

Innovative Research for National Development: the Role of Information Professionals

¹Katamba Abubakar Saka PhD, ²Muhammad Abubakar Bida & ³Henry Yisa Majinson

¹Department of Library and Information Technology,
Federal University of Technology, Minna, Niger State, Nigeria

²Yahaya Madaki Library,
Niger State College of Education, Minna

³National Library of Nigeria,
Corporate Headquarters, Abuja, Nigeria

Abstract

This paper highlighted the basic facts in relation to innovative research. These facts are included and not limited to various characteristics of an innovative research; various information resources; institutional digital repository (IDR), turnitin as well as the role information professionals (librarian, system analyst, archivist, library educator, library practitioner) can play towards producing innovative research(es). Address by this paper also include research process model involving seven steps; principles of good research; research methods consisting of descriptive and documentary research. Ethical issues in research work include taking precaution against harm to research participants, provision of incentives, maintaining confidentiality, avoid bias and plagiarism as well as the use appropriate research methodology. Towards producing innovative research output, the librarian is expected to select, acquire, store and make relevant information materials available for research purpose. The library educator rigorously supervise research works, system analyst and designer analyze and store the data in the system. The system analysts create database for research works for a particular organization or institution. Records manager act as the custodian of the research works. Information professionals are expected to embark on joint collaborative research with counter-parts in Medicine, Engineering, Pharmacy, Agriculture, etc. Also highlighted include research proposals consisting of several guidelines; academic research writing in relation to formal organizational structure as well as citation and referencing. Role of research in economic, social, health, technological, policy planning and implementation as well as manpower development of a nation were critically highlighted. Inadequate support by government, facilities, outlets for disseminating research findings and information explosion are the inhibiting factors to innovative research particularly in African setting. Adequate funding and motivation of researchers by the government were among the recommendations proffered by this paper.

Keywords: Research, Research works, Research institutes, Universities, National Development, Information Professionals

Background to the Study

The concept of research has different meaning based on the perception by different people. While some look at the concept of research as systematic method of inquiry into phenomenon, others look at the concept of research as: - what we do when we have a question or problem to resolve". "Re" and "Search" means to go over something in a careful manner. Research can therefore be seen as investigation conducted by individual (s) in scientific and systematic way in order to create new knowledge for the advancement of mankind. Research posses certain characteristics such as systematic, objective, empirical and measurable, replicable and verifiable as well as cumulative (Igwe, Bassey, Uzuegbo and Adebayo, 2015).

For any research to bring new ideas, Ibrahim (2013) was of the view that such research must be conducted through approaches, use steps, methods and technologies that have been subjected to validity and reliability. Above all, the research design must be objective and unbiased. It well known that universities are citadel of learning and research with research centres attached or affiliated to them have empowered them to be the central focus for national development. Research institutes/centres are established in various universities in Nigeria. For example in Ahmadu Bello University, Zaria, there are several research institutes/centres such as Institute for Agricultural Research (IAR), National Animal Production Research Institutes (NAPRI), Centre for Energy Research and Training (CERT), etc and are under Federal Ministries of Agriculture, Science and Technology. Federal University of Technology, Minna is attached with research centres such as Centre for Genetic Engineering and Biotechnology for the development of drugs and vaccines; Centre for Climate Change, Centre for Human Settlement and Urban Development, etc.

It should be noted however, that two of the three principal functions of any university are teaching and research which plays a vital role in national development. University staff as one of the academic activities conducts researches either individually or by collaborative effort. On the other hand, researches are conducted at undergraduate and postgraduate levels as well as term papers to satisfy course requirements (Ibrahim, 2013). Higher degree researches are expected to contribute to knowledge through discovering new things, implement the findings and recommendations. There are over 30 research institutes that are parastatals or agencies directly under Federal Ministries of Science and Technology, Agricultural, Water Resources and Education respectively. Some of these institutes include Cocoa Research Institute, Industrial Research (Oshodi), Agricultural Research, Animal Production Research; Building and Road, Cereals Research; Medical Research, Oceanography and Marine Research, Trypanosomiasis Research, Chemical Technology, Lake Chad Research Institutes, etc. Each of the research institutes have set objectives that are to be achieved. For example, the mission of Cocoa Research Institute of Nigeria (CRIN) among others is to provide the research and development back-up for Nigerian agricultural development and knowledge for mankind (www.crin-ng.org).

