



Management of Information Dissemination Mechanisms: Key to Successful Extension and Distance Education Programmes in Nigeria

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Abstract

This study was designed to determine how the management processes of information dissemination mechanisms is key to successful Extension and distance education programmes in Nigeria. The aim of the study was to ascertain the organisational and coordination skills of the administrative personnel in National Open University of Nigeria (NOUN) Kogi study centres for distance learning in the management of information dissemination in extension and distance education programmes in Kogi State. To carry out this study, two research questions were stated. The study adopted descriptive survey research design. The population of the study is 200 respondent. Simple random sampling technique was used to draw a sample size of 41 respondents from the none academic staff of National Open University of Nigeria (NOUN) Kogi study centre. Data collected were analysed using mean and standard deviation. The result revealed that the organizational and coordination skills of personnel still need to be improved through training and retraining of the staff for enhanced management of information dissemination mechanism for successful extension and distance programme in National Open University of Nigeria (NOUN) Kogi study centre. This will enhance the organizational and coordinating skill of the personnel in information dissemination in the study centres. It is recommendation that the centre for training and development in National Open University of Nigeria (NOUN) Kogi study centres should make concerted effort to expose the personnel to frequent training and retraining programmes for enhanced information dissemination for successful extension and distance education programme in Nigeria.

keywords: Management, Information Dissemination Mechanism, Extension Education and Distance Education

Introduction

Extension and distance education programmes in Nigeria were introduced into the educational system to bridge the gap of educational need of the citizenry. It is to extend education to those that have not been reached through the conventional system. Extension and distance education have become popular method of instruction especially for those with demanding full-time job or those who find it difficult to invest their time and money for educational pursuit in the conventional system (Mundi & Tenebe, 2013). In this way, extension and distance education help to reduce the burden of ignorance and poverty among the teeming Nigerians especially the youths and adults alike to fulfil and bridge the need for education. Successive government have used extension and distance education programmes to implement its valuable policies especially in the agriculture sector of the economy (Ogunniyi, Babu, Balana & Andam, 2020). Despite this importance and input of extension and distance education, it is glaring that Nigeria is still laden with economic, socio-cultural and intellectual issues that accounts for various problems bedeviling the country today. Youths in the country are either unemployed or lack job, due to inadequate



skills that will enable them fit into the emerging 21st century workforce as the engine room of production. The national bureau of statistics 2020 shows that the unemployment rate in Nigeria has risen up to 33.3% while youth unemployment rate in Nigeria increased from 40.80 in the second quarter to 53.40 percent in the fourth quarter of 2020 (National Bureau of Statistics [NBS], 2020).

This rise in unemployment rate may be largely due to lack of access to the right skill and education in the conventional system leading to skill deficiency which is the gap that extension and distance education programmes was ab-initio designed to fill. The continuous existence of this gap has led to continuous increase in term of unemployment rate especially among the youths which has become a cog in the wheel of progress in the socioeconomic and intellectual pursuit among Nigerians. This has necessitated the need to re-examine the management of information dissemination mechanism which is key to the success of any extension and distance education programmes in the world. It is spelt out as part of the mandate of Nigerian National Policy on Education NPE (2014) “to provide access to quality education and equity in educational opportunities for those who otherwise will have been denied” which invariably mean the extension of education to those that has not been reached through the conventional system. Our knowledge-based economy requires a complementary existence of formal education system in the form of an efficient extension and distance education programmes. This is to reach those that have not been reached in order to ensure a steady growth in training and the development of skilled and employable labour population in Nigeria.

