Course Material Development and Availability as Determinants of Students’ Academic Performance in National Open University of Nigeria

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ABSTRACT

This study attempts to find the factors affecting the development of course materials and its availability, how these determine students’ academic performance in National Open University of Nigeria (NOUN). The study examines whether there are enough course writers/developers for programmes offered. Research questions are raised and hypotheses formulated to guide the study. The instrument used for data collection was the questionnaire, administered on the sampled students from five (5) schools in two study centres in Ogun (Abeokuta) and Oyo (Ibadan) states. Descriptive tables, simple percentages, five points Likert scale are used. Chi-square test is also adopted in the analysis. The major findings of the study are that there are enough course writers / developers for the various programmes offered by NOUN, and there is timely release of fund to enhance printing and transportation of course materials for its availability to students among others. These adequate provisions enhance better reading culture in students which positively affect their academic performances in NOUN. The study concluded that even though the university is doing well, it needs more experienced/qualified course writers/developers to enhance more quality production of course materials for all old and new programmes offered at NOUN.
INTRODUCTION

The history of open distance learning and education in Nigeria started in 1983 when the National Open University of Nigeria (NOUN) was established. A total of 113 million children of school age were estimated to be out of school (Perraton 2001:2). Various statistics indicate that majority of Nigerians (the class of the poor, illiterate, women, marginalized and those living in rural/remote areas) were yet to be reached through one form of education or the other. The success of Open University in Britain from its inception in 1971 provided a model for distance education at University level. This was emulated in the establishment of institutions such as the Sukkothai Thammathirat Open University in Thailand in 1978 and the Indira Ghandi National Open University in India in 1985 (Dodds and Frank, 1994). The National Open University of Nigeria was initially established on 22nd July, 1983 as springboard for Open and Distance Learning in Nigeria (ODL).

ODL employs some methods to deliver and take education to the people and make learning an enjoyable activity. These methods included using: printed instructional materials, audio, video tapes and CD-ROMS. This would be transported to the students by courier companies, NIPOST and NOUN’S in-house transport division. Television and radio broadcast of educational programmes are used, with electronic transmission of materials in multimedia (voice, data, graphic, video) over fixed line (telephone or leased lines), terrestrial and VSAT wireless communication systems. Study centre signed each of the geopolitical zones, states and local government areas shall perform critical roles in the delivery of instruction.

Study Centres are resource places where students pick up Course and study materials as well as interact with Instructional Facilitators and Tutors, Students’ Counselors, Study Centre Directors and with other students. A number of other Learner-Support facilities include internet browsing, e-mailing, library and a range of communication channels are also available at the study centres.

Jegede (2003) submitted that since its independence in 1960, Nigeria has continued to demonstrate an irrevocable and unwavering commitment to education as a tool for national and personal development and as an inalienable right of her citizens. He went further to say that the socio-economic dimensions of providing education for all are huge, bearing in mind the population of the country and tilt competing basis for resources amongst compelling needs of the society. The ever growing demand for education cannot be met by the traditional face-to-face classroom instructional delivery. The way forward was to embrace the open and distance education. Thus, by an Act of the National Assembly, the National Open University of Nigeria (NOUN) was
established in 1983. The practice of self-learning distance learning mode was adopted as its way of instruction.

NOUN is offering courses which lead to the award of Certificates, Diplomas, Post-Graduate Diplomas and Degrees. It has catered for the continued educational development of various professionals that spread across Teachers, Accountants, Bankers, Lawyers, Doctors, Engineers, Politicians, Self-employed, Businessmen and Business Women. The University at present has 47 study centres spread across Nigeria and it is Nigeria’s leading – and only specialist – provider of open and distance learning at tertiary level. It offers over 50 programmes and 750 courses. It has been striving at maintaining a strong commitment to internationalization, (Adeyemi, 2013).

The Federal Government of Nigeria (2004) in its National Policy on Education stated that it shall undertake to make life-long education the basis for the nation’s educational Policy. And to achieve this objective, the government adopted a philosophy of education for Nigeria meant to ensure that at any stage of the educational process after primary education, or embarking on full-time employment without excluding the prospect of resuming studies later on, (FGN, 2004). The policy equally in recognizing the importance of self-learning according to Ogundiran (2009) underlined the fact that the education system will be structured to develop the practice of self-learning.