However, the end result of every research (social, scientific and technological research) is the information as the research findings composed of information which can be positively utilized by the society for the development of any nation. Continuous research and development and interdisciplinary research activities give rise to the increase in quantity of information generated world-wide (Nwalo, 2000). Literature search reveals that there are many types of research and their categorization depends on certain characteristics. The characteristics or criteria include product of research nature of data collected, conceptual and empirical, as well as empirical/oral research. On the basis of the product of research, research can only be categorized mainly into two: basic and applied research. In basic research, there is an extension of the frontiers of knowledge. This type of research arises from generalizations, principles and development of theories and may not be of practical use but may be applied in the future. Applied research provides solutions to a practical problem or an immediate problem.

Categorization of research based on the nature of data collected. Research is classified as qualitative and quantitative research. Qualitative research involves investigating a phenomenon in natural setting through collection methods such as observation detailed interview. Case studies and historical research fall under qualitative research, Quantitative research involves the use of measurements at the interval and ratio levels i.e the exact difference between two measurements as well as determining everything that forms the research process such as objectives, design, sample and research questions. Research can further be categorized into conceptual research and empirical research. Researcher develops new concepts or tries to re – interprets the existing concepts in an abstract form. Empirical research is obtained mostly from data that verifiable. Hypothesis are formulated an tested. Empirical research involves any methods of gathering information through observation, experimentation/laboratory experiment. Oral research is a research that involves gathering of information by direct contact with people (Aina, 2004; Egbulonu, 2007; Ibrahim 2013). To sum up with the various types of research, Ibrahim (2013) classified research by “application, objectives and inquiry method”. Research can be pure or applied. It can be carried out based on objectives – descriptive, correlation, explanatory, exploratory; it can be through inquiry method thus looking at components of research process such as objectives, design, sample and questions to interview respondents.

Developmental Research

It should be noted however that there is uniqueness in the type of research and development. It is a kind of research that is used in design and production engineering. By extension, it is “the systematic application of scientific knowledge for the production of useful materials, devices, systems, methods or processes in the field of engineering in general” (Hammed, 2014, p.91).

Experimental Research

This is the type of research that involves experiments which is either laboratory based or field based which is adopted in pure and applied sciences and social science researches respectively (Igwe, Bassey, Uzuegbo and Adebayo, 2015).

Information Professionals

Information professional according to Aina (2004) is one that is responsible for the acquisition and processing of information, maintenance of information sources, services and systems as well as providing information to end users whether directly or indirectly. Information professional could be a Librarian, Activist, Records Manager, Information Scientist, Systems Analyst and Designer, Information Manager, Information Broker, Information Consultant, Journalist, Editor, Curator and Educator (Aina, 2004). Librarian for example is expected to select, acquire, process, organize and disseminate relevant information resources for research purpose. Retrieval tools (indexes, catalogue, abstract, bibliographies, etc) be made available to guarantee effective accessibility and retrieval of the needed information.

Information Resources use in Research

In order to produce innovative research, it is the responsibility of librarian to acquire, process and make available current, relevant but quality information resources to support academic and research activities as well as produce innovative research output. Quality in the areas of recency, relevance, original sources. There are various types of information sources consulted in the course of scholarly/research paper writing. Some of the information resources include: books, journal, magazine, newspapers, reports, students' projects (Thesis and Dissertations), reference sources (dictionary, abstracts, indexes, Encyclopedia, etc.), Audio – Visual materials, computer, Internet, etc (Uzuegbu, Igwe, Ibegwum and Nwokocha, 2014). However, journals and theses are considered the most viable information sources as they contain latest and vital information on researches as already conducted, hence they contain research reports. It is the responsibility of library educator to rigorously supervise undergraduate and postgraduate research works, while the systems analysts and designers create database for research output in a given organization or institution.

Concepts associated with Academic Research Works Projects

Piece of research works undertaken and submitted for the award of diploma, degree and postgraduate diploma certificates respectively. They are subjected to oral defense but not as detailed and rigorous as that of higher degree research works.

Thesis and Dissertation

These are piece of research reports submitted for the award of higher degree (Masters and Doctoral degrees). The two terms are used interchangeably and varies from university to university. Some universities perceive thesis as piece of research report submitted for the award of Doctorate degree while in some universities dissertation is regarded as research work submitted for the award of Masters degree. To some universities, thesis refer to research works submitted for the award of Masters and Doctorate degree.