Holland (2000) observed that any training programme leading to a qualification or a credit in the 21st Century will be available in three modes: full time, part time, and through extension/distance learning programme. This implies that where formal education system, harnessed through full time educational programmes do not meet the needs of the learning community, part time and extension/distance education programmes will bridge the gap. This system has its strong hold in the dissemination of information through mechanisms that convey the information to the recipient at a distance. In this perspective, information dissemination mechanisms becomes important and it implies the various channels through which the government and its agencies, nongovernmental organizations (NGOs), public and private companies and individuals involved in the work of providing information through required and designated information to the target audiences. These mechanisms include traditional African methods and modern global methods such as print (newspapers, magazines, government documents, periodicals, journals, books, etc.) and non-print (television, radio, the Internet, etc.) and library (Etebu, 2019). Again, in the 21st century media space, information media can also be categorized into social and traditional media. Social media space includes short messages service, microblogs, and news portals, WhatsApp, Messenger, and Emails, because of their high impact and coverage ratio made possible by developments in information technology (Kaplan & Haenlein, 2010; Macilwain, 2013) are becoming increasingly popular and therefore critical tools of information dissemination (Allen, Stanton, Di Pietro & Moseley, 2013). These media have the capability to enhance learning processes based on quick and more available data provided than the traditional media. The traditional media include television, textbooks and radio, which also play important roles in information dissemination.

Despite the availability of these media to enhance and ensure success in extension/distance education system, it has been heavily criticized by employers of labour as been inferior to the



conventional system of education. This is why it has become imperative to examine the management processes of these media in the dissemination of information in extension/distance education programmes in Nigeria. Management emphasizes the importance of working with people, who are the mechanisms through which works and projects are effectively carried out. Haimann and Scott (2017) defines management as a social and technical process which utilizes resources, influences, human action to facilitates change to accomplish organisational goals. This simple means that all the aforementioned factors are very important in the management processes of extension and distance education programmes. The proper utilization of resources, influences, and human action enhance the management process for better outcome of extension and distance education programmes. Corroborating this, Taylor (2017) sees management as the art of knowing what you want to do and then seeing that they do it in the best and the cheapest manner. The life wire of management in the context of extension and distance education programme is through a well-organized and coordinated dissemination of information mechanism for the achievement of objective of programmes. Effective information dissemination can be achieved in extension and distance education programmes based on the definition of Taylor which has the basic principle of management such as planning which is an ongoing process of developing the business, mission and objectives, and determining how they will be accomplished, it also includes both the broadest view of the organization, e.g. its mission, and the narrowest, which involves tactics for accomplishing a specific goal.

Management also involves organizing that leads to establishment of the internal structure of the organisation. This is division of labour, co-ordination, and control of the tasks and information flow within the organisation. This is where the managers distribute authorities among the personnel in the organisation. Another basic function is staffing. This is the process of filling and refilling of positions with qualified personnel within the organisation. This process involves recruiting, hiring, training, evaluating and compensation of personnel for specific activities within the organisation. In addition to staffing is directing which is influencing people's behavior through motivation, communication, group dynamics, leadership and discipline. The purpose of directing is to channel the behavior of all personnel to accomplish the organisation's mission and objectives while simultaneously helping them accomplish their own career objectives. Another basic principle of management is controlling which is a four-step process of establishing performance standards based on the firm's objectives, measuring, reporting actual performance, comparing the two, and taking corrective or preventive actions as necessary of the management especially of knowing what you want to do and making sure it is done in the best way possible. These basic components of management drives management activities that will enable the proper dissemination of various mechanisms of information function effectively at a distance.

It is the process of making sure that the needed knowledge is adequately and effectively conveyed to the target recipients. It has to do with the circulation or quick diffusion of information; aided by a number of mechanisms. The speed of information dissemination is dictated by the mechanism used for quick spreading of information to the target group. This may be through SMS, Blogs, Internet forums and bulletin boards. It also includes e-mail, instant messaging, CDs, video, film, PC-produced publications, community broadcasting, and other news media such as radio and television. Hudron (2016) also identify mechanisms for information dissemination as the radio, extension workers, television, GSM, films, immediate community and village square meetings. It noted that despite the use of these mechanisms to facilitate the achievement of programmes



