE FORMATION DOCTORALE (CRFD) EN « SCIENCES HUMAINES, SOCIALES ET EDUCATIVES »
****
UNITE DE RECHERCHE ET DE FORMATION DOCTORALE EN SCIENCES DE L'EDUCATION ET INGENIERIE EDUCATIVE
****

THE UNIVERSITY OF YAOUNDE I
****
DOCTORAL RESEARCH AND TRAINING CENTRE (CRFD) IN "SOCIAL AND EDUCATIONAL SCIENCES''
****
DOCTORAL RESSAERCH AND TRAINING SCHOOL IN EDUCATION AND EDUCATIONAL ENGINEERING
****

QUESTIONNAIRE FOR UNIVERSITY GRADUATES

SECTION A: GENERAL INFORMATION

Dear Respondent,

I am a master's student from faculty of Education of the University of Yaoundé 1, I am conducting a study on Crises-sensitive Educational Planning in the digital age and learners acquisition of employability skills in the university of Yaounde I. The answers you provide will be used strictly for this master's research and your privacy will be highly protected. Thanks for your participation

Informant's information

Instructions: ***kindly place a tick (√) on the box that best describes your opinion.***

1. Gender: Male ☐ Female ☐
2. Level of education: First Degree ☐ Masters ☐ PhD ☐
3. Faculty: FASLH ☐ FS ☐ FSE ☐

SECTION B:

Instruction: Tick **(√)** in one of the boxes labeled (**SD, D, A, SA)** that best suits your opinion

KEY: D=disagree, SD= strongly disagree, A=Agree, SA= strongly agree,

SN	SECTION B: Curriculum modification	SD	D	A	SA
4	All outdated parts of our curriculum were removed during the crises				
5	The extended parts of the curriculum were also removed from the program				
6	Only the core part of the curriculum was left for us to focus during the crises				
7	A very flexible teaching model was designed for us to cover the program				
8	My school curriculum reorganized to suit the 21st C. employability skills				
9	The curriculum was planned to be covered for the four semesters				
	SECTION C: Teaching Methods Modification	**SD**	**D**	**A**	**SA**
10	Lecturers used student centered teaching methods in all the courses				
11	The digital teaching methods were employed for all courses				
12	Lecturers used students-teachers interaction method during lessons				
13	The teaching methods used by lecturers motivated goal-orientated behaviour among students				
14	All our lessons were upload online for us to access from anywhere				
	SECTION D: Redesigning examination	**SD**	**D**	**A**	**SA**
15	We wrote and submitted our exams online				

16	Specific online examination centers were created for us in our university.				
17	We could do practical in the examination centers				
18	Our exams were focused only on the program covered				
19	The online platforms used were free of charge				
	SECTION C: Employability skills	**SD**	**D**	**A**	**SA**
20	Redesigned curriculum influence student's employability skills during crises				
21	A modified teaching method improve student's employability skills during crises				
22	Redesigned assessment strategy effects learner's acquisition of employability skills during crises				

Thanks for your collaboration

APPENDIX 2: Krejcie and Morgan Table

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Source: Krejcie & Morgan, 1970

APPENDIX 3: Map of Mfoundi division