ACADEMIC WRITING FOR UNDERGRADUTE A GUIDE

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MODULE I

RESEARCH PROPOSAL

1.0 Introduction

Academic writing is very significant for researchers and all final year students in all tertiary institution. Hence its importance can be seen in the heavy credit units allotted to it. It is in the final year project that students move away from threshold of classroom to real life field experience. In this instance all the previous four years undergraduate courses are put in to practice to solve a specific computational problem. At the end of a session work, students would have acquired developed and consolidated different programming skills and tools of solving practical real world problem. These include (discipline specific) data gathering, field surveys, questionnaire drafting, Programing Language (such as C, C++, C#, Java etc) among others and of course general usage of Microsoft Words, Excel, and Power point.

This guide is written specifically to assist students to get through this important huddle of preparing final year report with less hassle and substantially hitch free. At this juncture, students must realize that handling constructive criticisms is very important to writing an excellent and satisfactory report.

1.1 Project Proposal

It is strongly recommended that students should discuss in earnest with one or two lecturers specializing in their core area of interest in Computer Science. At the end of the 300Level, each student should have an idea of the area of specialization that he/she would want to do the project work. This can be enhanced by studying past project works in the department computer science, library and the internet. In addition, it can also be through identifying computational problems in the students' hometown, Banks, Market, Shops, Schools or elsewhere in need of solution to particular problem. Any idea conceptualize is tentative and must be worked upon by the student under the guidance of his/her supervisor.

1.2 Aims of the Project Proposal

(i) to articulate a project topic that addresses a specific computational problem either in theoretical, mathematical or practical formulation.
(ii) to identify the required data/information needed and how to obtain them
(iii) to state the methods of data analysis and the expected results
(iv) to discuss relevancy of results to the problem and give suggestion on improvement and further work.

1.3 Advantages of the Project Proposal

(i) project proposal is like a blue-print. It guides the students on what to do and how to do them.
(ii) it also allows the students to focus on the work and ensure compliance with the schedule of work.

(iii) the long term benefit is to help the students in acquiring the art of proposal writing which would be required in the students' future career either as an academia or professional person.
(iv) developing a proposal is in the best interest of the students for it allows for self progress monitoring and assessment. Ditto for the student project supervisor.

A research proposal is a written expression of interest to carry out a (non-trivial) deep enquiry (research) which is expected to be of significant benefit to the society. It is good practice in research proposal design to put down ideas (pertaining to the salient features/issues of a research) on paper, as they evolve. A significance of a good research proposal is that it unambiguously demonstrates the intellectual capability of the proposal writer to carry out the envisaged research. It also engenders confidence of the person and organization (supervisor, Department, Faculty etc) to whom/which the proposal is submitted, in the capability/ability of the proposal writer. A well-written research proposal should, with some editing and improvement, be easily convertible to the actual Chapter 1 (Introduction) of the project to be carried out.

1.4 Layman's Models of a (Research) Proposal

i. A man walking a distance of 100km by starting with a single step. Invariably, he makes several steps and eventually gets to the end.
ii. A prospective postgraduate student of the University of Ilorin who, of necessity, must first obtain the admission form. After the admission letter has been issued, the student attends classes, sits for examination, and writes a project which ultimately leads to the award of a degree.
iii. A man making an attempt to woo a lady. He first conceives ideas and best strategies of winning the heart of the lady. If the strategies are well formulated and implemented, and other things being equal, the lady becomes his.

1.5 Basic Components of a Research Proposal

A research proposal is expected to contain at least the following:

a. Title (page)

b. Abstract

c. Introduction

d. Aim and Objectives

e. Problem Statement

f. Significance of Study

g. Motivation for the Study

h. Scope and Limitation of the Study

i. Research Methodology

j. Expected Results

k. Budget

l. Timeline

m. Conclusion

n. References

(a) **TITLE PAGE**

Include the following:

1. An informative concise description of a project/ study
2. Name(s) of investigators/researcher(s)
3. Other necessary information e.g.
    i. Matriculation number of student
    ii. Authorities/organizations to which the proposal is submitted
    iii. Date

(b) **ABSTRACT**

A concise summary of the contents of the proposal

(c) **INTRODUCTION**

Here, the background to the subject matter is presented. It should be stimulating enough to encourage the reader to be interested in reading other parts of the proposal. This is normally supported with relevant literature

(d) **AIM AND OBJECTIVES**

Aim: This describes the ultimate goal of the research, usually stated in one complete sentence.

Objectives: These refer to the various means of attaining the aim/goal. Objectives are normally itemized and must, as much as possible, be specific and measurable.