objectives of extension and distance education, there is a continuous low perception of the programme which the researcher perceived might be due to poor management of information dissemination mechanism to reach the target group or audience in extension and distance education. Hence the efficient management of mechanisms in disseminating information at a distance is inevitably important. This is why Tire (2006) has observed that no single method of delivery will suit a particular programme if it is to succeed. The challenge is finding the most appropriate method that will make a positive impact on the learners is very important. Hence the need for proper management of mechanism for dissemination of information in extension and distance education programmes. Rumble (2002), has observed that setting up of a distance education system raises a number of questions, one of them being how to run such programmes in a way that maximizes efficiency and effectiveness in the use of information resources. This is important since distance education enables a limited number of teachers to reach a very large number of students, this seems to offer a large scale of return in terms of cost benefit analysis of extension and distance education programmes. Hence the need for efficient management of mechanism for dissemination of information. Information dissemination mechanism in extension and distance education paradigm, according to Rumble (2002), is diversified. It ranges from the well-established to the newest forms of communication technology. In developed countries, extension and distance education programmes do not only use printed text but also tapes and cassettes, telephone, audio and video-conferencing, telematics and computer-conferencing. In planning extension and distance education programmes, the questions that may interest planners are:

- Which media to use to satisfy which needs?
- Which media works best and where?
- How much do they cost?

Management of these information dissemination mechanisms has not been successful in Nigeria largely due to poor organization and control. This can only be achieved through inter-sector teamwork, collaboration and cooperation. This implies that government and non-governmental organisations are sufficiently involved in the decision-making process and making substantial technical contributions for the effective management of these information dissemination mechanism in extension and distance education programmes in the country. This assertion has been corroborated by Ikegulu and Oranusi (2014) that existing delivery or conventional models cannot address the growing global demand for post-secondary education. Nigeria needs the political will, the human and infrastructure capability to build and sustain extension and distance education system. It is in realization of this that Awe (2017) has observed that presently, the National Universities Commission has approved the following Universities as dual mode institutions; namely: University of Ibadan, University of Lagos, University of Abuja, Obafemi Awolowo, University of Nigeria Nsukka, University of Maiduguri and Federal University of Technology, Yola among others. The dual mode institutions combine both conventional and distance education programmes. In some of these institutions, students come for residential programmes when the regular students are on vacation. The National Open University of Nigeria Abuja and the National Teachers Institute (NTI) are the uni-mode institutions running distance programmes in Nigeria.



These Universities serves as hub through which information is delivered at a distance to their clientele. The institutions form the bedrock for the distance learning due to its already existing infrastructural framework that will enable the extension and distance education programme to be adequately administered. Information Communication Technology (ICT) available at these institutions of higher learning were incorporated into the distance education programme and experts in the ICT arena puts into play the needed ingenuity for effective information dissemination at a distance. Distance educators at various NGOs and stakeholders meet for consultation and collaboration; team up with the needed personnel to help the institutions on the training of facilitators. They also hold meeting together with the facilitators for programme success, general opinion and challenges and prospect; for the essence of effective management of information dissemination mechanism employed in extension and distance education programmes.

The above collaborative framework puts more importance on intra-institutional relations, this is necessary because a lot of extension and distance education programmes are run and operated by non-governmental organisations. The provision of the institutional information dissemination mechanism also reduces the cost that might have been incurred in the absence of such collaboration. Windham (2015) has observed that problems can arise, however, where common interests are not strong enough to keep the partners together, and where disagreements about academic and pedagogic policies, or technical and financial pressures, make collaboration difficult. In this perspective, collaborators should involve and actively engage in the programmes and activities that have been generally agreed upon through concerted effort at mobilization of resources for effective management of information dissemination mechanism for extension and distance education.

In addition to the challenges created by uneven and puny collaborative effort, management of information dissemination mechanism in distance education lacks the necessary impetus and force required to achieve the needed information dissemination in a knowledge driven and globalized world. In order to effectively respond to these lapses, efficient collaboration between the various stakeholders is sine-qua-non for efficient management of the mechanism used in information dissemination in an extension and distance education paradigm.

Management of information dissemination mechanism in distance education shares certain peculiar rudiments with all other forms of management in human organizations. This is because the role requires constant decision making that affects the use of both human and material resources to produce the desired result. To corroborate this view (Fayol, 2015) identified the major factors in efficient management of information dissemination mechanism to include Planning, Organizing, Staffing, Directing and Controlling. It establishes the place of decision making, creativity, personal skill and goal oriented as basic tools that enhances mechanism involves in disseminating information in extension and distance education.

