In-depth Thesis and Journal Critiquing in Nigeria

Ezeani Nneka Salome¹, Orjiakor Paul Ikechukwu², Dosunmu Jokotade Omotayo³, Emumejakpor Idowu Samson⁴

¹Department of Educational Foundations and Management, Ekiti State University, Ado-Ekiti, Nigeria
²Department of Microbiology, Ekiti State University, Ado-Ekiti, Nigeria
³Department of Office Technology and Management, Polytechnic, Iree, Nigeria
⁴Department of Geology, Achievers University, Owo, Nigeria

Email address: salonneka@yahoo.com (E. N. Salome), paul.orjiakor.eksu.edu.ng (O. P. Ikechukwu)

To cite this article: Ezeani Nneka Salome, Orjiakor Paul Ikechukwu, Dosunnu Jokotade Omotayo, Emumejakpor Idowu Samson. In-depth Thesis and Journal Critiquing in Nigeria. American Journal of Information Science and Technology. Vol. 3, No. 3, 2019, pp. 55-61. doi: 10.11648/j.ajist.20190303.11

Received: June 24, 2019; Accepted: July 16, 2019; Published: July 31, 2019

Abstract: Research is an indispensable tool in academics endeavor, business decisions, social and economic analysis, conducted in order to unveil certain problems and contributes to the body of knowledge in any particular discipline of study. This study examined an In-Depth thesis and Journal critiquing in Nigeria. An explorative, method of research was employed. This study was carried out to ensure originality and quality Students/Scholars work, in order to make significant contribution to knowledge in addition to satisfy the conditions of the awards of required certificate before embarking on the study. The reviewed literatures of this study include; the need for research thesis and journal, structural differences/similarities between a thesis and a journal articles, the exploration of research resources, Research Ethics, Components of a Critique Material, Assessor’s stake in critiquing Journal Publication. A well-deserved and outstanding research work needs the guidelines and details provided in this study imperatively.

Keywords: Research, Critique, Thesis, Journal, Assessor, Report

1. Introduction

Research is a systematic investigation and careful search geared towards enriching knowledge about the existence of a problem and proffering solutions to them; through the provision of reliable and valid information [1]. Research is an indispensable tool in academics endeavour, business decisions, social and economic analysis, conducted in order to unveil certain problems and contributes to the body of knowledge in any particular discipline of study [2]. Research remains a problem-solving adventure and could be applied in solving business, academics and social problems. Most importantly, it is geared towards the advancement of frontiers of knowledge in any identified field of study; proffering solution to educational problems and challenges [3]. However, once the research work is completed, it is presented in a report format which could be in a book, seminars, conferences, article, Journal and thesis. But the scope of this paper is on Thesis and Journal.

The academics world is a hub of knowledge in which the university systems, constantly attracts ideas and desires for understanding of what is known and what is unknown through thesis writing or journal articles. Thesis is a research instrument, a systematic or logical investigation leading to increased sum of what we know or intends to know [4]. The purpose of thesis is therefore to produce an independent, yet, where applicable, generalized, planned original research report within a framework or research design [5]. Thesis must be appropriate and exhaustive study aimed at advancing theoretical and casual knowledge using methodological, ethical approaches, independent, coherent and sustained arguments, capable of evaluating an idea or work [5]. On the other hand, research paper (journal) simply means a summary of a research written with the intent of being published [4]. This could be either an opinion or empirical paper submitted for publication when needed.
2. Exploration of Research Resources

Researchers should adopt different research resources in writing a research report. Accounting to the author, these include main sources used to find resources; open access, use technology tools and social media in research work, institutional provided or supported technology, using social media to collaborate sources of help with technology search for tool URL address [6].

Main Sources used to find Resources: The main sources used to find resources include: Google, Scholar, internal library catalogue (own Institution), cross institutional library catalogue, search interface of E-journal, bibliographic database, website of an organization/person, abstract, indexes, subjects. I.e specific information gateway, citation database, guide to/catalogues of archival material, Wikipedia, browsed library shelves, and training search tools such as search tool URL address-