Term Paper

A paper written in the form of essay or research work usually as an assignment given by lecturer during a semester and to be presented as part of the requirements for graduation; usually written at diploma, degree and higher degree levels. Library educators are expected to give assignment and encourage LIS students to conduct researches/write term papers on current trends in Librarianship.

Institutional Digital Repository (IDR)

This is the generation, acquisition, processing, storage and preservation to information resources particularly research works as well as other information resources in an electronic environment. The department of Library and Information Science, as well as Kashim Ibrahim Library of Ahmadu Bello University, Zaria has a typical IDR where more than 3,000 records of theses and dissertation have been digitized and entered into database (Mohammed, 2009). As discovered through phone call, “the IDR of the two organs used D-space software and the digitized resources can be accessed through their respective web pages and the university website” (Saka, 2013, p.89). The library practitioner and archivist can establish electronics IDR so that all research work conducted by staff are kept in the electronic environment of the various organization.

Research Collaboration

In order to produce innovative research, there is need for joint research collaboration among institutions of higher learning, thus is a public lecture delivered by Njobeh on 9th June, 2015, it aimed at:

- i. Facilitating exchange of researches between two institutions for information and technology sharing.
- ii. Having joint supervision of postgraduate researches.
- iii. MOU between the two institutions (Njobeh, 2015).

Above all the information professionals need to collaborate with other professionals in the field of Medicine, Engineering, Agriculture, etc owing to the fact that the information professionals have ideas in the information field. e.g.

1. Factors affecting the attitude of information needs, seeking behaviour and information utilisation among primary healthcare staff in Nigeria.
2. Information needs and seeking behaviour among Cassava producers in South-East Nigerian.
3. Effect of Geographic Information System on town planners and geologists in Nigerian

Turnitin

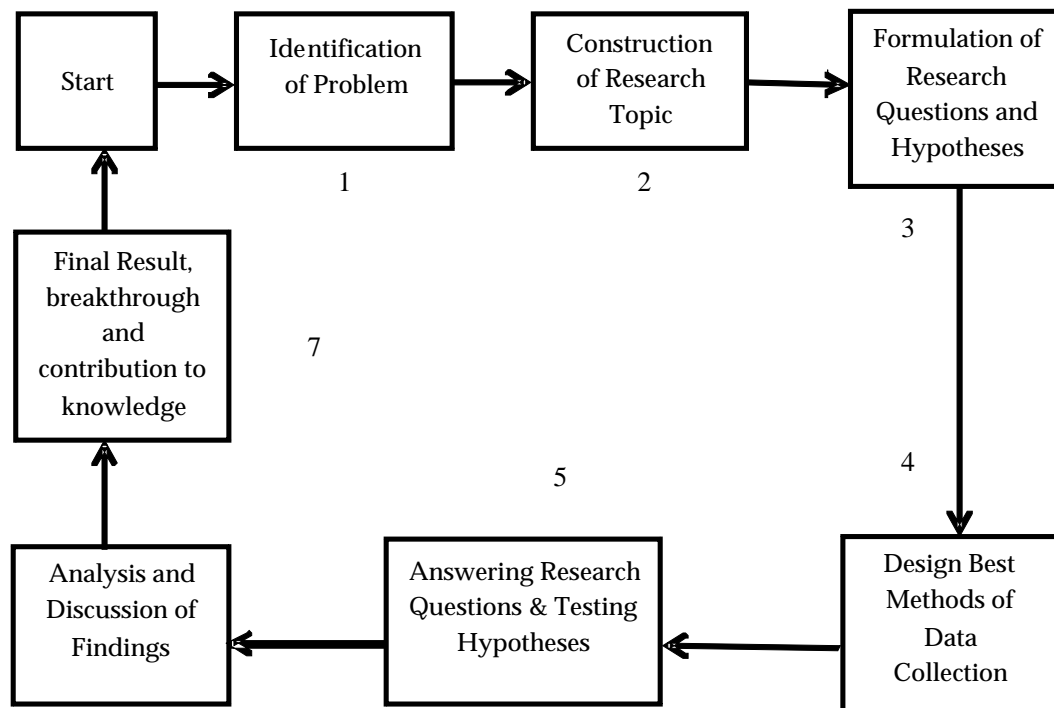
Towards producing innovative research works, Federal University of Technology, Minna has developed a software that check the level of plagiarism among undergraduate and postgraduate research works. The software is called “Turnitin”. The level/percentage of plagiarism allowed for undergraduate project is 20%, masters thesis is 15% and doctorate thesis is 10% respectively. This is software that checks to determine whether or not information contained in the work has source(s); cited work have dully acknowledged by referencing or works have lifted verbatim. It is the duty of information professionals to see that all works cited are dully acknowledged by way of referencing.

