A Quest for Increased Interactivity in the Print Instructional Resources of Open and Distance Learning (ODL) Institutions in Africa: Writing the Study Units of National Open University of Nigeria (NOUN) Print Course Materials

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Abstract: *Learning resources (mainly self-instructional materials, SIMs) remain the most important pedagogic tool in the open and distance learning (ODL) mode. The SIM character is for learners to study with minimum physical or face-to-face contact with the teacher. Distance learning in Africa has however, for the most part been delivered by the operating institutions as part-time learning especially with the increase in required contact hours. This is obviously a quest for the learners to have a dose of the interactivity that is missing in the pseudo-conventional 'textbooks' instead of SIMs, made available to them. The existing print course materials should be modified by interrogating the contents. A comprehensive content review would for instance reveal the inadequate interactivity in the print course materials made available to learners at present. As SIMs, the print course materials which are the most pervasive means of instructional resource delivery in African ODL institutions at present need an increased dose of interactivity. This paper will examine the language in selected print course materials of the National Open University of Nigeria, identify their inadequacies in interactivity and suggest ways of making them more interactive against a conceptual framework of communication theory.*

Keywords: study unit, interactivity, ODL, print, communication.

INTRODUCTION

This paper examines the level of interactivity in print course materials with particular reference to the study unit. Print course materials at present dominate other formats of instructional delivery in distance learning institutions especially in the West African sub region, where Nigeria has become the leading light in the embrace of Open and Distance Learning. As the country is readily providing the other interested countries in the sub-region with assistance to set up their ODL institutions, the seemingly microcosmic focus of this paper therefore, assumes a macroscopic dimension and accentuates the urgency for considering its recommendations.

The paucity of interactivity in the print course materials delivered to learners in ODL centres and institutions in Nigeria has been a source of worry for all stakeholders in the ODL mode that the country's National Universities Commission (NUC) embarked on the seemingly Herculean task of reorientation for teachers of distance learning centres as well as writers of print course materials in the country's universities. NUC in collaboration with the British Council mounted a three-part train-the-trainers (TtT) workshop series to standardize print course materials on General Studies programme of the universities using a course team approach.[1]

This paper makes a case for writers of ODL print course materials to discard their 'textbook' writing mentality for a 'SIMs' orientation to achieve increased interactivity in the writing of each study unit; examines how some selected course materials of the National Open University of Nigeria (NOUN) achieve this and suggests ways for implementation.

The Distance Education Council (DEC) based in New Delhi, India, in order "to **ensure** the **quality** of education and to **assure** the **standard** of degree/diploma earned through distance mode of education," embarks on the evaluation of self-instructional materials (SIMs). Having accepted SIMs format as the most effective mode for preparing learning materials for distance education, the council states categorically that SIMs differ from textbooks or articles in journals. Thurnmond (2003) highlights five factors, continuous contact with course content, clarity of course design, time, participation in discussion, mode of delivering course content as revealing the complexity of the concept of interactivity and its role in determining the quality of learners experiences.

> To conform to the SIMs mode according to Rowntree (1986:9),
> the self-instructional materials must carry out all the functions a teacher would carry out in the conventional situation… guiding, motivating, intriguing, expounding, explaining, provoking, reminding, asking questions, discussing alternative answers, appraising each learner's progress, giving appropriate remedial or enrichment help… and so on .

There is a need to understand the difference between a textbook, a tool in a convention or formal learning mode, and a SIM, the learning resource of the distance learner. In a comparative study of textbooks and self-instructional materials (SIMs), Lockwood (1997) lists the differences, thus:

Textbooks	**Self-Instructional Materials**
- Assumes interest	- Arouses interest
- Written for teacher use	- Written for learner use
- No indication of study time	- Gives estimates of study time
- Designed for wide market	- Designed for particular learners
- Rarely state aims and objectives	- Always gives aims and objectives
- Usually one route through	- May be many ways through it
- Structured for specialists	- Structured according to needs of learners
- Little or no self-assessment	- Major emphasis on self-assessment
- Seldom anticipates difficulties	- Alert to potential difficulties
- Occasionally offers summaries	- Always offers summaries
- Impersonal style	- Personal style
- Dense content	- Content unpacked
- Dense layout	- More open layout
- Readers' views seldom sought	- Learners evaluation always conducted
- No study skills advice	- Provide study skills advice
- Can be read passively	- Require active response
- Aims at scholarly presentation	- Aims at successful teaching

It is obvious from the differences listed that SIMs have to play a vital role in the distance learner's learning process. Lockwood (1997) quoted in Kumar (2010) opines, identified certain attributes of SIM as fostering individual learning, self-paced learning, private learning, availability of learning at any time, availability of learning at any place, availability of learning to any number, standardized content, expert content, updateable content, structured teaching, active learning, frequent feedback, explicit objectives and individualized tutoring.