An example of an agency that uses information communication technology as a mechanism in disseminating information to the communities is Kogi State Ministry Health; which has anchored a lot of programmes aimed at sensitizing the various communities on the various functions they perform. A good number of rural communities in the state are not abreast with the functions of this ministry. These lapses have been attributed to inefficient personnel management. These personnel form a very important aspect of the mechanism used in disseminating information at a distance. They are supposed to function properly in ways that will enhance the awareness of members in relation to health services that the agency renders in the communities. It is against this



backdrop of inefficient communication technique of agencies that this study seeks to find solution on how information dissemination mechanisms could be better utilized in Extension and Distance Education services in Kogi State. The motivation and enhancement of extension and distance education programmes and the realization of its goals cannot take place without efficient managerial principles. For sufficient information dissemination to be realized in extension and distance education in Kogi State Nigeria there is need for efficient management of the mechanisms used in the dissemination of the needed information; which also requires close monitoring of the various vehicles involved therein; and this is what propels this study.

Statement of the Problem

Information is power in this current age of fast changing technology. This is especially important in the learning space of extension and distance education. So, a well coordinated and engineered information dissemination system in extension and distance education space promotes learning. This is why the management of information dissemination mechanism is important in extension and distance education. But numerous issues appears to hamper the management of information dissemination mechanism in extension and distance education in Nigeria. Some of the issues include: choice of which media to satisfy which need, which media works best where, and ascertaining the financial implication of such media in extension and distance education. These questions seem to hamper the smooth running of extension and distance education and appear to constitute areas of inefficiency among players involved in extension and distance education programmes in Nigeria,

The continuous improvement and growth in extension and distance education in Nigeria, demand efficient management mechanisms of disseminating information in extension and distance education programmes. This is achieved through the provision of state of the art technology to adhere to effective mechanism to meet the educational need of students in extension and distance education programmes in Nigeria. If this is not done, reaching the underserved in the conventional system of education may not be achieved through extension and distance education programmes in Nigeria. It is on this understanding that the management of information dissemination mechanism in extension and distance programmes in Nigeria becomes imperative. Unfortunately, the success of extension and distance is not acceptable base on the criticism by the consumers of the products of extension and distance education especially employers of labour. They try to compare the products of extension and distance education to the conventional system especially, the various inputs made in the production process of extension and distance education such as the mechanism of information dissemination which they view as been inferior due to the distance between the teacher and the learner. It is based on this notion that the Management of Information Dissemination Mechanisms is been examined as a Key to Successful Extension and Distance Education Programmes in Nigerian context.



Purpose of the study

The main purpose of the study is to investigate the management of Extension and Distance Education Programmes in Nigerian especially for the effective dissemination of information to meet the learners need in Kogi State Nigeria. Specifically, the study sought to:

1. determine the organizational skills of personnel in centre for extension and distance learning in the use of media to meet the needs of extension and distance learners in Kogi State study center.
2. ascertain the innovative skills of personnel in centre for extension and distance learning in the use of media to meet the needs of extension and distance learners in Kogi State study center.

Research Questions

The following research questions were posed to guides the study:

1. What are the organizational skills of personnel in centre for extension and distance learning in the use of media to meet the needs of learners in Kogi State study center?
2. What are the innovative skills of personnel in center for extension and distance learning in the use of media to meet the needs of learners in Kogi State study center?

Hypotheses

1. There are no significance difference in the mean ratings of male and female personnel on their organizational skills in the centre for extension and distance learning in the use of media to meet the needs of learners in Kogi State study centers?
2. There are no significance difference in the mean ratings of male and female personnel on their innovative skills in the centre for extension and distance learning in the use of media to meet the needs of learners in Kogi State study centers?