Nigeria has always seen education as an instrument for empowering people and equally the best legacy any nation can bequeath to its citizenry. Adeyemi (2013), writing on the role of education in national development agreed that for development to take effect, a country must have a very considerable proportion of trained educated citizens not only to act as doctors, engineers, teachers, agriculturists, scientists and the like, but must create a new class sufficiently large and hence, sufficiently strong to establish its own value of justice, selection on merit, flexibility, empiricism and efficient.

Nigeria, like most other populous countries is not a newcomer to distance education. During the colonial era, the quest by the British to colonize what is now referred to as NIGERIA could be traced to when some Emirs in the Northern part of the country refused bluntly to colonial rule, and domination of their territory and were banished to Lokoja (now capital of Kogi State) as punishment by the colonists. Some international organizations such as United Nations Education, Scientific, and Cultural Organizations (UNESCO), Commonwealth of Leaning (COL), British Council (BC), Literacy in Education Assistance Programme (LEAP) have equally assisted Nigeria in the quest to firmly root distance education. These international agencies have been of immense help in the training of distance education institutions and staff. COL has encouraged the use of information and communication technologies (ICTs) in the delivery of distance learning.

Aderinoye and Kester (2003) noted that UNESCO, apart from providing technical advice for the establishment of National Teachers Institute (NTI) Kaduna in 1976; also organized a workshop on “Course writing” for distance education course developers in Abuja in June 2001, in which more than 3000 course developers from West Africa
sub-region participated. Jegede (2003a:15) argued that the birth of distance education is traceable to the quest by Nigerians struggle to obtain qualification through higher education for social and occupational mobility. Tait, A. (2003) echoed that “the University of London which was termed the “first Open University” because of its move to use correspondence education as means of preparing candidates for the General Certificate of Education (GCE), which was a re-requisite for the London Matriculation Examination then. Some Universities in Nigeria that operated similar programmes were University of Nigeria, Nsukka in 1981 while Ahmadu Bello University (ABU) Zaria operated a variant of distance education.

The University of Lagos established its Correspondence and Open Studies Unit (COSU) in 1972 and had been upgraded to an institute called Correspondence and Open Studies Institute (COSIT) but now called Distance Learning Institute (DLI), even as University of Ibadan (UI) and University of Ilorin called their Institute of Education. In 1978, National Teachers’ Institute (NTI) Kaduna was established using distance education mode to improve the quality of primary school teachers in Nigeria.

According to Federal Republic of Nigeria (2004), in the current knowledge driven global economy, higher education systems play major roles in social development and national economic competitiveness, however, they face immense challenges in meeting rising enrolment demands worldwide. Open Educational Resources (OER) are teaching, learning and research materials in any medium that resides in the public domain and has been released under an open license that permits access, use, re-purposing, reuse and redistribution by others with no limited restrictions or any restrictions (Atkins, Brown & Hammond, 2007).

According to Glen (2005) and UNESCO (2011), Open Educational Resources (OER) can include full courses/programmes, course materials, modules, student guides, teaching notes, textbooks, research articles, videos, assessment tools and instruments, interactive materials such as simulations and role plays, databases, software, applications (including mobile applications) and any other educationally useful materials such as simulations and role plays, databases, software, applications (including mobile applications) and any other educationally useful material. UNESCO (2011) also clarified that the term Open Educational Resources (OER) is not synonymous with on-line learning, e-Learning or mobile learning but while shareable in a digital format, is also printable. The National Open University of Nigeria (NOUN) system of delivering instructional materials was modeled after that of Indira Ghandi National Open University (IGNOU), India, NOUN does not provide lectures to students in the normal classroom situations, instead, it teaches through the provision of specialized study materials on the basis of self-learning. These study materials are given or sent to students who are enrolled for the courses by the postal service.
FRAMEWORK

Open learning refers to “policies and practices that permit entry to learning with no barriers or with minimum barriers with respect to age, gender or time constraints and with recognition of prior learning” (Glen, 2005). The flexibility of open learning and its access to means of instruction, the distance educational mode ensures that broad availability of educational opportunities reaches as many segments of the population as possible, (Jain, 2001:63; Aderinoye & Kester, 2003). Jegede (2003:13) has argued that this mode of learning can accommodate diverse learning styles, and provide access to remote and normally inaccessible under-represented groups and people in different circumstances. He had also argued further that this type of learning has proved to be efficient all over the world including Africa, not leaving Nigeria behind.