| Theses | Journal article |
|--------|----------------|
| Lead to award of Degree | Mainly not written for any award. But May cumulatively lead to award of internal Degree by publication. e.g. in the United Kingdom, PhD by publication |
| Characterized Word Count Large: far-reaching, yet specific piece of academic work in terms of volume with specified word count. e.g. Most UK Universities word count for PhD Thesis in social sciences/arts and humanities and Management Sciences: 75000 to 85000 words minimum. Ebonyi State University: 75000 for Social Sciences/Arts and Humanities and Management Sciences. | Sectionalized Word Count Short: far-reaching, yet specific piece of academic work in terms of volume with specified word count. e.g. Most ABS and other Internationally ranked Journals accept Articles with minimum of 4000 to 5000 Words and maximum of 7000 to 8000 words. |
| Title Can have extended research title up to or above 25 words. Must be a research title, clear, brief. Specific and encapsulating purpose. | Title Research title restricted and can be very short. e.g. 8 to 10 words. Must be a researchable title, clear, brief. Specific and encapsulating purpose. |
| Abstract Longer word count: e.g., between 250 words to 500 words. Style of presentation e.g. Purpose Methodology /Design/Analysis Findings Conclusion Implication | Abstract Very short word count: e.g. between 100 to 250 words |
| Introduction Chapter Large piece of the research. Content of introduction chapter is always extensive and will include: Research Background-which will include: the motive/driver/external stimuli arousing your quest to search for knowledge. | Very Brief Introduction Or Background Section |
| Literature Review Same as in research paper: However, difference only in terms of word count and extensiveness of theory covered. | Literature Review Same as in thesis. Difference only in terms of word count |
| Methodology and Methods Requires identification, selection and clear explanation and justification of choice of: Research philosophy and strategy Methods of data collection Methods of data analysis Sample population and size (where applicable) | Same as thesis but may not involve explanation of Philosophy /Methodology / Methods and justification of such |
| Research Involves final examination called Viva Voce: Latin word meaning-Live voice or sometimes called oral defence. | Does not involve any viva |
| Will naturally involve at least one Academic supervisor | May not involves supervisor. But possibly a research mentor for new academic researchers. |

Source: Ike-Elechi and Ezeoha (2013).

The table above provides an insight into the differences between a thesis and journal from a structural point of view. However, the researcher of any of the above mentioned, could adopt a similar procedure.

2. Exploration of Research Resources

Researchers should adopt different research resources in writing a research report. Accounting to the author, these include main sources used to find resources; open access, use technology tools and social media in research work, institutional provided or supported technology, using social media to collaborate sources of help with technology search for tool URL address [6].

Main Sources used to find Resources: The main sources used to find resources include: Google, Scholar, internal library catalogue (own Institution), cross institutional library catalogue, search interface of E-journal, bibliographic database, website of an organization/person, abstract, indexes, subjects. I.e specific information gateway, citation database, guide to/catalogues of archival material, Wikipedia, browsed library shelves, and training search tools such as search tool URL address-

| Source | URL |
|--------|-----|
| Yahoo! | www.yahoo.com |
| Info seek | www.infoseek.com |
| Alta Vista | www.altavista.com |
| Lycos | www.lycos.com |
| Excite | www.excite.com |
| Webcrawler | www.webcrawler.com |
| HoBot | www.hotbot.com |
| Magellan | www.mickinley.com |
| Galaxy | galaxy.tradewave.com |

Open Access/Use of technology Tools and Institutionally Supported Technology. There is a need for utilizing an open access technology tools, and institutionally supported technology [6]. He affirmed that an open access is a free online access to scholarly works through the removal of price barriers to subscription fees and most permission barriers such as copyright and licensing restrictions, making them available with minimal author attribution only.

Apart from the above assertions, social media could also be an outstanding source in research work as it attracts the following benefits to the scholars: filtering of resources and comments, enables new kinds of research to be shared, gives feedback by submitting to journals and presenting conferences papers, raises the profile of one’s work rapidly than conventional academics publishing allows, encourages the use of experience of other scholars in the area of techniques used, method and analysis. It gives room for a critique with other people from the same field. Other sources are;

Directories i.e list of websites classified by topics, search engines such as Google, Hotpot, Lycos are used to find specific documents through keyword searches or menu choices;

| New Jounal / thesis (printed or online) | Printed Photograph or other (digital linage) |
| Other students | Full text e-journal |
Sources of research resources could be categorized as primary and secondary data [7]. The primary data contains direct accounts of events or phenomena e.g. questionnaire, interviews, and observations. Primary data are more authoritative, relevant and are called the first order source. On the other hand, secondary source contains events, information, and phenomena by other people who did not witness or participate in the events directly. As a result of this, people may not be certain of how far the original information has been altered by their secondary authors. Secondary sources of information include almanacs, dictionary, textbooks, journal, encyclopedias, newspapers, magazines, yearbooks, projects, Thesis/Dissertations, Government publications and so on. These sources are expected to be embedded in research report.