Electronic Databases

Assembling of organized documents or data in a file within a computer system. Electronic database in all fields of knowledge could be used to support academic activities such as teaching, course work, research, current awareness and learning in Nigerian universities (Abubakar and Saka, 2009). Librarians as well as system analyst should create and manage database for ongoing researches as well as completed research work (Thesis and dissertation) just like what obtains in University of Jos Library as the University Library was able to create database for African thesis and dissertation with particular reference to in-house thesis and dissertation already completed.

Research Process Model

Ibrahim (2013) as cited Preddy (2002) proposed four step model and based on the analysis, other models of research process containing several steps were propounded.



Principles of Good Research

White (2006) outlines the various principles of good research as follows: -

1. Clear statement of research aims and objectives
2. Information sheet for participants: Inform respondents on what the research is all about and what it will involve. Write consent to the respondents.
3. Methodology:- Various ways of undertaking a research, the researcher is expected to mention a particular method and state the reason for its adoption.
4. Research design, population and sample:- researcher identify the population in number, there is usually population of the study and subject of the study.

Data Collection Instrument: Instrument used in data collection include questionnaire, interview schedule, checklist, documentary sources, observation etc. more especially in art, social science and physical science.

Data Analysis: As information professionals such as Librarians and systems analyst can use computer software can be used to conduct all forms of multivariate analysis of the data collected (Ibrahim, 2013)

1. A combination of methodologies will complement one another.
2. Unbiased Research:- there should be unbiased research
3. Resources:- researcher should have appropriate and sufficient resources such as people, time, transport, money, etc.
4. Trained research assistants : people conducting research should be trained
5. People involve in designing, conducting, analysis and supervising the research should have full knowledge of subject area and training should accompany data gathering techniques, study area, etc.

Research Methods/Methodologies

Depending on the nature of data to be collected, and data collection instrument to be used, its expected that the researcher adopt one research method or a combination of research methods. Research methods can be grouped under two broad categories i.e Descriptive and Documentary research.

Descriptive Research

Research conducted in order to describe, classify, compare the phenomenon at a given point in time. Examples:- survey, case studies, correlation, experimental and historical.

Documentary Research

This can also be called analytical research e.g bibliometric, content analysis (Igwe, Bassey, Uzuegbo and Adebayo, 2015).

Research Proposal

This is a blue print or an outline of sequences of procedures and process to follow in a bid to successfully carryout a study in the near future. Research proposal writing differs from one university/organization to others as proposal for research grant will be different

from that of higher degree research, hence the latter consists of chapters 1,2, and 3. White (2006), Ibrahim (2013), Igwe, Bassey, Uzuegbo and Adebayo (2015) respectively provided an outline/guide for research proposal:

1. Preliminary title
2. Introduction/Background: state the need for the research in a given topic area; briefly review related studies that are carried out. The researcher state how the research will add to existing knowledge in the proposed area. Other aspects include objectives, main and specific questions.

Literature Review

How will you carry out the Research? State whether it is going to be an independent or collaborative research; target population, number of people to be interviewed, study area, consent of the respondents, supervision and monitoring of the research, sample, study area as well as funding agencies, etc

Time Table: indicate the period when the research commence and end: stages of research e.g pilot study and main research and provision of progress report

Methodology: state the type research design, population, sample size and sampling technique and the type of data to be collected e.g. counting, direct interview or both. Indicate method to be used in carrying out the research e.g. questionnaire, face – to face interview, focus groups, paper reviews, etc. Also to be included are validity and reliability of instruments, sample selection, data collection and analysis: paying the participants.

In other to ensure innovative and quality research output, the researcher is expected to use either questionnaire, interview schedule or documentary sources, etc to collect data. If the researcher chooses to use questionnaire to collect data, the designed instrument must be subject to validity and reliability. Validity is a measuring device whereby the researcher present the designed questionnaire to experts (in proposed research field) to go through identifying and pointing out errors and effect the corrections. The modified instrument will undergo reliability test. This is another measuring device whereby the corrected/ modified instrument undergo pilot study or pre-test outside the study location. In this case either test-retest method or split half technique or equivalent from change in used. The former involves administering the same instrument to the same respondents at two different interval (Ibrahim, 2013 & Saka, 2014).