Dhanarajan (2001) described distance education as the means by which the teacher is taken literally to the student. It is a teaching and learning process in which students are separated from the teachers by a physical distance which is often bridged by communication technologies. Also, Dodds and Frank (1994) as cited by Perraton (2001) see distance education as an educational process in which a significant proportion of the teaching is conducted by someone that is removed in space and time from the learner. The link between the so called someone and the learner is therefore necessary provided by different means of communication and instruction. A fundamental characteristic of distance education is that it is learner-centred. A learner-centred educational process means departing from a conventional teaching and learning culture, to one which employees a wide range of tools (course materials) to effect learning outcomes.

Table: 1. Common Synchronous and Asynchronous Technologies

|               | SYNCHRONOUS                | ASYNCHRONOUS                |
|---------------|----------------------------|------------------------------|
| Video         | Video conferencing         | Video tape, DVD Broadcast video |
| Audio         | Audio conferencing         | Audio files, Radio Podcasts |
| Data          | Internet chat, Internet video conferencing | E-mail, CD-ROM |

These are materials and tools designed for recognizing self-learning. They include printed course units and readers, tutor and computer marked assignments and feedback systems, radio and television broadcasts, audio and video tapes, CD-ROMS, home kits and individualized counseling, and help through telephone and electronic mails (data, graphic) terrestrial and VSAT wireless communication systems. The method of instruction at NOUN is by the distance learning mode within an open learning environment. For clarity, open learning is defined by Glen, (2005) and Adeyemi (2013) as any form of learning in which the process enables individual learners to exercise
choice over any one or more of a number of aspects of learning and that this type of instructional mode provides opportunity for working people to acquire knowledge, skills, and techniques which may be relevant to their present work situation or to future career prospects. It allows for teaching people who are living in any location, regardless of the types of jobs they do. It is also flexible in terms of age and time, allowing for enrolment at any time and age and at a convenience of pace dictated by the students.

**OBJECTIVES OF THE STUDY**

The study is seeking to identify the factors that are responsible for non-availability of printed course materials in National Open University of Nigeria using two selected study centres. If materials are not available as at when needed, does it affect the academic performance of students? Then, this study is designed to investigate into factors that affect their availability and students’ academic performance.

**METHODOLOGY**

The survey research design was adopted in this study. Survey researchers are interested in the accurate assessment of the characteristics of the whole population of people. It studies large and small population by selecting and studying samples chosen from the population to discover the relative incidence, distribution and interrelations of sociological and psychological variables.

The population of this study consists of 100 (one hundred) students of National Open University of Nigeria in five (5) different schools amongst others, and from two (2) study centres within Lagos State. The study outreach centres are in Agidingibi and Apapa.

From each of the five schools, twenty (20) students will be randomly selected totaling 100 (one hundred) in all. Fifty (50) students from Ikeja study centre and fifty (50) from Apapa study centre. One hundred students were selected through random sampling to comprise male and female. These resulted into having 20 students selected from each of these five schools.

One set of questionnaire was designed by the researcher. It has three sections; SECTION A has to do with the background information of the student. SECTION B has a list of questions probing into the students awareness and importance of the availability and use of course materials for their programmes vis-à-vis their academic performance, while SECTION C is a list of questions probing into the effect which the availability of course materials have on academic performance.