2.1. Research Ethics

In any academic environment, there is need for both the students and lecturers (supervisors) to keep to the rules and regulations guiding the research ethics. Research ethics provides guidelines for the responsible conduct of biomedical research. In addition, it educates and monitors scientists conducting research to ensure a high ethical standard [8].

In order to protect the researchers, a list of ethical guidelines for the conduct of research was developed by the Nuemberg Code with the emphasis on biomedical research or within a clinical setting [8]. The Nuemberg Code outlined ten ethical principles backing a researcher as follows: research scholars must voluntarily consent to research participation, research must be based on sound theory and prior animal testing; and must avoid unnecessary physical and mental suffering; research should contribute to the good of society; no projects can go forward where serious injury and/or death are potential outcomes; the degree of risk taken with research participants cannot exceed anticipated benefits of results; proper environment and protection is necessary; experiments can be conducted only by scientifically qualified persons; human subjects must be allowed to discontinue their participation at any time, and lastly, scientists must be prepared to terminate the experiment if there is cause to believe that continuation will be harmful or resulted in injury or death.

Some ethical principles which the researcher must abide by while writing a research report were summarized as follows [9]:

a. Openness: Shares data, results, ideas, tools, resources.
b. Respect for Intellectual Property: Honour patents, copyright, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give credit where credit is due. Give proper acknowledgment or credit for all contribution to research. Never plagiarize.
c. Confidentially: Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.
d. Responsible Mentoring: Help to educate, mentor, and advise students. Promote their welfare and allow them to make their own decisions.
e. Honesty: Honesty strives for honesty in all kind of scientific research or communications. Allow honesty to prevail, all report data, results, methods, and procedures, and publication status. Avoid any act of fabrication, falsification, or misrepresentation of data. However, do not mislead people i.e. Colleagues, granting agencies or the general public.
f. Objectivity: According to the author, avoid or minimize bias or self-deception that might affect experimental design, data analysis or interpretation, decisions etc.
g. Competence: Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in sciences as a whole.
h. Legality: know and obey relevant laws and institutional and governmental policies.
i. Animal Care: show proper respect and care for animals when using them in research. Do not conduct unnecessary or poorly designed animal experiments.
j. Integrity: keep your promises and agreements; act with sincerity; strive for consistency of thought and action.
k. Carefulness: Avoid careless errors and negligence; carefully and critically examine your own work and the work your peers. Keep good records of research activities, such as data collection, research design, and correspondence with agencies or journals.
l. Respect for colleagues: Respect your colleagues and treat them fairly.
m. Social Responsibility: Strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.
n. Non-Discrimination: Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors that are not related to their scientific competence.

Apart from the above ethical principles against research set up, there are other research misconducts that need government attention [8]. These attitudes are termed “other deviations” from accepted research practices. Although codes, policies and principles are very essential and useful, like any set of rules, they do not cover every situation; they often conflict, as they require justifiable interpretation. Therefore, this calls for the researchers to learn how to interpret, assess, and apply
various research rules and how to make decisions and to act in various situations. For one to become a scholar there is need to avoid plagiarism of any kind.

2.2. Critiquing a Research Report

Critiquing a research report involves evaluation of another researcher's report; this is very common among students engaging in educational research since it assists them to develop competency in their research and reporting skills [7, 11]. The assessor reads the report, articulates and formulates certain questions that probe the research work for validity. Apart from this, the research work is evaluated for worthiness and sufficiency of work done to justify the award of the academic certificate such as OND/B. Sc, M. Sc, Ph. D (that is, project/ thesis & dissertation respectively). Students/Scholars have been encouraged to ensure originality in their work, in order to make significant contribution to knowledge in addition to satisfy the conditions of the awards of required certificate. While evaluating or critiquing, the assessors consider research design; whether adequate or not, the objectivity and clarity in reporting the research findings, accuracy of the statistical analysis and inferences, and validity of the conclusions made.

