

# COURSE CONTENT ORGANISATION IN DISTANCE LEARNING PROGRAMS IN CAMEROON HIGHER EDUCATION INSTITUTIONS

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# ABSTRACT

Distance Education is a mode of instructional delivery that has gained grounds in Cameroon's higher education institutions (HEIs). The interest in distance education programs has emerged in response to the need to provide time-bound and locationbound students with access to educational opportunities that would not have been afforded to them if only offered in a traditional, face-to-face format (Belderrain, 2006). As a result, many HEIs in Cameron such as the university of Buea, Dschang, Douala, Yaounde I and II, ICT university, just to name a few have design instruction programmes that are offered though various distance education modes (face-to-face, online and blended). The proliferation of distance learning programs has brought the need to examine not only the type of content provided to learners but also, the way this content is provided to ease students' learning. The quality of content is one of the factors that determine the quality of education in distance learning. Irrespective of the availability of the content development tool for distance learning, content needs to be presented in such a way that it will be easy for learners to understand and interact with its structure. Designing the quality instruction involves organizing instructional activities to create a satisfying and effective learning experience. Therefore, it is important to describe the way course contents in these distance learning programs are organized so as to determine whether it meets the standards of organization content or not. The purpose of this study is to provide a description of the organization of course content in higher education distance learning programmes.

# **KEYWORDS**

Content, Organization, Distance, Learning, Higher, Education Institutions, Cameroon.

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#### **Introduction and Background**

Efforts to introduce Distance Learning (DL) in Cameroon began over four decades ago (Ndongfack, 2016). In 1998, the Commonwealth of Learning (COL) reported attempts made to use distance learning in Cameroon's educational system since 1967 to address the problem of falling standards of education which was largely blamed on the lack of qualified teachers and access to education at all levels (COL, 2008). In the past two decades, higher education in Cameroon has undergone many changes in an effort to introduce and develop distance learning initiatives. In this connection, the Ministry of Higher Education in Cameroon has contributed to the development of distance learning in Cameroon through several initiatives which included:

- 1. The initiation and promotion of the "one teacher, one computer" policy (aimed at developing the computing skills of teachers and enabling each to own a computer);
- 2. The beginning of the pioneer DE programme in the Dschang University Centre;
- 3. The creation of the CITI and electronic library in Yaounde;
- 4. Training of teachers of higher education in China on distance learning;
- 5. Launching of a Master's of Distance learning programmes for Public Universities (granted to the University of Douala for execution);
- 6. Starting of a myriad of DE programmes in Institute Universitaire de Technologie (IUT) Bandjounm, University of Yaounde I (UYI), University of Buea (UB) and the University of Douala (UDL); and
- 7. The start of the Virtual University of Central Africa (Alemnge, 2018).

A National Forum on Distance Learning (Forum National surl'Enseignement à Distance) was held in Yaounde from the 16<sup>th</sup> to 19<sup>th</sup> of September 2003 on "Distance learning: An alternative for increasing diversity, to access and to quality in education". This forum was jointly organized by the Ministries of National, Technical and Vocational Training and Higher Education under the aegis of the Commonwealth of Learning. The main objective of the forum was to open dialogue among all stakeholders on the national needs, priorities and challenges in the design and implementation of Open and Distance Learning (ODL) in Cameroon and to propose to Government elements of a national strategy or road map for the implementation of distance learning (Alemnge, 2018). Following this conference, state universities started initiating and engaging in collaborative ventures to gather experience to enable them eventually initiate and implement distance learning programmes.

In this connection, the University of Douala participated in the "ProjetVirtuel au Service de l'Afrique Francophone" from 2005 to 2008 and initiated its own programme in partnership with the Université de Pariset Marne la Villéand the Ecole Nationale de Sciences Geo graphiques, Paris. The University of Yaounde I started its own programme in Electrical Engineering and Tele-communications in partnership with the Agence Universitaire de la Francophnie (AUF) in the 2006/2007 academic year. This programme aimed at providing students with skills and competences to conceive and install various telecommunications devices was housed by the Department of Electrical and Telecommunications Engineering of the l'Ecole Nationale Supérieure Polytechnique (ENSP).

The University of Yaounde II (UY II) equally started two distance education programmes in 2002 and 2010. These programmes were a Research Masters in Information and Communication Science Started in 2002, in collaboration with James Baldwin Information Resource Centre of the USA Embassy and housed by the Advanced School of Mass Communication (ASMAC) and a Masters in International Cooperation, Humanitarian Action and Sustainable Development, in collaboration with the Centre for Didactic Research and Advanced Training University of CaFoscari of Venise (Italy) and housed by International Relation Institute of Cameroon (IRIC) respectively (Ndongfack, 2016).