The instrument used was properly scrutinized by most senior colleagues within and outside the University. Descriptive tables, simple percentage, Likert’s 5 point Rating Summated method and Chi square test were used for analyzing the data.
Compliance to research ethics protocol was done through signed informed consent. The researcher personally visited the two study centres (Agidingbi and Apapa) involved in the study with the formal permission of the student counselors of the centres before administering the questionnaire. The validated questions were administered on the students of 5 (five) schools with the help of the staff of the study centres. The researcher ensures the immediate retrieval of completed questionnaire.

The instruments are scored and coded for competition on the SPSS package of the computer. Meanwhile, the analysis of data was done using Descriptive Tables, Simple percentage, Likert 5 Points Summated Rating Method and Chi-square Test.

**RESULTS**

| Name of School                   | No. of Admission | No. Returned | Percentage % | No. Administered | No. Returned | % |
|----------------------------------|------------------|--------------|--------------|------------------|--------------|---|
| School of Management Science     | 10               | 10           | 20           | 10               | 10           | 20 |
| School of Science and Technology | 10               | 10           | 20           | 10               | 10           | 20 |
| School of Law                    | 10               | 10           | 20           | 10               | 10           | 20 |
| School of Education              | 10               | 10           | 20           | 10               | 10           | 20 |
| School of Arts and Social Science| 10               | 10           | 20           | 10               | 10           | 20 |
| **Sub Total**                    | **50**           | **50**       | **100**      | **50**           | **50**       | **100** |

Section A: Analysis of Respondents Bio-Data

The School of Arts & Social Science (Apapa Study centre) 04 male and 06 female students responded (20%); while from the same school (Ikeja study centre) 08 male students and 02 female responded (10%), totaling 20%. Also, it would be observed that the total number of male respondents for the two centres were $22 + 36 = 58$ while female respondents were: $28 + 14 = 42$ cutting across the five schools in the two study centres. This implies that more male students responded than female students.

About 25 (50%) of the respondents were from School of Management Science (Apapa) offering B.Sc and 23 (46%) from (Ikeja) study centres total 96%. The School of Science & Technology (Apapa) had 16 (32%) while (Ikeja) had 05 (10%) total 42%. The School of Arts & Social Sciences (Apapa) had 06 (12%) while Ikeja had 07 % (14%), totaling 26%. Amongst the three, out of the five schools, respondents undergoing B.Sc programme were the highest respondents.

About 35(70%) of the respondents in (Apapa) and 17(34%) of Ikeja were in 100 level, i.e. undergraduates in year one. Those on 200 level from Apapa were 10(20%)
while 12 (24%) were from Ikeja. Those on 300 level from Apapa were 05 (10%), while 11 (22%) were from Ikeja, only 08(16%) that came from Ikeja were on 400 level. This result implies that many respondents were undergraduates who would need to have been supplied with PRINTED COURSE MATERIALS among others for their use in academic pursuit.

About 36 (72%) of all respondents in the five schools were from (Apapa), and 40 (80%) from (Ikeja) study centres used or collected printed course materials. Only 01 (02%) from Apapa used CD-ROM, 13(26%) respondents from (Apapa) and 10 (20%) respondents from Ikeja used materials downloaded from the internet. This implies that students who collected or used printed course materials were higher than those that used other sources.

RESULTS AND DISCUSSION

RESEARCH QUESTION ONE: Are there enough writers/developers for all courses offered in National Open University of Nigeria?

From the above analysis in statement 1, the mean rating of 4.30 shows that the respondents agreed that NOUN uses printed course materials as means of instruction as a higher institution. The mean rating of 4.4 obtained from Statement 2 portrays the effect that there is need for course developers and writers to enhance production of course materials. For statements 3, 4, 8 and 15, the respondents did not decide while for statement 21 with mean rating 4.30 showed that the respondents agreed that there were other sources of instruction apart from printed ones.

RESEARCH QUESTION TWO: Are the course materials printed on time? This research question sought to ascertain if these course materials are printed on time. This question was tested with statements 4, 6, 7, 10, 11, 12 and 14.