In addition, evaluation of the journals for publication follows the same pattern as stated previously. Evaluation of a journal for publication follows a similar format to that Assessment of certificate award project work [11]. Hence a conference paper is subjected to assessment only establish agreement with the theme of conference. Tools used for evaluating research differ with the type and purpose of the report. This is the reason some assessors needs personal experience, expertise and initiative for making a fair assessment- knowing well that assessment is a tool used to determine students’ progress in learning [12].

2.3. Guideline for Critiquing a Research Report

The following are the guideline for critiquing a research report, and thus it is divided into [2, 7, 11, 13-16]:

a) The title of the study.
b) Abstract.
c) Introduction.
d) Review of related literature / reference citations.
e) Materials and methods (methodology).
f) Results (finding).
g) Discussion of the findings.
h) Conclusion and Recommendation.

a) Title
The title of the study should be such that must be reseachable.

b) Abstract
The abstract must be clearly stated and concise

i. The aims and scope of study must be stated and covered,
ii. The experimental design and procedures must be described,
iii. State the major findings (result) and conclusions-
iv. PROFFER recommendations.
v. THE information in the abstract must be accurate that it summarizes the information in the body of the research results.
vi. The abstract should not be more than 250 words for B. Sc students, for M. Sc students 350 words while 400 words for Ph. D students.
vii. Abstract are written in one paragraph and typed in single line spacing.
viii. No citation is made in the abstract.

c) Introduction
i. The research problem must be clearly stated and defined in terms of nature and scope.
ii. The background information of the research problem should be sufficient to understand and to evaluate the results of the study.
iii. There must be justification for carrying out the study. State the rationale for or significance of the study.
iv. The research objectives and questions must be clearly stated and be specific as well as the research hypotheses.
v. Define the important terms.
d) Review of related Literature
i. The literature review must be comprehensive and well organized to allow for a flow of information.
ii. The literature review must relate to the problem in view and the research hypothesis.
iii. Build up the literature review with current information and citations.
iv. The researcher should cite references from primary source.
v. Check whether there is any correlation between the review and the rationale of the research work.
vi. Check whether the references cited in the body of the text are cited correctly and listed in the list of references at reference section,
vii. Check whether the presentation of the references conform to the specific and known format.

e) Materials and Methods (Methodology)

i. Check the methodology adopt if the sample size is large and whether it is Appropriate.
ii. The sampling procedure must be properly stated to avoid a representative unbiased.
iii. Check the characteristic features and size of the population studied.
iv. Check whether there is justification for the instruments used.
v. Ensure that the variability and the reliability of the instruments were ascertained.
vi. Check the appropriateness of the instrument for measurement of intended variable.
vii. Check whether there are limitations and / or weaknesses in the instruments to the measurement procedures that could have affected the research findings.
viii. Check whether the control and treatment procedures used are in sufficient details to enable them be
replicated by another research.

f) Result (Findings)
   i. Check the statistical tools and the descriptive statistics employed whether they are adequate or appropriate.
   ii. Present the result in clearly and understandable manner.
   iii. Check whether the tables and figures are well presented and organized in the report.
   iv. Check whether there is a descriptive in the text of results already presented in the tables and/or figures.
   v. Check also if the problems / Hypothesis stated appropriately in relation, to the presentation of the findings.

g) Discussion of the Findings
   i. The analysis of the data must be objective.
   ii. The discussion must be clear and concise.
   iii. Relate the research result to the statements of the hypothesis or research objective.
   iv. Show that there is evidence that the result and their interpretation agree or contrast with previously published work.
   v. Discuss the report in line with the theoretical and practical implications of the research findings.
   vi. Check whether there are evidence of claims made that are not supported by data.

h) Conclusions and Recommendations
   i. The findings and conclusions must be clearly stated.
   ii. Check whether they are supported or justified by the data presented and analyzed.
   iii. Check whether the researchers generalize appropriately or over concluded.
   iv. The parts of the report must properly related to one another.
   v. The research work must contribute to education knowledge.
   vi. There must be recommendations for further work to be done in future.