Also, Lewis (1981) identifies the characteristics of SIMs which Kumar (2010) describes as under:

- An indication of what the learner should be able to do before taking a particular project (i.e., any pre-requisites).
- A statement of what should be learned from the particular section (objectives).
- Practice, so that the learner can see whether or not she/he has successfully reached the objectives.
- Feedback on learner's performance.
- Advice on how to tackle the work, example on how long it should take, how to take notes.
- Motivation and stimulation.
- Unpacking (and) the often difficult content (my word) of the textbooks so that is makes sense to the students.
- Relating concepts to the learner's experiences.

No wonder there have been recorded efforts at making even correspondence course institutes in conventional universities in highly populated India for instance, to transform printed course materials into SIMs. Major props of the characteristics of SIMs enumerated so far emphasize the need for the learning resources to embrace effective interactive communication. Tangential to this is the fact that enhanced interactivity is capable of reducing, if not totally eliminating the distance between the teacher and learners. As Jheengu (2010) emphasizes that interactivity is key element in ODL.

Similarly in Nigeria, the National Universities Commission (NUC) in October, 2009, stated in its Guidelines for Open and Distance Learning in Nigerian Universities, that the practice of dual mode Nigerian universities offering distance learning "is far below acceptable best practice and at best, they are in transition from running of part-time/ sandwich courses to distance learning" (p.6). The identified station of distance education in dual mode universities in Nigeria is the pervasive use of course materials that are best suited for conventional face-to-face learning instead of SIMs for distance learning students.

Learning resources have been encouraged along the self-instructional materials (SIMs) mode according to the NUC, "to bring the Practice of distance learning (in Nigeria) up to speed with global practice" (p.7). This is because studies have shown that delivering instructions, if not skillfully done, is capable of killing learners' initiatives and may encourage dogmatism.

Interactivity is propelled by the tenets of oral communication which may be formal or informal and realizable in a number of media. Of all forms of oral communication however, the face-to-face medium of is regarded as the richest. The participants in this communication process not only take advantage of verbal communication but also can interpret each other's non verbal signs such as facial expressions and body language. For participants in face-to-face communication, a look of dejection or puzzlement sometimes communicates more than a hundred words. The cue can be responded to by the participants right on the spot, that is, instant feedback may be received in face-to-face communication especially when the appropriate steps have been taken to establish the process.

Since the printed course material in distance learning is the medium of communication between the teacher and learners, a right dose of interactivity can further reduce the gap between them. The nearer such dosage brings the teacher to the learners, the better for the learning process as it will be very comparable with the face-to-face learning. What is the right dosage of interactivity that the course units of printed course materials require? This paper suggests three ways the writer of the course unit can increase interactivity in the print course materials for distance learning.

The first is at the linguistic level and this concerns the writer's style and point of view to be adopted in presenting the course unit. The writer should embrace the conversational style and use the second person singular or plural pervasively. Halliday (1973) asserts that the speaker/writer of language makes complex sets of choices which lead to the realization of the meaning in an actual structure. The systems are grouped into three broad functions which correspond to the task any communication system is asked to perform namely: ideational, interpersonal and textual. Halliday refers to "saying something about the state of the social relations between those who are interacting by means of communicational system" as interpersonal function. Whether the writer is in interpersonal and intrapersonal communication with the learner, the conversational approach will not only reduce the environmental stress that may distract the learner, it will also stimulate his or her interest in the subject of discourse.

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- Motivation and stimulation.
- Unpacking the often dense content of the textbooks so that is reads simpler to the students.
- Relating concepts to the learners' experiences.

Again, according to the Indira Gandhi National Open University (IGNOU) *Handbook 5* (1989) the SIM is, self-explanatory, self-contained, self-directed, self-motivating self-evaluative and self-learning. These concepts would eliminate the teacher propelled and enthrone the learner-friendly regime. The major characteristics of SIMs enumerated so far emphasise the need for learning resources to be modeled to achieve similar goals associated with effective communication especially that of achieving the communication initiator's desired objectives.

Since the oral communication process in the face-to-face medium is rated highest for communication fidelity, our recommended dosage of interactivity will be based on the five basic steps required for effective oral communication.