From the above analysis, the mean rating of 4.24 for statement 4 showed that the University used printed materials as means of instruction and issues same to students upon enrolment. Statement 10 with value of 4.00 also revealed that the respondents that printed course materials were not available at study centres when needed. The learning skill of students was enhanced with the provision of printed course materials through the value 4.25 in statement 11. The value of 4.05 from statement 12 revealed that printed course materials were usually not issued out in full to students at the beginning of such semester. It will be noted from Statement 14 with 4.08 value showed that the respondents agreed that the University prints less number of needed course materials, compared to registered population. The mean rating values of statements 6 and 7 of 2.56, and 3.94 showed that the respondents disagreed and did not decide on whether it was easy to collect study materials from the school store and being exposed to printed course material for their programmes respectively.
RESEARCH QUESTION THREE: Does the release of fund for printing makes course materials available on time? This research question sought to find out if funds are released on time for printing of course materials. This question was tested with statements 9 and 17.

The mean rating for statement 9 of 3.27 showed that respondents were not decided that the school authorities’ administrative bureaucracy makes non-release of fund on time possible for printers to carry out printing course materials. The mean rating of 4.53 for statement 17 showed that respondents agreed that the release of fund for the printing of course materials will enhance students’ academic performance.

RESEARCH QUESTION FOUR: Does transportation logistics of these course materials to all study centres, make these instructional materials available for collection when needed? This research question sought to determine if the logistics of transporting course materials to all study centres make them available for collection by students when needed. This question was tested with statements 13, 16, 19, 20 and 26.

On statement 13, the value of 3.76 showed that respondents were undecided about logistics of transporting printed course materials to study centres for examination preparation. The mean rating of 4.5 for statement 16 showed that respondents strongly agreed that timely printing of course materials will enhance students’ academic performance. Furthermore, the mean rating of 4.46 gotten from statement 19 shows clearly that respondents agreed that students read printed course materials and it enhances that academic performance. It is worthy to note that the mean rating of 4.37 obtained from statement 20 revealed that the respondents agreed that printed course materials contributed to students reading ability. The student’s ability to read more for longer time with the use of printed course materials was corroborated with the mean rating value of 4.33 in statement 26 as they agreed to it.

RESEARCH QUESTION FIVE: Does the availability of these course materials affect students’ academic performance? This research question sought to know if the availability of course materials have effect on students’ academic performance. This question was tested with statements 18, 22, 23, 24, 25, 27, 28, 29, 30.

The mean rating value of 4.48 for statement 18 showed that respondents strongly agreed that the availability of course materials is a contributor to their reading ability. Statement 22 also showed that its figure of 4.16 revealed that respondents agree that the availability and accessibility of printed course materials have improved students’ academic performance. The mean rating of 4.18 for statement 23 showed that the respondents agreed that the availability of printed course materials for collection enhanced students’ encouragement to read, and also contributed to their academic performance. Statement 24 with 4.19 value showed that the respondents agreed that non-issuance of printed course materials in full affects students’ preparation for tutor-marked assignment.
The late arrival of printed instructional course materials in full to study centres, has effect on students’ academic performance as agreed to in statement 25 with the mean rating value of 4.18. The value of 4.19 for statement 27 proved that the respondents agreed to the use of printed instructional materials has produced improved attributes in students towards reading and learning, 4.16 value for statement 28 revealed that respondents also agreed that students performed well with the use of printed instructional materials, even as statement 29 with mean rating value of 4.21 showed that academic performance of students’ programme improved from the use of course materials. Statement 30 with mean value of 3.32 revealed that respondents were undecided on the statement that academic performance of the students did not improve with the use of course materials.

**CONCLUSION**

The results from this study indicate congruence among teachers’ self-efficacy, English proficiency, and their teaching effectiveness. The more proficient the teachers are in the language, the higher their senses of efficacy, which later has a greater impact on their teaching effectiveness.

Evidence highlights the importance of enhancing English proficiency and developing self-efficacy among teachers in the secondary schools. The results of this study show the importance of language proficiency as the foundation of teachers’ confidence. Also, teachers’ judgments about their teaching competence influence their effectiveness in teaching. These findings suggest that English proficiency enhancement and self-efficacy development should be considered as means to address issues and problems in language teaching.

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