3. Components of a Critique Material

The journal for critique could be current research in a field of interest or assigned to do. An assessor should look into the following components which make up the scores of the researcher.

| S/No | Components                                                                                                                           | Scores (%) |
|------|-------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1    | A Summary of the material (Abstract)                                                                                                 | 20         |
| 2    | An evaluation of the article taking cognizance of followings: Relevance of the research questions and/or hypothesis                    | 5          |
| 3    | Utility of style and possibility, feasibility alternatives                                                                             | 5          |
| 4    | Adequacy of review of related literature                                                                                               | 10         |
| 5    | Representativeness of sample to generalization made or implied                                                                         | 5          |
| 6    | Data collection instrument (instrumentation)                                                                                           | 10         |
| 7    | Presentation and analysis of data                                                                                                     | 10         |
| 8    | Good (quality) interpretation                                                                                                         | 10         |
| 9    | General Summary of recommendations                                                                                                    | 10         |
| 10   | Contribution of research to knowledge                                                                                                | 5          |
| 11   | References                                                                                                                            | 10         |
| Total|                                                                                                                                     | 100%       |

3.1. Assessor’s Stake in Critiquing Journal Publication

Editors (assessors) of scholarly journals use different methods for reviewing scientific papers submitted for publication. However, the following key elements in the structuring of the scientific paper: the title, author's address; abstract; introduction; materials and methods; results and discussion, conclusion, and references are assessed on a rating scale. An inexperienced researcher may be guided by the checklist below as possible items to be scrutinized by the reviewer.

| Parameters                                                                                                                                         | Maximum Score | Score Obtained |
|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| Appropriateness of the title of research                                                                                                           | 5              |                |
| Adequacy of abstract                                                                                                                               | 5              |                |
| Adequacy of the introduction and clear statement of the problem. Are the issues raised of topical interest? Relevance/significance of the subject matter to global situation. | 10             |                |
| Adequacy of literature review and appropriateness of reference citation both in the text and as back matter.                                        | 5              |                |
| Logical arrangement of thought/content                                                                                                             | 15             |                |
| Appropriateness of experimental design and adequacy of experimental techniques or procedures: If empirical, appropriateness of research questions / hypothesis, methodology and discussion or if a theoretical paper, adequacy of conceptual clarification and depth of technical coverage. | 5              |                |
| Mechanical accuracy and fluency of write up                                                                                                        | 10             |                |
| Adequacy of presentation of results and soundness of the interpretation, discussion, recommendations and conclusion / implications                   | 5              |                |
It should be noted that all parameters listed above are not applicable to every paper. It is usual to have an evaluation sheet with a checklist of probing questions as an assessment guide for the reviewer or assessor. Such a guide adopted by a journal is shown below. Again, the assessor is requested to comment freely, in a space provided to allow room for flexibility in the evaluation. The authors are made anonymous to the reviewer. Similarly, the reviewers are made anonymous to the author. This removes elements of bias.

### 3.2. Assessment Guide for Reviewers (Combined Formats)

**Paper Code**

a) Article / materials & how suitable?
b) Paper Title.
   i. Is the title of the paper appropriate?
      Yes () No ()
   ii. Suggest a new title if the title is not adequate.
c) Abstract.
   i. Is the abstract clear and adequate?
   ii. Does it give a correct summary of the contents and findings of work?
      Yes () No ()
d) Experimental material and data.
   i. How adequate?
   ii. Are they too few or too many?
      Few () Many ()
e) Statistical Treatment.
   i. Are they necessary tools used?
      Yes () No ()
   ii. Are the tools adequate?
      Yes () No ()
f) Quality and Originality.
   Does the paper add any substantially new knowledge to the existing body of knowledge, or is it a mere repetition or confirmation of existing work?
      Yes () No ()
g) Literature review / reference citation.
   i. Is the literature review adequate?
      Yes () No ()
   ii. Does the author show a clear understanding of the subject area?
      Yes () No ()
   iii. Is the reference citation properly done?
      Yes () No ()
   iv. Is the latest APA style of referencing used?
      Yes () No ()
v. Make your suggestions.
h) Technical and Experimental methods (where applicable).
   i. Is the method appropriate and consistent with the problem?
      Yes () No ()
   ii. Is the statement on the accuracy of the method used?
      Yes () No ()
   iii. Is the statistical analysis appropriate for the design?
      Yes () No ()
i) Results (where appropriate).
   i. Is the presentation clear and easily understood?
      Yes () No ()
   ii. Can the tables, figures or illustrations be understood without reference to the Text?
      Yes () No ()
   iii. Are the results properly illustrated for ease of analysis?
      Yes () No ()