The University of Buea also started a distance learning programme in the 2007/2008 academic year. The programme in Nursery and Primary Education seeks to upgrade the knowledge and skills of primary school teachers with opportunity to earn a Bachelor degree in Nursery and Primary Education. This programme was initiated following the Ministry of Higher education's adoption of distance education as an alternative mode of delivery in order to overcome challenges such as limited access, insufficient diversity in provision, gender parity, reduced funding, quality assurance and good governance (Alemnge, 2015). Course writing was facilitated through cooperation with the National Open University of Nigeria under the RETRIDOL initiative.

Other universities that followed in the same light include: The university of Maroua (Higher Institute of Sahel) which started its own distance education in 2014, offering Masters in many fields in collaboration Agence universitaire de la Francophonie, the university of Ngoundere which offers a Masters in Geography and Geomatics in collaboration Agence universitaire de la Francophonie.

According to Tambo and Akume (2014), a workshop on Sensitization on Open Schooling, cosponsored by COL was organized in 2009, while another workshop organized in 2010 focused on curriculum design for open schools. In addition, two virtual universities went operational in Cameroon in 2010. One national and the other, a sub-regional virtual university, were established within the framework of the "Pan-African e-network project", resulting from cooperation between the Government of India, the African Union and the Government of Cameroon. Masters Degree programmes are offered in various fields. Courses are delivered by videoconferencing from Madras University, as well as the Indira Gandhi National Open University in India.

Agence Universitaire de la Francophonie (AUF), under the accreditation and quality assurance of a university in Quebec, is supporting three universities in e-learning course delivery. Students take online degree programmes at Bachelors and Masters levels: the universities are the University of Dschang (IUT Fotso Victor College of Technology), University of Yaounde I (National Polytecnique) and University of Douala (College of Technology). Also, the Institute of Digital University Governance in Yaoundé, a support unit providing pedagogical and technical ICT support, as well as digital connectivity to the eight State-run universities in Cameroon. The institute comprises an online library or documentation centre, a science and technology centre and a centre for distance learning (Tambo & Akume, 2014).

Other developments in Distance Learning in Cameroon according to Tambo and Akume, (2014):

- 1. Creation of the Centre for Continued Education by Distance Learning by the World Bank placed at the disposal of the four Ministries of Education.
- 2. Many public and private Universities are offering online courses locally in collaboration with foreign institutions. Such is the case with the University of Yaounde I and Yaounde II, ICT University Yaounde, St. Monical University, Buea, amoungst others.
- 3. The Pan African University is also offering online courses locally.
- 4. Two personnel of the Ministry of Basic Education; two from the Higher Teacher College Yaounde, one from the Universities of Dschang and Douala respectively were sponsored by COL to present papers at the Seventh Pan Commonwealth Forum (PCF7) that was held in Abuja, Nigeria in December 2013.

The increase in the distance learning programs in higher education institutes in Cameroon has brought the need to examine the type of content provided to learners and the way this content is provided to ease students' learning. The quality of content is one of the factors that determine the quality of education in distance learning. Content needs to be presented in such a way that it is interactive in structure so as to ease understanding in learners. The purpose of this study therefore is to find out how content in higher education distance learning programmes in Cameroon is organized to ensure quality standards.

#### **Theory and Concept**

Studies have shown that students learn better when they interact with instructions that are effective efficient and appealing (Smith and Ragan,2005). Several well-established and respected models for instructional design and/or development provide guidelines and procedures that can be applied to the distance learning programs in Cameroon higher institutions. The study adopts Reigeluth (1987) Elaboration theory (ET) as a model for sequencing and organizing courses of instruction using the following basic strategies:

**Organizing structure.** The designer should determine a single organizing structure for the course which reflects the course's primary focus. This organizing structure may be one of three types: conceptual, procedural, or theoretical.

**Simple-to-complex sequence.** The course proceeding should be designed through the identified structure in a simple to complex fashion, with supporting content added within lessons. Begin with a lesson containing "a few of the most fundamental and representative ideas (taught) at a concrete, application (or skill) level..." (Reigeluth, 1987, p. 248). This first lesson is termed the "epitome"; successive lessons add successive layers of complexity in accordance with the categories of the organizing structure.

**Sequencing guidelines.** For conceptually organized instruction "present the easiest, most familiar organizing concepts first" (Reigeluth, 1987, p. 251). For procedures, "present the steps in order of their performance" (p. 251). For theoretically organized instruction, move from simple to complex. Place supporting content immediately after related organizing content. Adhere to learning prerequisite relationships in the content. Present coordinate concepts simultaneously rather than serially. Teach the underlying principle before its associated procedure.