(e) **PROBLEM STATEMENT**

Every research being proposed is necessarily targeted towards solving a problem. Every research that does not have a clearly stated problem to be solved is not worth embarking on! Problem Statement (otherwise called 'Statement of Problem') is a well-articulated identification/statement of issue(s) to which solution is to be found. A good problem statement invariably traces the genesis of the problem, identifies gaps in the literature and proposes the problem to be solved in a project.

(f) **SIGNIFICANCE OF STUDY**

This depicts the importance of embarking on the study

(g) **MOTIVATION FOR THE STUDY**

Here, a narration is made of how the fundamental inspiration to embark on the study is obtained.

(h) **SCOPE AND LIMITATION OF STUDY**

This is a statement on the extent to which the research is applicable i.e. it includes what the project covers (scope) and what its procedure and findings may not be applied to (limitation).

(i) **RESEARCH METHODOLOGY**

This refers to aggregate of procedure or method(s) through which the research problem is to be solved. Details on research methodology can be found in Chapter 4.

(j) **EXPECTED RESULT**

This is a clear description of what the solution to the stated problem will look like. Every well-defined problem necessity has a result or solution.

(k) **BUDGET**

This refers to a breakdown of costs involved in executing the project.

(l) **TIMELINE**

The timeline is a schedule indicating the major/minor tasks involved in the project and the corresponding projected time for executing each task.

(m) **CONCLUSION**

This provides a short general overview of the contents of the body of the proposal, with final convincing statement(s) on the capability of the researcher to effectively execute the research.

(n) **REFERENCES**

This is a list of all literature consulted in preparing a research proposal. It is important that all listed works are cited at least once within the body.

EXERCISES

Develop a research proposal for each of the following research projects:

(i) Development of software for computing the cumulative grade point average of a student.
(ii) Development of software metric.
(iii) Measurement of the societal impact of newly developed software.
(iv) Design and implementation of an E-Library for a higher institution.
(v) Development of a web-based stock control system for a large supermarket.

MODULE II

GUIDELINES FOR CONDUCTING AND REPORTING UNDERGRADUATE PROJECT/RESEARCH WORK

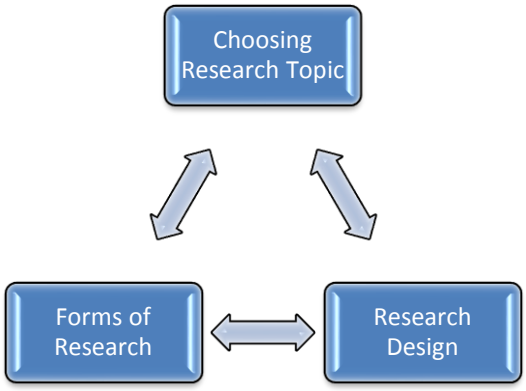
How do I start my research?

i. Identify area of interest
ii. Look for scholarly materials
iii. Background Reading
iv. Identify research problem
v. Identify research gap
vi. Choose tentative topic

2.1 Types of Academic Writing

i. Research Proposal
ii. Project Report
iii. Publication: a report of academic research
iv. Textbook
v. Dissertation/Thesis
vi. Technical Report etc.

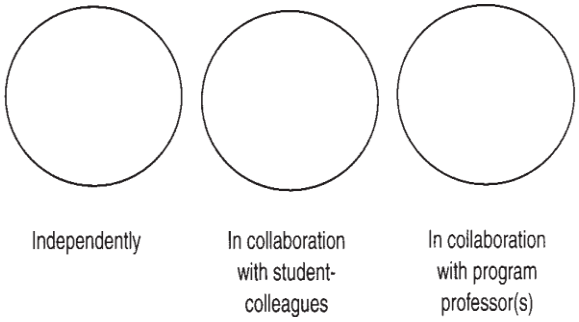
2.2 Choosing a Research Topic

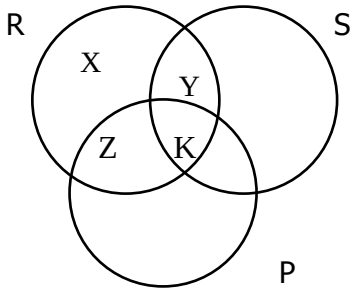


Two schools of thought about *when to identify your research focus:*

i. *The earlier in your coursework you decide on an area of study the better. You focus all of your attention on the issue, connecting all assignments and readings to your research focus.*
ii. *The later in the process you decide the better. With this extended knowledge, you are in a position to see where there are gaps and conflicts in your discipline, and you may design a study which will lead to expanding your discipline's knowledge.*