Scope of the Study

This study is limited to Kogi State of Nigeria. The variables under study are the organizational and innovative skills of the personnel in center for extension and distance learning to meet the need of the learners. The contents scope includes management, information dissemination mechanism, and extension and distance education. Geographically, the study will be carried out in Kogi State study centers for extension and distance education.

Methodology

This study adopts a descriptive survey research design. The study covered the three (3) senatorial districts in Kogi State of Nigeria namely: Kogi East, Central, and West. The choice of this area was inspired by the fact that the state is a host to extension and distance learning centers. The population for the study is 1200 respondents. It consists of ten directors, 36 supervisors, 72 facilitators and 1082 students of the study centers and other agencies involved in extension and distance education, all proprietors of adult education centers and their instructors in the State. The sample size of the study was 239 respondents. Proportionate simple random sampling technique



was adopted to draw out the samples and the outcome gives two directors, seven supervisors, 14 facilitators and 216 students respectively as sample size for the study. The instrument designed for this study was a structured questionnaire which was developed by the researcher and titled: Questionnaire for Investigating Management of Information Dissemination Mechanisms in Extension and Distance Education programme (QIMIDMEDE). To determine if the instrument was capable of measuring what it is designed to measure, the questionnaire was face and content validated by two lecturers in the Department of Continuing Education and Development Studies and two lecturers in the Department of Science Education of the University of Nigeria, Nsukka. This helped to put the structure and contents of the instrument in line with the research objectives. The reliability of the instrument was trial tested using 12 respondents consisting of six proprietors, four supervisors and two coordinators, randomly drawn from the respondents not used for the study. Cronbatch alpha method was used to determine the reliability index of the instrument because the items in the instrument were not dichotomously scored. The internal consistency for each of the research question was then established. They are .76 and .87 and the overall value was .82. This value certify the reliability of the instrument. The instrument was based on a four-point rating scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). The rating scale was based on 4, 3, 2, and 1 point respectively. More so, the real limit of numbers was used for decision rule for the research questions as follows: Strongly Agreed (SA), = 4.00-3.50; Agreed (A), = 3.49-2.50; Disagreed (D) = 2.49-1.50 and Strongly Disagreed (SD) =1.49-1.00 respectively. Mean and standard deviation was used to answer the research questions while the hypotheses were tested at a ($P > 0.05$) level of significance using t-test. The questionnaire is made of two clusters with five items each. It has ten items in all. The researchers administered the instrument to the respondents through On the Spot Administration and Collection (OSAC). In this way, the quantitative depletion of the research instrument was avoided.

Result

Table 1: Mean Scores and Standard Deviation of Respondents on the Organisational Skills of Personnel in Centres for Distance Learning

S/N	ITEMS	Mean	SD	Decision
1	The personnel have the ability to stick to organisations targets through effective time management.	3.61	0.77	SA
2	Competent personnel in the use of computer digital tools.	3.80	1.10	SA
3	They have competent personnel in the use of distance learning software.	3.30	0.40	A
4	They make use of internet facilities in disseminating information at a distance.	3.30	0.40	A
5	Their software packages for distance learning are user friendly.	3.20	1.10	A
	Grand mean	3.44	0.75	A



Table 1 above shows that all the items (1-5) were all agreed to by the respondent as the area of organizational skill possessed by personnel in the centres for distance learning in the use of media to meet the needs of distance Learning. The grand mean of 3.30 goes ahead to state how effective the distance education centres were performing as regard to their organisational skills.

Table 2: Mean Scores and Standard Deviations of the Respondents on the Innovative Skills of Personnel in Centres for Distance Learning

S/N	ITEM	Mean	SD	Decision
6	Skilled in creating multimedia content for improved online classes.	3.60	0.63	SA
7	They skilled on state-of-the-art technology for improved online learning.	3.01	1.01	A
8	They show skills in collaboration to build virtual network to enhance student learning.	3.20	0.60	A
9	Championing new ideas through emerging technologies and pilot testing them and demonstrating leadership.	3.30	0.40	A
10	Ability to create accessibility for their online courses by the students	3.51	0.20	SA
Grand mean		3.32	0.65	A

Table two shows that all the items (6-10) were agreed to as innovative skills possessed by personnel in centres for distance learning in the use of media to meet the needs of distance learning. The grand mean of 3.32 also shows that the identified areas of personnel innovative skills were very vital in enhancing the performance of distance learning centre with the aid of making it to meet the distance learning needs of distance learners in Kogi state.