Learner control. Reigeluth (1987), believe that "instruction generally increases in effectiveness, efficiency, and appeal to the extent that it permits informed learner control by motivated learners (with a few minor exceptions)" (p. 362). Learners are encouraged to exercise control over both content and instructional strategy. Clear labelling and separation of strategy components facilitates effective learner control of those components. Content may be categorized, analysed, and represented in different ways for different purposes, and need not relate directly to internal cognitive representations. While different positions may be taken, however, Reigeluth believe that content/task analysis, as a basic ID procedure, is most useful when it models in external form the structure and process of people's knowledge and skills. Such a model of internal forms is important as a basis for planning sound instruction.

This theory has practical implication to organization of content through its nine-step procedure which can be used by designers and teachers working together as a team. The procedure involves: deciding when to use a conceptual approach, selecting the concepts to be taught and organizing them into knowledge structures, deciding what is the most inclusive of those knowledge structures, arranging that knowledge structure's concepts in a general-to-detailed sequence that will provide the "skeleton" or basic structure of the course, identifying other ideas and facts that should also be taught (including learning prerequisites) and adding "flesh" to the skeleton of the course by allocating each such idea and fact to its most highly related "skeletal" concept, allocating all content to lessons, sequencing the

content within each lesson, designing the test items and instruction on each individual piece of content (that is, on each concept, principle, procedure, and fact), and creating synthesis test items and instructional components.

# **Organization of Contents**

Designing the best instruction possible involves organizing instructional activities to create a satisfying and effective learning experiences. This is particularly important when the content to be covered is sizable (for example, yearlong training; multiple years of study for a degree; an entire curriculum). The activities of any one lesson often have to fit appropriately into a larger educational scheme. Understanding how these larger schemes work and how to develop such a scheme allows one to deliver better instruction. Organizing content allows one to see the depth and breadth of the content to be covered, while organizing instructional activities allows one to see the range of methods used to communicate that content to the learner (Brown & Green, 2016).

Before organizing content, the designer must first select the type of content to be organized. This is guided by the instructional gaols and objectives. It is important to note that there is no point to creating any form of instruction without first setting goals for that instruction. The instructional intervention has to be designed to cause some change in the learners' knowledge, skill, or attitude. These changes are informed by the goals and objectives of such instruction.

Regardless of any lack of visible evidence, setting goals and objectives for instruction especially distance learning instructions is a critically important part of the instructional design process. Determining the intended outcome in advance is an important step in the design process if student success will ultimately be measured against some standard or specific evaluation criteria. Clearly stated instructional objectives also make it easier for a design team to produce instruction that meets with the approval of everyone involved.

According to Merrill (1998), determining what to teach is the most important activity of the instructional design process. This is known as the curriculum (a course of study organized by the content to be covered and the activities employed to cover them). A curriculum for any course of study is described by its scope and sequence, the instructional events and learning experiences it encompasses, and the methods in which these events and experiences are delivered.

Endeley and Zama (2021), describe scope as the number of topics and learning experiences covered at any time by a school or class. Pertinent questions when deciding on scope are: how much should students be able to study from each domain? Do all students have to study a common content? What content should be excluded from the curriculum? It is important to note that content of a year's programme or longer may be listed as topics to be studied while the content of the course, along with the cognitive, affective, and psychomotor skills to be cultivated, are listed as important ideas, concepts, principles, and skills. The contents or topics are usually organized in chapters or units.

Sequence refers to the order in which that which is to be taught will occur over time and are influenced by factors such as students' prior knowledge and developmental stages. According to Posner and Rudnisky (1994), cited in Endeley and Zama (2021), sequence should follow guidelines such as from simple to complex, whole to part, chronology, learner-related, world related, concept related and inquiry related sequence.

The scope and sequence of an instructional activity are determined by the instructional designer, based on the goals and objectives he or she has developed through needs, task, and learner analyses.

According to Orlich et al. (2013), sequencing instruction serves two essential purposes: either to isolate a piece of knowledge (a concept or principle) to help students comprehend its unique characteristics, or to relate that concept or principle to a larger organized body of knowledge. Determining the scope of instruction serves the essential purpose of placing some restriction on just how much of any topic is covered as part of the instruction. For any instructional event, one must determine both the scope (the amount of information) and the sequence (the order in which the information will be presented). Regardless of how one organizes and divides up the instruction, some scope and sequence must be developed at the outset in order to determine what is to be taught and the order in which it will be presented.

Other important concepts to be taken into consideration when organizing distance learning content in continuity, integration, articulation, and balance:

Continuity means vertical reiteration of crucial learning task (Tyler, 1949), cited in Tambo (2012). This means that certain ideas, concepts, principles and skills that are considered crucial, reappear at increasing levels of sophistication or depth and breadth of knowledge. The crucial elements are revisited repeatedly until the students grasp them fully.