**Section C: Research Method**

(D) General Comments.
j) Discussion.
   i. Is the discussion based on the results and findings presented?
      Yes () No ()
   ii. Is it critical or balanced?
      Yes () No ()
   iii. Does it distinguish speculation from facts?
      Yes () No ()
   iv. Are the conclusions and recommendations sound and logically based on the results?
      Yes () No ()

k) Quality of writing presentation.
   i. Is the paper properly written or presented?
      Yes () No ()
   ii. Is there a smooth flow of thought?
      Yes () No ()
   iii. Are the headings, sub-heading and paragraphs adequate?
      Yes () No ()
   iv. How correct are punctuation and spellings?
   v. General Comments.
l) Material/Journal/thesis is graded:
   Excellent () V. good () Good () Acceptable () Preliminary () Unsuitable ()
m) Recommendation.
Based on the review, the reviewer should recommend any
4. Conclusion

In writing a research report scholars are required to present a well written work free of any academic misconduct. Critiquing standard report writing will lead the scholars to be free from; publishing the same article to different journals without telling the editors, using an inappropriate statistical technique in order to enhance the significance of the paper work, stretching the truth on a grant application order to convince reviewers of the paper, sabotaging someone’s work and making unauthorized copies of data, papers or computer, etc.

5. Recommendations

The following recommendations were made:
1. All scholars should be vast in experience and have special interest in research, especially in the areas of specialization.
2. Scholars should be able to differential between a school Thesis and journal structure and format.
3. A research scholar should be able to posses the following skills: technical, computing, writing skills and understanding of methodological procedures.
4. A researcher should have a good knowledge of the research area.
5. A scholar profile and publication should be well documented from time to time for easily accessibility and onward promotion exercise.
6. A researcher should be capable of consulting various research resources, social medias and technological tools.
7. Research aims should contribute to the good of society and as well be based on sound theory.
8. Any research report must be properly guided by the ethical principles guiding research writing.
9. A researcher should be very conversant with the copyright law.
10. Be mindful of plagiarism in literature review.

References

[1] Anthony, V. (2011). Student Project Manual for Tertiary Institution: Modern Approach. Onitsha: Rehoboth Print.
[2] Echeta, D. O and Ojiuko, A. A. (2011). Business social and economic research methods. Owerri: Mega Atlas Projects Ltd.
[3] Ezeani, N. S. (2011). Research Methods and Statistics: A Practical Approach. Onitsha: Eri Print Ltd.
[4] Ike-Elechi, O & Ezeoha, A. E. (2013), is differentiating between A Journal paper and Academics Doctrine Thesis. Academics Research Supervision. Enugu: Idealway Production.
[5] Ogba, I. E. (2007). Organizational Commitment in Developing Countries: The Case of Nigeria. Unpublished Thesis, University of Northumbria, British Library DX110966.
[6] Dribe, C. O. (2013). ICT and effective supervision. Academics Research Supervision. Enugu: Idealway Production.
[7] Ezeani, N. S. (2010). An insight into: Writing Effective Seminar/Multidisciplinary case studies (MDCS) and Basic Research methods (3 in one Approach). Oba: Ifevic Publishers Ltd.
[8] Ogunji, J. (2013). Research Ethics. Academics Research Supervisions. Enugu: Idealway production.
[9] Shampoo A. & Resnik, D. (2009). Responsible conduct of research, 2nd ed. New York; Oxford University Press.
[10] Ezeoha, A. E & Ike-Elechi, O. (2013). Academics plagiarism: between scholarship and Criminality. Academics Research Supervision. Enugu: Idealway Production.
[11] Nwachukwu, C. O. (2007). Research Methods and Statistics for Management/Social Sciences, Applied Sciences and Education. Nsukka: UCO-Academic Publishers Nigeria Ltd.
[12] Arban, P. A. (2016). Online Peer Assessment: Effects of Cognitive and Affective Feedback. MSc. Thesis Graduate Studies and Applied Research (GSAR). Laguna State Polytechnic -University Laguna, Philippines.
[13] Agu, A. O. (2008). Research Methodology: A Practical Approach to Project Writing. Onitsha: Agu Printing Press.
[14] Azuka, E. B &Agomuo, E. E. (2006). Research Techniques for Techniques for Tertiary Institutions. Enugu: Cheston Agency Ltd.
[15] Eze, A. N. (1999); Practical Approach to Research Methods and Statistics in Education, Management and Social Science Onitsha: Onwubiko Printing and Packaging.
[16] Nworgu, B. G. (1991). Educational Research: Basic Issues and Methodology. Owerri: Wisdom Publisher Ltd. 192 P.