The second involves series of questions are spited into two groups/ sub-sets of questions and equivalent from technique. Two different instrument are designed to measure identical construct (Ibrahim, 2013)

1. Paying the participants (trained research assistants)
2. There is the need to provide incentives for research authorities. According to Ibrahim (2013) respondents do not participate in the research because of the incentives but because they value research.

Budget: Income and expenditure involve in the course of carrying out the project.

Ethical Issues: White (2006) and Ibrahim (2013) enumerates the ethical issues in research work as they affect both research participants and the researcher(s):

1. State any potential risk or harm to participants or researcher e.g research that may contain hazardous experiment or discomfort. Take precautions against those risks or harm to research participants.
2. Dealing with sensitive or criminal matters that may be raised during the research. Researcher must guide against asking sensitive information from respondents. e.g. have you ever smuggle out book(s) from library?. This type of question should be avoided while collecting data from respondents.
3. Dealing with participants complains / Provide incentives
4. Avoid bias and thus the researcher must be objective: Report your findings appropriately.
5. Avoid plagiarism
6. Carry out the test, hypothesis or experiment.
7. Research must be authentic, accurate and original
8. Maintain confidentiality in terms of respondents' information.
9. Use appropriate research methodology (Ibrahim, 2013)

Data Protection

1. State whether you are to use recording or video equipment
2. Method of analyzing data
3. Method of storing data
4. Method of confidentiality of data are way to achieve this through password the system or store the data in the internet or e – mail. Avoid sharing the information about respondents with others.
5. The system analyst and designer must ensure that data on the system are well analysed, stored and pass worded to avoid unauthorized access to information contents.

Dissemination

State the form of presenting and dissemination of findings e.g report, presentation, journal publication, conference, workshop presentation, etc. State the benefit of the research to user, community management, government and the contribution of research to knowledge or Research report should be in councils website. After the proposal has been written, it may be presented to a committee as part of the process of evaluating an advanced degree or publish in a peer review academic journal. Like any other profession, librarians carried out investigations on national live for enhancement of nation building while findings from various investigations are usually published in journal, presented in seminars, workshops and symposia (Dauda, 2011).

Academic Research Writing

Academic research is that type of research that takes place or done in an academic environment such as universities , colleges of education, polytechnics, monotechnics and all other institutions of higher learning The essence of research in academic environment is to meet up with the academic privileges of academic staff such as academic allowances and promotion. The essence is based on the fact that an academic staff may choose to undertake research and/or write and publish articles (s) in a reputable journal(s) or test book. He or She may decide not to write and publish and remain stagnant in the same position for years. This situation is referred to as “publish or perish syndrome”

Organizing Academic Research Writing

Writing academic research paper has a formal organizational structure:

1. Abstract
2. Introduction (research problem, goal, statement of the problem)
3. Literature review
4. Methodology (describe any survey, laboratory experiment, etc.)
5. Result of the research are presented in qualitative or quantitative information
6. Discussion of results
7. Conclusion with reference to discussion and significance to the findings
8. References – use the current 6th edition of APA style.

Citation and Referencing

One critical area in librarianship and almost in all professions is citation and referencing. Any innovative research must contain current but relevant cited works and accurate referencing must be provided. Whether you are writing opinion paper, or academic research paper, it is important to properly cite the source(s) and acknowledge by of referencing. It is an offence not to put a source in cited work or to cite a source(s) without acknowledgment of the source by providing references at the end of the text. APA style 6th edition according to Uzuegbu, Igwe, Ibegwan and Nwokocha (2014) “is widely accepted in social sciences and other fields such as education, business, nursing, engineering etc.” (p.2). The current APA style is in its 6th edition. It has been argued that for every bit of idea or information culled from one source require acknowledgement in and at the end of the text (Naga, 2014) and according to Lawal (2014) citation and references are very important features of scholarship.

Citations in the text could be direct or indirect

Direct Citations: where there are less than 40 words, quotation mark be used to close the sentence e.g. Abubakar (2014) found that “there was no significant difference between teaching methods and students' academic performance”. (P.12)

The research found that” there was no significant differences between teaching methods and students' academic performance (Abubakar, 2014, P.12)” but did not suggest the solution. Where there are 40 words and above, you provide indention which is usually at the centre of the paper.