Integration refers to relating curriculum content and activities within the programme to ensure that students understand how related subjects/courses are than learning them in isolation (Endeley and Zama 2021). It is concerned with relating the elements of scope (objectives, subject matter topics, learning activities) in one subject or syllabus with those of another subjects or syllabus as stated by Tambo (2012).

Articulation refers to the vertical and horizontal relationship of the curriculum experiences (Endeley& Zama, 2021). To them, vertical articulation refers to sequencing content such that subsequent content is built on preceding content while horizontal articulation, also called correlation refers to the process of building on the relationship among elements in one subject with those of another.

Balance refers to how much weighting is given to each aspect of the design (Endeley& Zama, 2021). There should be equitable assignment of content and experiences vis a vis available time. Balance answers questions such as: How much of general course should be included against specialized courses? How much breadth of content is included against depth? As far as objectives are concerned, there should be a balance of domains of educational objectives.

In addition to the above ways of organizing instruction, Posner (2003), describes organizing instruction by macro and micro levels. To him, the broadest macro level is that which refers to educational levels (for instance, the difference between elementary and secondary education) while the micro level at its most specific refers to the relationships between concepts, facts, or skills within lessons. Posner (2003), equally states that there are only two basic methods of organizing a curriculum or program of study. To him, instruction can be organized by using either a content or a media structure. A content structure organizes the instruction by the concepts, skills, or attitudes students are to acquire (as described by the instructional objectives) while a media structure organizes the instruction by the activities, methods, and materials used to teach the concepts, skills, or attitudes described by the instructional objectives.

Associated with Posner's micro level organization of instruction is determining the order of the activities within a given lesson, known commonly as the events of instruction. These events are discrete activities that work best in a specific order. The most elemental series of instructional events consists of an introduction, a body (a variety of activities related to the content), a conclusion, and an

assessment (Smith & Ragan, 2005). Most distance learning programmes like that of the university of Buea are organized in this structure. Gagne (1985), theorized that there are nine events of instruction: (1) Gain the learners' attention. (2) Inform learners of the objective. (3) Stimulate recall of prior learning. (4) Present the stimulus. (5) Provide guidance for the learners. (6) Elicit learner performance. (7) Provide feedback. (8) Assess learner performance. (90 Enhance retention and transfer (varied practice and reviews). To put this theory into practice, each of the events described requires at least one instructional activity. The order of the activities makes a difference in the effectiveness of the instruction. Although the events of instruction are most often described in terms that make it seem as if the teacher is the active participant while the learners passively receive instruction, this should not be the case. Both directed and open-ended learning environments have carefully planned instructional events. In both environments, students may take an active role in each of the instructional events.

Smith and Ragan (2005), observe that each instructional event can be viewed as having two aspects: the supplantive (those supplied by the instruction itself) and the generative (those generated by the students). For example, during an introduction event, the instructor may present activities intended to gain the learner's attention, but the learner must activate his or her attention in order to participate effectively. During the body of a lesson, the instructor may present the activities, but the learner must actively participate by doing such things as focusing his or her attention, employing learning strategies, and offering and responding to feedback. The events of instruction should be considered a reciprocal process, with instructors and students making contributions that lead to an effective learning experience.

Geis (1996), state that many variations on concept mapping techniques exist to help instructional designer decide on an organizational structure for their content. To him, some suggestions for ordering the topics or concepts include:

**Topic by topic**. There are no set relationships amongst the topics, so the ordering is not critical. This works well for courses that revolve around current issues, for example.

**Chronological.** Moving from past to present is a very common and easy to implement organizational pattern.

**Causal.** The course presents a number of events or issues that culminate in some final effect or solution.

Cumulative. Each concept builds on the previous one(s).

**Problem-Centred**. Problems, questions, or cases represent the principal organizing features of the course.

**Spiral**. Key topics or concepts are revisited throughout the course, with new information or insight developing each time.

According to Thomas (2004), The ISD discipline has two basic approaches to selecting content. They include the gap approach and the criterion approach.

The gap approach is best suited when the designer has a clearly defined target audience with similar existing knowledge, skills, and attitudes (KSAs). In his way, the designer Identify the knowledge, skills, and attitudes (KSAs) necessary to perform the job; Identify the deficit or gap on KSAs within

the target audience; Write terminal and enabling objectives to address the gap KSAs; and select the content needed to achieve the gap KSAs (Thomas, 2004).

The criterion approach is best suited when you have an undefined target audience or an audience with a wide range of KSAs (for example, new hires taking the same training as experienced workers). In this case, the designer should identify the knowledge, skills, and attitudes (KSAs) necessary to perform the job; Write terminal and enabling objectives to address the required KSAs; Select the content needed to achieve the required KSAs (Thomas, 2004). In both approaches, KSAs and objectives are critical elements as stated by Krathwohl et al., (1964).