Table 3: Summary of t-test on the Mean Ratings of Male and Female Respondents on the Organisational Skills of Personnel in Centres for Distance Learning.

Group	Number	Mean	Standard Deviation	df	t-cal	Sig. (2-tailed)
Male	124	3.56	.73	237	0.54	0.58
Female	115	3.82	.71			



The above table revealed that there is no significant difference between the mean ratings of male and female respondents on the Organisational Skills of Personnel in Centres for Distance Learning.

Programme in Kogi State. $t\text{-cal} = 0.54$, $p\text{-value} = .58$. Since the probability value of 0.58 is greater than 0.05 level of significance, the null hypothesis was accepted.

Table 4: Summary of t-test on the Mean Ratings of Male and Female on the Innovative Skills of Personnel in Centres for Distance Learning

Group	Number	Mean	Standard Deviation	df	t-cal	Sig. (2-tailed)
Male	124	3.45	.84	237	1.03	0.27
Female	115	3.35	.88			

The above table revealed that there is no significant difference between the mean ratings of male and female on the innovative skills of Personnel in Centres for Distance Learning in Kogi state $t(52) = 1.03$, $p = .27$. Since the probability value of 0.27 is greater than 0.05 level of significance, the null hypothesis was accepted.

Discussion of findings

The purpose of this study is to investigate the management of extension and distance education programme in Nigeria, especially, the effective dissemination of information mechanism to meet the need of the learners in Kogi state. Specifically, the study seek to determine the organisational and innovative skills of personnel in the use of media to meet the needs of extension and distance learners in Kogi state study centers.

The findings in Table 1 shows that the personnel have the required organizational skill in meeting the needs of distance learners in distance learning centres in Kogi State. The items responded to by the respondents on the organizational skills of personnel in centres for distance learning in the use of media to meet the needs of distance learning in Kogi State shows a grand mean of 3.44 showing that they concord to the skills as been possessed by the personnel. This findings of the study was collaborated by Bawa, (2016 p. 12) in a study on the role time management and organisation in distance education. The findings of the study show that effective organisation and time management are key factors in reducing dropout rate and high retention of students in distance learning. This shows the importance of organization for successful extension and distance learning as an indispensable skill. The result of the hypothesis in table 3 shows the probability value of 0.54 is greater than 0.05 level of significance and hence the null hypothesis was accepted. This signifies a high rate of acceptance of skill as highly important for the success of the extension and distance education.

The findings in Table 2 shows that the personnel have the required innovative skills in meeting the needs of distance learners in distance learning centres in Kogi State. The result of the items shows that the respondents agreed on the possession of innovative skills of personnel in



centres for distance learning in the use of media to meet the needs of distance learners in Kogi State. The grand mean of 3.32 shows that they concord to the skills as been possessed by the personnel. The findings of this study was in line with the study of Bates, (2015 p. 23) in a study titled 'Teaching in digital age: guidelines for teaching and learning. The findings states that innovative skills such as creativity and problem solving are essential in online, extension and distance education. This study's findings show that innovative skills such as creativity and problem solving are essential to achieve successes in extension and distance learning. Hence, the importance of innovative skills for successful extension and distance learning cannot be underestimated. The result of the hypothesis in table 4 shows the probability value of 0.27 is greater than 0.05 level of significance, the null hypothesis was not rejected. This signifies a high rate of acceptance of innovative skills as highly important for the success of the extension and distance education.

Conclusion.

Laying credence on the findings of the study, it has been observed and established that personnel of the centres for distance learning established attests that the agency is doing a lot in making sure that organizational skills of personnel in distance learning centers are capable of delivery distance learning programmes with the needed media for utmost performance in the area of education. State-of-the-art accessories are also, making it possible for the centres to be able to handle any challenge that may arise in the course of carrying out this onerous assignment. The personnel were also emphatic in establishing the fact that the personnel have developed innovative areas that will go a long way in enhancing the use of media in disseminating information at a distance.