Indirect Citation

This refers to paraphrase, reworded or rephrased, interpretation or translation of author's original statement or language

Role of Research in National Development

Generally speaking research occupies very important position in the socio-economic, cultural, political, scientific and technological well-being of a nation. As pointed out by Saka (2013), that the findings and recommendations of the higher degree research works are supposed to be implemented for national development. Contrary to this assumption and expectation, the higher degree research reports in Nigeria are used to earn the higher degree certificates as well as winning the awards by the researchers but not for national development in true sense.

1. Economic Development

The success of any private organization in various nation of the world and few government parastatals make use of information to improve their productivity level. The piece of information is normally obtained through researches. The technical experts in-charge of research spent time and money collecting and processing data that are of benefit to their companies (Ifidon and Ifidon, 2007).

2. Policy Planning and Implementation

The information generated from the research will inform the policy making process. For example the national school census is usually conducted with a view to ascertain the number of schools, children pupils/student etc. The outcome of this study will assist government in decision-making processing above all the data generated from research will serve as guide in policy-making process.

3. Social and Health Status of Citizens

We are all aware of the outbreak or prevalence of certain disease such has HIV/AID and the current EBOLA virus. Research into these vulnerable and dangerous diseases will help government to find vaccines and curative measures to them. The Centre for Genetic Engineering and Biotechnology is expected to conduct researches into the development of vaccines are currently undertaken Federal University of Technology, Minna. This is with a view to finding lasting and curable drugs/vaccines to maintain the health status of Nigerians in particular. In social setting, health is very important.

4. Technological Development

The socio-economic and political objective can only be achieved in a situation where discoveries and inventions are made. The progress of any country largely depends on the effective utilization of accumulated information which are mostly the product of

research. Information from various researches, discoveries and invention are further stored in books and periodical (Aguolu and Aguolu, 2002). Research institutes conduct researches and the new ideas are used to produce good quality products.

5. Personal Self - Development of Academic Staff

Academic staff develop themselves through writing scholarly papers and published them in reputable journals, textbooks, etc. and this enhance their promotion to next rank or level in their academic career (Saka, Song and Oyedum, 2014).

6. Manpower Development in Universities

Universities in Nigeria perform among other roles learning, teaching and research. Two of these functions (teaching and research) are driven vehicle for national development more especially in the development of manpower both in the intellectual, academic and professional aspects.

Problems of Innovative Research in Africa

The importance of research in Africa in general cannot be under rated. Looking at one of the social science disciplines i.e (Library and Information Science) researchers or professionals are faced with the following challenges which according Aina (2014) include: inadequate support by government, inadequate research facilities and outlets for disseminating research findings conclusion and recommendations.

Information Explosion

The research findings or results of the research conducted constituted information which can be used by the society for the advancement of mankind. However, the continuous research and development lead to information explosion (Nwalo, 2000).

Recommendations

As earlier stated, research performs prominent role in the socio-economic well-being of every nation and thus national development. For effective and quality research;

1. Government must commit adequate funds for research. Research findings should not end on paper, or presentation at seminar or workshops but be implemented by the concern authority (ies).
2. Government should motivate researchers while adequate and relevant collections be made available to support the conduct of innovative research. Current but relevant hard copies of academic journals as well as technical reports should be made available in all libraries, archive, research institute, museums etc.
3. Librarians should engage in the compilation indexes, abstracts, catalogues etc of both completed and on-going researches to avoid duplication thus serves as the measures of controlling the rate of literature explosion.
4. Professional organizations and associations worldwide should establish journals so that research findings in various continents/parts of the world can be published.
5. Institutions of higher learning more especially universities globally should establish joint research collaboration among themselves as well as having the same among faculties and departments within a university.