According to Thomas (2004), information is remembered better and longer when it is well organized, even if that organization is imposed upon it, and the learner is aware of the organization structure through such tools as advanced organizers. The following table lists basic organization strategies, and provides a description and basic uses for each as stated by Thomas (2004).

# Table 1

Strategies	Description	Uses
Chronological	Content is arranged in time pattern of occurrence.	Procedures, processes, recipes
Cause & effect	A cause is presented, followed by the effect. (This can also be reversed	Policy, build awareness, change attitude and behaviour
Problem & solution	A problem is defined, followed by the solution. (This can also be reversed.)	Introduce a new system, process, or product; policy, build awareness, change attitude & behaviour
Complexity	Content is typically arranged from easy to difficult. (This can be reversed to gain attention and provide a concrete end goal.)	Complex content requiring prerequisite knowledge or skill, motivate learners, minimize frustration
Spatial	Content arranged in a directional pattern (e.g., left to right, top to bottom, front to back, inside to outside, clockwise).	Geographic information (e.g., regions, lata maps, screen layouts), forced organization (left to right, top to bottom)
Conceptual/topical	Content is divided into its inherent chunks or clusters.	Used when no other strategy listed above fits.

#### Organization Strategies, Description and Basic Uses

### Source: Thomas (2004). Selecting & Organizing Instructional Content

As illustrated on the table, the organization strategies include providing content in a chronological, cause and effect, problem and solution, complexity, spiral and conceptual or topical manner. When distance learning content is presented following these strategies, it becomes easy to be learned by learners who are independent and separated from the tutors by time and space.

COURSE CONTENT ORGANISATION IN DISTANCE LEARNING PROGRAMS IN CAMEROON HIGHER EDUCATION INSTITUTIONS

# Methodology

The survey research design was employed in the study where by standardized information was gathered from a sample drawn from a cross section of pre-determined population at one point of time. A description of status of single variable (content organization) was explored through investigation of sample respondents.

The target population were students offering distance learning in the selected departments in six universities of Buea, Dschang, Douala, Yaoundé I (International Relation Institute of Cameroon-IRIC, and Advanced school of Mass Communication) and the ICT University, Yaoundé. This gave a total of 435 targeted students with a sample of 214.

#### Table 1.

University	Faculty	Target population	Sampled population
Buea	Faculty of Education	115	82
Dschang	Faculty of Agronomy Sciences	05	05
Yaoundé I	International Relation Institute of Cameroon (IRIC)	103	50
	Advanced School of Mass Communication (ASMAC)	45	20
Douala	Master's programme in Computer Applied to Geography Information System	13	08
ICT University	Post graduate programme	154	49
Total		12	214

#### Sampled Population of the Study

# *Source:* Conceived for the study

A purposeful sampling technique was used to identify the institutions offering distance learning, the specific schools/faculties. The sample was selected using the table suggested for sample size determination by Krejcie and Morgan (1970). According to Krejcie and Morgan (1970), if the population is in the range of 420 to 440, to make inference to the larger population, a sample size of at least 205 is statistically significant. In this study, the total number of all the DL students from the seven universities is just 435. Therefore, 214 respondents selected is above 205 and statistically gave a 95 per cent confidence interval, with a margin of error of 5 per cent.

A closed-ended structured questions which required respondents to select an answer from a given set of four points questionnaire consisting of Strongly Agreed (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The questions contained definite, concrete and directed questions, rated using the Likert scales. The questionnaire was given to other experts to review them for face, content, construct, and criterion validity. Their recommendations were used to finally modify the questions and the format of the tool so that it could have the ability to solicit the expected data. Once the questionnaires were designed and corrected, the content validity index (CVI) was then be computed. In the process, the CVI for item (I-CVI) was calculated as follows:

 $CVI = \frac{Agreed items by judges as suitable}{Total number of items being judged}$  while the CVI for scale (S-CVI) was calculated by average of the I-CVI scores for all items on the scale (S-CVI/Ave). in line with this, the I-CVI was 0.9 while

To ensure reliability of the questionnaire, the instrument was taken for pilot study. The pilot study was conducted with some distance learning students St Monica University, Buea. The objective of pilot study was to allow for modifications of various questions in order to rephrase and clarify any ambiguity in the instrument. Their responses were then subjected to a Cronbach's Alpha Coefficient reliability test, which is a statistical test of how well the items in a scale are correlated with one another. Data was analysed descriptively highlighting the degree of occurrences of content organization attributes. Percentages was used to present the findings of the study

#### **Findings**

The findings were based on theaim of this study to find out how distance learning course content are organized in higher education in Cameroon. Data on the research question was gotten with the use of questionnaire. Twelve items were designed to sample students' opinion on how distance learning course content are organized in higher education in Cameroon. The tables below summarize the findings.