The first step (This is the INTRODUCTION labeled 1.0 in the Case Study below) in oral communication is for the initiator of the process to develop rapport with the receiver. He then states his communication objective before transmitting the message as the third step. The feedback step, the fourth, starts with the initiator checking whether the receiver understands the message transmitted and ends with him or her getting a commitment from and following up on the receiver which is the fifth step. We suggest that writers follow these five steps in writing each unit of their courses. The initiator of the communication (the writer) will switch from the intra-personal to inter-personal narrative style as s/he takes the steps. While s/he takes the first step of developing rapport with the receiver by starting with the intrapersonal narrative style, s/he switches, in the next three steps, to the interpersonal style. The last step which is to get the receiver's commitment will entail that the initiator returns to the intrapersonal interactive style.

In developing rapport, the initiator of communication who is our equivalent of the course writer, thinks (researches) of what to say to put the receiver or the learners at ease before delivery of the core message or the main content of the courses. This is the period of conception and it is at the intrapersonal level. Language used at this level is not directed at a second person but to oneself. It is usually contingent to start writing a course material with a small talk that is correlated to the subject matter.

The University of Maiduguri Centre for Distance Learning (2010) course material *Nigerian Peoples and Culture* rightly develops rapport with a historical preamble on "Nigerian peoples, culture and arts in pre-colonial times."(p.4) .The piece is couched at best in the third person narrative style.

Performance objectives (See 2.0 OBJECTIVES in the Case Study below) set in any course unit are to inform, express feelings or to influence; these should be stated interactively by using the second person conversational style. This not only gives the learner information about the ultimate end result of the purpose but tremendously brings him or her nearer the teacher. The statement of objectives which starts thus: "At (or By) the end of this unit, you should be able to …." is better than "At (or By) the end of this unit, the student should be able to …."

In transmitting the core message which is the main content (labeled 3.0) of the course, the course writer should determine the thrust of his/her communication. Where the content is meant to influence the learners, the writer should tell them what he wants them to do also in the second person narrative style; give instructions, set deadlines for them to complete tasks, and so on. When the aim is to inform, give the information; all in the second person interactive narrative style.

To check the learners' understanding of what has been learnt, the course writer should ask direct questions and/ or use paraphrasing also preferably in the second person narrative style (See SELF-ASSESSMENT Exercises and TUTOR-MARKED ASSIGNMENT labeled 6.0 in the Case Study below). Except, probably, when the objective of your content is to express feelings, the course writer needs to frequently check the learner-receiver understanding of the core message which is the main content of the course or a unit of it. The regularity of self–assessment questions also aids learners' ability to retain the knowledge learnt or practice the skill acquired.

Where the study material is aimed at influencing the learners for acquisition of new knowledge or skill which is the predominant purpose of education, it is important to get a commitment to the action. This is usually done again by a test which this time could be through theoretical or practical examination or both. The writer needs to be sure that the learners can carry out the task they have been taught or trained to carry out; a sought of follow up. The tests in this category are often thought out by the examiner before putting it down for the learners to solve. Such tests are set usually devoid of interpersonal interactive style. The bulk of the examination in distance learning situations is largely impersonal multiple choice objective questions which may only feature strands of personalisation in case-study versions. The multiple choice questions style has aided the realization of electronic examinations (e-exams) in some distance learning institutions in Nigeria, a step that has solved other myriad problems of malpractices associated with the pen-on-paper exams.

Also a second way the unit writer may increase interactivity is by using illustrations. Since "collaborative learning is necessary for constructing one's cognitive process," (Vygotsky, 1978), the use of illustrations including pictures, graphics and tables especially text-tables, could be explored to stimulate interactivity in course materials. This is mostly to generate teacher- student as well as student-student and even group interactivity. For example, the text-table is a simple table without graphical elements like grid lines, rules, shading or boxes. It is usually embedded in the text to flow along with the description of its contents. According to Marcin Kozak (2009), a text-table is "ideal for communicating information to the reader quickly and comprehensively" (p.103).

The third way to increase interactivity in writing the study unit has to do with hiring personnel trained for the purpose. ODL institutions in Africa should engage the services of instructional designers and include them in the course developing/writing team. Right from the planning stage of courses to the actual writing of the course units, the instructional designer should be asked to suggest and offer as many clues as possible to make the material interactive. This will be aside from their usual roles of coming up with suggestions of the other delivery formats in which the course could be presented. Also, the course material should be passed through various trial runs to ascertain the interactivity.