References

- Abubakar, T. & Saka, K. A. (2009), "Electronic Database: A Tool for Scholarly Research in Nigerian Universities." *Journal of Arts and Education*, 3(2), 84-95.
- Aina, L. O. (2002), "Introduction to Research." In L. O. Aina (Ed) *Research in Information Sciences: An African Perspective*. Ibadan: Stirling Horden Publishers Nig. (Ltd), 1-4.
- Aina, L. O. (2004), "Library and Information Science Text for Africa." Ibadan: Third World Information Services Limited.
- Aguolu, C. C & Aguolu, I. E. (2002), "Libraries and Information Management in Nigeria." Maiduguri: Ed-Linform Services.
- "Cocoa Research Institute of Nigeria". www.crin-ng.org 11/06/15
- Dauda, M. M. (2011), "The Place of Librarians in Nation Building: Librarians." *Registration Council of Nigeria (LRCN) Newsletter*, 1 (2) December, 2011;8.
- Egbulonu, K. (2007), "Research Paper Writing for Librarians." *Journal of Senior Staff Association of National Library of Nigeria*, 1(1); 44-60.
- Hammed, A. B. (2014), "Use of Library: Essential Manual for Beginners." New Edition – Ibadan: Nigeria Akacom Publication Limited.
- Ibrahim, U. (2013), "Techniques for Writing and Presentation of Thesis/Dissertation: A Companion Guide for Postgraduate Students in Nigerian University System." Zaria, Nigeria: Ahmadu Bello University Press Ltd.
- Ifidon, S. E. & Ifidon, I. E. (2007), "New Directions in African Library Management." Ibadan: Nigeria, Spectrum Books Limited.
- Igwe, K. N., Basse, U., Uzuegbu, C. P & Adebayo, A. O. (2015), "Research and Scholarly Publishing in the Information Profession." (Pp. 306-327). Lagos: Issues and Themes in Publishing, Nigeria, Zeh Communications Ltd.
- Mohammed, Z (2009), "Towards Establishment and Management of Institutional Digital Repository." *Proceedings of the 47th Annual National Conference and AGM of the Nigerian Library Association, held at Jogor Centre, Ibadan*, 100-108

- Murana K. F (2006) "Factors Affecting the Choice of Career among Social Science Students of Ahmadu Bello University." Doctorial Dissertation (Bayero University) Retrieved From <http://wellhandle.net> 20170
- Naga, M. M. & Lawal, O. O. (2014), "Forward A Guide to APA 6TH Edition: Style of Citation and Referencing for Research Writing." Umuahia: Nigeria: Zech Communication.
- Njobeh, P.B (2015). "Mycotoxicology Related Research at the University of Johannesburg (UJ), South Africa: Opportunities for Joint Research Collaboration." Public Lecture Delivered at Caverton Lecture Hall, Federal University of Technology, Minna on 9th June, 2015
- Nwalo, K. N. (2000), "Society, Development and Libraries, LSE 101, University of Ibadan." Ibadan: Nigeria, Centre for External Studies, University of Ibadan, Ibadan.
- "Personal Pages". Manchester.ac.uk/staff/horold.semons/RPD/RPD2.PPT 17/12/14
- Sonaike, S. E (2004), "Research Methodology for Social Sciences." http://www.ehow.com/about_5082305_definition.academic.researchwriting_.html 17/12/14.
- Saka, k. A. (2013), "Trends in the Preservation of Theses and Dissertations in Nigerian University of Libraries: a Review of Digitization Projects." Proceedings of the 13th Annual Conference and General Meeting of the Nigerian Library Association. Enugu State Chapter Held at National Library, Enugu 20th – 22nd November, 2003 86 – 92.
- Saka, K. A. (2014), "Relationship among Motiratorial Factors, Job Satisfaction and Job Performance of Library Personnel in University in North-Central, Nigeria." (Unpublished Doctoral Thesis) University of Maiduguri: Maiduguri, Nigeria
- Saka, K. A., Song, I. S. & Oyedum, G. U. (2014), "Influence of Continuing Professional Development and Skills Acquisition on Librarians' Performance in Two State Capitals." Northern Nigeria Proceedings of 14th Annual Conference and AGM of the Nigerian Library Association, Enugu State Chapter Held at the National Library, Enugu 25 – 27 November, 2014. 28 – 67.
- Saka, K.A & Haruna, I (2013), "Relationship between Staff Development and Job Performance in Branch Libraries, University of Maiduguri." Mediterranean Journal of Social Sciences, 4 (5),1-9.

Uzuegbu, C. P., Igwe, K. N., Ibegwam, A. & Nivokocha, U. (2014), "A Guide to APA" 6th Edition Style of Citation and Referencing for Research Writing. Umuaiha, Nigeria: Zeh Communication.

White, T. (2006). "Principles of Good Research and Research Proposal Guide." www.richmond.gov.uk/reserach_proposal_guide.pdf 17/12/14.