#### Table 3

S	Items	SD	D	А	SA	Total
Ν						
1	Courses in our distance	06	05	82	68	161
	learning programme begin with	(3.7%)	(3.1%)	(50.3%)	(41.7%)	(98.8%)
	well stated instructional					
	objectives.					
2	Course contents are organized	06	11	86	60	163
	to fit with the course's	(3.7%)	(6.7%)	(52.8%)	(36.8%)	(100%)
	objectives.					
3	The courses are organized	01	02	78	82	163
	according to topics/units.	(.6%)	(1.2%)	(47.9%)	(50.3%)	(100%)
4	The scope of the topics/units	2	22	74	65	163
	provides extensive learning	(1.2%)	(13.5%)	(45.4%)	(39.9%)	(100%)
	experiences for students.					
5	The learning experiences	12	35	57	59	163
	provide a balance in cognitive,	(7.4%)	(21.5%)	(35%)	(36.2%)	(100%)
	affective and psychomotor					
	skills development.					
6	Course content are organized in	06	10	84	60	160

### Distribution of Responses Based on Organization of Content

	meaningful bits	(3.7%)	(6.1%)	(51.5%)	(36.8%)	(98.2%)
7	The course contents are	00	05	77	81	163
	presented from simple to	(.0%)	(3.1%)	(47.2%)	(49.7%)	(100%)
	complex.					
8	Some key concepts are	02	09	92	60	163
	continuously stressed or	(1.2%)	(5.5%)	(56.4%)	(36.8%)	(100%)
	repeated in greater depth and					
	breadth throughout a course.					
9	Key topics/concepts are	02	09	80	72	163
	revisited in different courses	(1.2%)	(5.5%)	(49.1%)	(44.2%)	(100%)
	with more sophistication.					
1	The course content is	01	10	75	77	163
0	sequenced such that subsequent	(.6%)	(6.1%)	(46%)	(47.2%)	(100%)
	content is built on preceding					
	content					
1	Tasks are provided at the end	01	09	78	75	163
1	of each unit or topic	(.6%)	(5.5%)	(47.9%)	(46%)	(100%)
MRS		39	123	863	759	1788
		(2.2%)	(6.9%)	(48.1%)	(42.3%)	(99.7%)

COURSE CONTENT ORGANISATION IN DISTANCE LEARNING PROGRAMS IN CAMEROON HIGHER EDUCATION INSTITUTIONS

Table 3 shows distribution of responses based on organization of content. Out of the 166 respondents, 06(3.7%) strongly disagreed that courses in their distance learning programme begin with well stated instructional objectives, 05(3.1%) disagreed that courses in their distance learning programme begin with well stated instructional objectives, 62(50.3%) agreed that courses in their distance learning programme begin with well stated instructional objectives while 68(41.7%) strongly agreed that courses in their distance learning programme begin with well stated instructional objectives while 68(41.7%) strongly agreed that courses in their distance learning programme begin with well stated instructional objectives.

06(3.7%) strongly disagreed that course contents are organized to fit with the course's objectives, 11(6.7%) disagreed that course contents are organized to fit with the course's objectives, 86(52.8%) agreed that course contents are organized to fit with the course's objectives, while 60(36.8%) strongly agreed that course contents are organized to fit with the course's objectives.

01(0.6%) strongly disagreed that the courses are organized according to topics/units, 02(1.2%) disagreed that the courses are organized according to topics/units, 78(47.9%) agreed that the courses are organized according to topics/units, while 82(50.3%) strongly agreed that the courses are organized according to topics/units.

02(1.2%) strongly disagreed that the scope of the topics/units provides extensive learning experiences for students, 22(13.5%) disagreed that the scope of the topics/units provides extensive learning experiences for students, 75(45.4%) agreed that the scope of the topics/units provides extensive learning experiences for students, while 65(39.9%) strongly agreed that the scope of the topics/units provides extensive provides extensive learning experiences for students.

12(7.4%) strongly disagreed that the learning experiences provide a balance in cognitive, affective and psychomotor skills development, 35(21.5%) disagreed that the learning experiences provide a balance in cognitive, affective and psychomotor skills development, 57(35%) agreed that the learning experiences provide a balance in cognitive, affective and psychomotor skills development, while

59(36.2%) strongly disagreed that the learning experiences provide a balance in cognitive, affective and psychomotor skills development.

06(3.7%) strongly disagreed that course content is organized in meaningful bits, 10(6.1%) disagreed that course content is organized in meaningful bits, 84(51.5%) agreed that course content is organized in meaningful bits, while 60(36.8%) strongly agreed that course content is organized in meaningful bits.