Writing the study units of new course materials or transforming our existing print course materials into SIMs would entail injection of more of the linguistic elements discussed earlier into the study units delivered to distance learners across the continent. The difference between the SIM style and the textbook style is well exemplified in two course materials of the National Open University of Nigeria (NOUN): *PHY 131 Hazard in Laboratory and Laboratory Safety* and *PED 422: Behavioural Problems And Primary School Child*.[2] Both courses materials were published by NOUN but in two years interval. Obviously the latter course material *PED 422* is more representative of the SIM character than *PHY 131*. The goal of NOUN as should be for other West African ODL institutions is to get all course materials in the perfect SIM mode.

Case Study
The study unit is the minimum chunk of the print course material. At NOUN, it is divided into seven labeled parts i.e. 1.0 Introduction, 2.0 Objectives, 3.0 Main Content, 4.0 Conclusion, 5.0 Summary, 6.0 Tutor-Marked Assignment, 7.0 References/Further Reading. The Study Unit is actually the basic foundation in the NOUN programme delivery structure.

The course structure is:
• The Programme e.g., B.Sc Primary/Early Education

I
- Course making up the programme e.g., PED 422
    I
- Modules making up the course e.g., Module 1, 2, 3, and so on.
    I
- Study Units making up the Module e.g., Unit 1, 2, 3, 4, etc.

Interactivity when increased in the study units, will translate to a pervasive increase in interactivity in the course material. Taking an example of a Course Material at the National Open University of Nigeria, PED 422: *Behavioural Problems And Primary School Child* by Professor A. B. Alhassan, the interactivity of the study unit could be increased by taking the following steps under each division of the study unit starting with the Introduction; the ideal study unit will read, as in PED 422 thus:

1.0 INTRODUCTION

By now, **you** have read through the course guide, which was sent to **you** as part of **your** instructional package for the course. If **you** have not, please ensure that **you** read the course guide before reading **your** study materials as it provides a comprehensive outline….

2.0 OBJECTIVES
By the end of this study unit, **you** should be able to:
he then adds a list of measureable objectives e.g.
- explain what is meant by the term behaviour;
- define the concept of socialisation;
- explain the concept of behaviour problem

Using Interactive Self -Test Exercises
- **SELF ASSESSMENT EXERCISE 1.1**
How do parents influence their children to behave the way they want?
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

Good attempt! Let **us** continue **our** discussion.

- **SELF ASSESSMENT EXERCISE 4.1**
If **you** are to embrace Lewin's view, what will be **your** suggestion with respect to behaviour problem in the classroom?
………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………

That's a good attempt! Let **us** continue **our** discussion.

Other Areas of the Study Unit that could be interactive

4.0 CONCLUSION
In this study unit, **you** have learnt the meaning of the term behaviour and some description of the concept of socialisation and the explanation of behaviour problem. **You** have also learnt the description of the psychoanalytic theory. In addition, **you** learnt that the concept of

fixation was Freud's way of explaining how important psychological characteristics and individual differences are in personality development.

5.0 SUMMARY

What **you** have learnt in this study unit concerns description and definitions of the term behaviour, and the concept of socialisation. **You** have similarly learnt what is meant by behaviour problem and the description of psychoanalytic theory.

The study unit has served to introduce **you** to other study units in the course material.The study unit that follows shall build upon this introduction to ensure clarity of terms, concepts and understanding of contents.

6.0 TUTOR-MARKED ASSIGNMENT (TMA)

What do **you** understand by the term behaviour?
* *Note the conversational style under the three items (Conclusion, Summary, TMA).*

We have justified the need to increase interactivity in print course materials delivered to learners by ODL institutions in Africa. It is easily done by adopting our recommendations of conversational style, use of the second person singular and plural to address the learner as well as using more interactive self-test exercises to increase interactivity in the study unit

Notes

1. The NUC in collaboration with the British Council held the three-session Train-the-Trainers Workshop at the NUC headquarters building in Abuja, Nigeria with the resource person from the Open University of UK (OUUK). It was basically on writing course units along the SIM mode and E-Teaching.

2. *PHY 131* written by Olaitan, H.M. and Gupta, S. was published in 2008 while *PED 422: Behavioural Problems And Primary School Child* by A. B. Alhassan was published 2011. In between those years the NOUN held a couple of course writing workshops for its course writers with the theme of injecting interactivity in the course units featuring prominently in a number of them.
Also, the university has since adopted the course team approach for the writing of some of its new course materials with trained instructional designers as members of the teams.

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