Recommendation

With the findings of this study, the following recommendations have been made:

1. The various stakeholders, such as the government, administrators and supervisors of extension and distance learning programmes should create an organisational culture that support and reward creative thinking, experimentation and risk taking to enhance distance learning programmes in Kogi study centers.
2. Government, administrators, and supervisors should encourage more training programmes that will develop opportunities to enhance personnel innovative skill for more and higher productivity of personnel in Kogi state distance learning study centers and keep abreast with the latest modes of delivery at a distance in order to be able the enhance output of distance learning activities.



References

- Allen H. G., Stanton T. R., Di Pietro F, Moseley G. L. (2013). Social media release increases dissemination of original articles in the clinical pain sciences. *PloS One* 8(7): e68914. [PMC free article] [PubMed] [Google Scholar]
- Apokin, A., Yudkevich M. (2008) Analysis of Student Employment in the Context of Russian Labour Market. *Voprosy Ekonomiki*, 6, pp. 98-110.
- Analysis of Communication Barriers to Distance Education A Review Study, *Online Journal of Communication and Media Technologies* Volume: 1 – Issue: 1 – January – 2011. *Online Journal of Communication and Media Technologies*
- Bates A. W. (2015). *Teaching in digital age: guidelines for teaching and learning*. Routledge.
- Bawa, P. (2016). The role time management and organisation in distance education. *Journal of education and Human Development*, 5(1), 1-12
- Etebu, A. T., (2019). Assessment of Information Dissemination Mechanisms for Sustainable Livelihoods of Rural Dwellers in Bayelsa State, Southern Nigeria *International Journal of Applied Technologies in Library and Information Management* 5 (2) 04 - 23-37 2467 – 8120
- Kaplan, A. M., Haenlein M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Bus Horiz* 53(1): 59–68. [Google Scholar]
- Lengel, R. H., Daft, R. L., (1988). The selection of communication media as an executive skill. *Acad Manag Exec* 2(3): 225–232. [Google Scholar]
- Macilwain, C., (2013). Sharing information is preferable to patenting. *Nat* 498: 273. [PubMed] [Google Scholar]
- Mundi, N. E.; Tenebe, V. A, (2013). The role of distance education and e-learning in agricultural extension services. *Common wealth of learning*, paper ID 484
<http://hdl.handle.net/11599/1854>.
- Mwangi, A.P. (2000). The African Medical Research Foundation Distance Education Project. In Siaciwena, R., Ed., *Case Studies of Non-Formal Education by Distance and Open Learning*. Vancouver and Cambridge: Commonwealth of Learning/International Extension College.
- NPE (2014). *Nigeria National Policy on education*.
- Ogunniyi, A.; Babu, S. C.; Balana, B.; and Andam, K. (2020). National extension policy and state level implementation. The case of cross river state, Nigeria.
<https://www.researchgate.net/publication/342865674>.
- Omolewa, M. (2002). *Directory of distance education institutions in Afric*. (Ed). Abuja; UNESCO
- Perraton, H. (2004). “Aims and purpose”. In Perraton and Lentell (eds),. *Policy for open and distance learning*. London Rutledge falmer
- Sadeq, A.M (2003). Cooperation and collaboration for ODE. The case of Bangladesh, presented In 17th AAOU annual conference, held in Thailand, November, 12 – 14. Sherry
- Safina, L., Kolesnikova, J., Karasik, E., Yurieva, O., Fakhrutdinova, A., (2014). *The Higher Education Impact on The Quality of Young People Working Life Russian Federation*: Elsevier Ltd.
- Timothy Olugbenga Ajadi, Ibrahim, Olatunde Salawu, & Femi, Adetunji Adeoye (2008). Learning and Distance Education in Nigeria School of Education, National Open University of Nigeria. *Turkish Online e-Journal of Educational Technology*, Volume 7 Issue 4. No. 19.