0(0.0%) strongly disagreed that the course contents are presented from simple to complex, 05(3.1%) disagreed that the course contents are presented from simple to complex, 77(47.2%) agreed that the course contents are presented from simple to complex, while 81(49.7%) strongly agreed that the course contents are presented from simple to complex.

02(1.2%) strongly disagreed that Some key concepts are continuously stressed or repeated in greater depth and breadth throughout a course, 09(5.5%) disagreed that Some key concepts are continuously stressed or repeated in greater depth and breadth throughout a course, 92(56.4%) agreed that Some key concepts are continuously stressed or repeated in greater depth and breadth throughout a course, while 60(36.8%) strongly agreed that Some key concepts are continuously stressed or repeated in greater depth and breadth throughout a course, while 60(36.8%) strongly agreed that Some key concepts are continuously stressed or repeated in greater depth and breadth throughout a course.

02(1.2%) strongly disagreed that key topics/concepts are revisited in different courses with more sophistication, 09(5.5%) disagreed that key topics/concepts are revisited in different courses with more sophistication, 80(49.1%) agreed that key topics/concepts are revisited in different courses with more sophistication, while 72(44.2%) strongly agreed that key topics/concepts are revisited in different courses with different courses with more sophistication.

01(0.6%) strongly disagreed that the course content is sequenced such that subsequent content is built on preceding content, 10(6.1%) disagreed that the course content is sequenced such that subsequent content is built on preceding content, 75(46%) agreed that the course content is sequenced such that subsequent content is built on preceding content, while 77(47.2%) strongly agreed that the course content is sequenced such that subsequent content is built on preceding content.

01(0.6%) strongly disagreed that tasks are provided at the end of each unit or topic, 09(5.5%) disagreed that tasks are provided at the end of each unit or topic, 78(47.9%) agreed that tasks are provided at the end of each unit or topic, while 75(46%) strongly agreed that tasks are provided at the end of each unit or topic.

In total, most of the respondents (90.4%) agreed and strongly agreed that the distance learning programme in their institution is well organized. Only about 09.1% of the respondents disagreed and strongly disagree to the fact that their distance education programme is well organized.

### **Discussion of Findings**

The findings revealed that distance learning course contents are well organized in higher education in Cameroon. This finding is in line with Reigeluth (1987) Elaboration Theory (ET) which is used as model for sequencing and organizing courses of instruction using basic organizing structure which may be one of three types: conceptual, procedural, or theoretical. Reigeluth (1987) stressed that instruction should be designed proceeding through an identified structure in a simple to complex fashion, with supporting content added within lessons. To Reigeluth (1987), the sequencing guidelines should depend on the type of content. For example, for conceptually organized instruction "present the easiest, most familiar organizing concepts first" (p. 251). For procedures, "present the steps in

order of their performance" (p. 251). For theoretically organized instruction, move from simple to complex.

Smaldino and Simonson (1999), stated that "when designing any distance learning programme, the learners and their needs should be at the forefront of the design process..." (p. 215). This guides the selection of instructional gaols and objectives and consequently, the content to be organized. When this is done, the instructional intervention that is designed to cause some change in the learners' will definitely enhance the required knowledge, skill, and attitude in the students, thereby enhancing quality assurance. The ADDIE model of instructional design by Gagne (1975) equally states that the Design Phase of an instruction should among other aspects, sequence instruction in an appropriate way so as to attend to the instructional objectives. This is the case with most distance learning programmes in Cameroon. However, for quality assurance to be at the top level in our distance learning programmes, other organization principles such as scope, sequence, the instructional events, learning experiences, continuity, integration, articulation, and balance must be taken into consideration.

# Conclusion

Based on the findings and discussion of this study, it could be concluded that distance learning programmes in Cameroon employs some principles of curriculum or content organization that pertain to scope, sequence, integration, continuity and balance. For example, the content is sequenced from simple to complex, known to unknown and following learners' interest. The micro level scope takes into consideration the learning objectives, subject matter topics and learning activities, just to mention a few.

### Recommendations

This study found out that distance learning course content is well organized in higher education in Cameroon. It was therefore recommended that distance learning instructional designer should continue to organize instructional activities that creates a satisfying and effective learning experiences by taking into consideration the basic design dimensions or organizational principles - the horizontal considerations (scope, integration and balance) and vertical consideration (sequence and continuity and articulation). This will make sure curriculum elements are arranged in a spiral manner to form a relevant, unifying and functional whole thereby enhancing quality.

#### REFERENCES

- Alemnge, F. L. (2015). Distance education at the University of Buea, Cameroon. Journal of Educational Policy and Entrepreneurial Research (JEPER), 2(1), 34-42, ISSN: 2408-770X (Print), ISSN: 2408-6231 (Online), January 2015.
- Alemnge F, L. (2018). Distance Education in Cameroon: Evolution and Challenges. Scholars Journal of Arts, Humanities and Social Sciences, 6(11): 2053-2058.
   DOI: 10.21276/sjahss.2018.6.11.1
- Amin, M. E. (2005) Social Science Research: Conception, Methodology and Analysis. Makere University: Uganda.
- Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139-153.
- Brown, A. H., and Green T. D. (2016). *The Essentials of Instructional Design*. Connecting Fundamental Principles with Process and Practice Third Edition.
- Bušelić, M. (2012). Distance Learning-Concepts and Contributions. *In Oeconomica Jadertina*, Vol. 2, No. 1, pp. 23-34
- Commonwealth of Learning. (2008). *Education for a digital world: Advice, guidelines and effective practice from around the globe*. Retrieved from http://www.col.org/resources/crsMaterials/Pages/edDigitalWorld.aspx

Gagné, R. M. (1985). The conditions of learning (4th Ed.). Holt, Rinehart and Winston.

- Gagné, R. M., Briggs, L. J., & Wager, W. W. (1992). Principles of instructional design (4<sup>th</sup> ed.). Forth Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Gagne, R. M., Wager, W.W., Golas, K. C. & Keller, J. M (2005). *Principles of Instructional Design* (5 th edition). California: Wadsworth.
- Geis, G. L. (1996). "Planning and Developing Effective Courses." In R.J. Menges and M. Weimer (eds.). *Teaching on solid ground*. San Francisco, CA: Jossey-Bass
- Homberg, U. (2008). Evolution of the central complex in the arthropod brain with respect to the visual system. Arthropod Structure & Development, 37(5), 347–362
- Krathwohl, D.R., Bloom, B.S., & Masia, B.B. (1964). *Taxonomy of educational objectives: Handbook II: Affective domain.* New York: David McKay Co.
- Moore, M., & Kearsley, G. (1996). Distance education: A systems view. Toronto: Wadsworth.
- Moore, M.G. & Kearsley, G. (Ed.). (2005). Distance Education: A Systems View. Belmont, CA: Wadsworth
- Ndongfack, M. N. (2016). Baseline study on the current state of open and distance learning in in Cameroon. Yaounde: Commonwealth of Learning

COURSE CONTENT ORGANISATION IN DISTANCE LEARNING PROGRAMS IN CAMEROON HIGHER EDUCATION INSTITUTIONS

- Orlich, D. C., Harder, R. J., Callahan, R. C., Trevisan, M. S., Brown, A. H., &
  Miller, D. E. (2013). Teaching strategies: A guide to effective instruction (10th ed.).
  Independence, KY: Wadsworth/ Cengage Learning.
- Permalla, C., Mak, J., Kee, N. & Maththews, S. (2011) Integrating web applications to provide an effective distance online learning environment for students, *Computer Science*, 3 (pp. 770 – 784
- Posner, G. J., & Rudnitsky, A. N. (1994). *Course design: A guide to curriculum development for teachers* (4th ed.). White Plains, NY: Longman.
- Reigeluth, C. M. (1987). The search for meaningful reform: A third-wave educational system. *Journal of Instructional Development*, 10(4), 3-14.
- Shearer, R. L. (2003). Interaction in distance education. *Special Report* 2(1). Madison, WI: Atwood Publishing
- Smaldino, S. & Simonson, M. (1999). Instructional design for distance education. Paper presented at the National Convention of the Association for Educational Communications and Technology, Houston, TX, 215-219.
- Smith, P. L., and Ragan, T. J. (1999). *Instructional Design* (2nd ed.). Upper Saddle River, NJ: Prentice-Hall,
- Tambo L.I (2012); *Principles and Methods of Teaching,* Second Edition Global Tech Limbe; Design House.
- Tambo, I. L. and Akume, D. A. (2014). Africa and the mediterranean regional focal points meeting. Ebene City, Mauritius May 2014
- Thomas, K. (2004). Selecting and organizing instructional content. *Rocky Mountain Alchemy: Turning the plain into the precious.*
- Tyler, R. (1949). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.
- Webster, J & Hackley, P. (1997) Teaching effectiveness in technology-mediated distance learning. *Academy of Management Journal*, 40 (6), 1282 1309.
- UNESCO. (2000). World education report 2000—The right to education: Towards education for all throughout life. France: UNESCO Publishing.
- UNESCO. (2004). Education for All: The Quality Imperative. *EFA global monitoring report*. UNESCO: Paris.
- UNESCO (2002). Annual report 2002: UNESCO Institute for Education (UIE)