Modes of Conducting Research





X = Independently Research
Y = Collaboration with Student colleagues
Z = Collaboration with program Professor
K = Collaboration with both Student colleagues and program Professor

The following should be considered:

i. *Is it interesting to me?*
ii. *Is it manageable? (achievable?)*
iii. *Is it within the range of my competence?*
iv. *Is the data source reliable?*
v. *Does it make a significant and original contribution?*
vi. *Is it [too] controversial?*
vii. *Research topic is selected mainly to fill one research gap or the other.*
viii. *How do we show a research gap?*
ix. *Review of past literature to reveal what have been researched and known.*
x. *'GAP' is between what is known and what is not known. Criteria can be set to validate research topic.*

2.3 Identifying Research Gap

KEYWORDS THAT SIGNIFY 'GAP'

i. There is paucity of research…….
ii. The relationship is still unclear……
iii. There still exists some ambiguity……
iv. The effects have not been empirically tested…….
v. More findings are still required……..

vi. Research effort is still scanty……..
vii. Past research has ignored……..
viii. There are inconsistencies in the findings……
ix. N. B: Just to mention a few……

2.4 Types of Research

APPLIED/ ACTION RESEARCH

- **AIMS AT SOLVING SPECIFIC PROBLEMS WITHIN AN ORGANIZATION OR COMMUNITY**

2.5 RESEARCH DESIGN

Quantitative Research	Qualitative Research
Identifying research problem is description and explanation oriented	Identifying research problem is exploratory and understanding oriented
Literature review plays a major role in justifying the need for the research	Literature review plays less role in justifying the need for the research
The research purpose is specific, finite and the data is measurable (quantifiable)	The research purpose is broad and the data is not measurable
Data to be collected is predetermined , numeric and mostly voluminous	Data to be collected is situational, text and mostly

	small
Data Analysis involves statistic analysis for: description of trends, relationship among variables and comparison with previous studies.	Analysis is done via text analysis for: description, analysis and thematic development and the interpretation of findings.
Research report is standard and unbiased	Research report is flexible and biased

Basic Rules in Academic Writing

a. *"Anyone who wishes to become a good writer should endeavour, before he allows himself to be tempted by the more showy qualities, to be*
   i. *direct,*
   ii. *simple,*
   iii. *brief,*
   iv. *vigorous, and*
   lucid." (Fowler & Fowler, 1906)

b. Writing in academics is known to be precise, impersonal and objective.
c. The use of third person and passive tense is encouraged.
   E.g. It was revealed that……..
   The researcher wishes to…..

Example

Wrong: I am interested in developing a more secured algorithm.
Right: The researcher is interested in developing a more secured algorithm.

Avoid plagiarism!!!

How?

It is accepted that you are not plagiarizing

1. if you are writing from a source without looking at the source.
2. The source is acknowledge.

Plagiarism-free writing

i. **Source:** A published article by R. G. Jimoh in 2012
ii. There are number of security challenges facing use of Automated Teller Machine (ATM) in Nigeria.
iii. **Reproduced as:**
   It is revealed that the use of Automated Teller Machine (ATM) in Nigeria is associated with some security issues (Jimoh, 2012)

2.6 Acknowledgement of Source(s)

i. It is a good academic practice to acknowledge all sources of knowledge in our writing.
ii. All strong statements must be acknowledged by citing appropriate reference(s).
iii. *What are strong statements*?

Types of statements in Academic Writing

Statements in academic writing can either be:

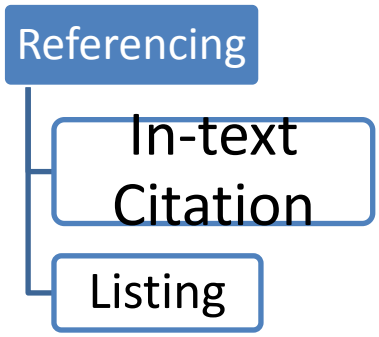
i. Affirmative/strong
ii. General/universal/weak

Acknowledging source of strong statements

Example of weak statement:

"*Education is a good legacy*"

A statement is considered strong if it is assertive, informative, confirmatory, revealing and leading. e.g "It is revealed that the use of Automated Teller Machine (ATM) in Nigeria is associated with some security issues (Jimoh, 2012)"



2.7 Components of a Good Abstract

i. Motivation
ii. Objective
iii. Methodology
iv. Findings
v. Gap(s)
vi. Keywords

2.8 Statement of Problem and Research Question(s)

The statement of problem is a statement showcasing the circumstances that inform the interest to carry out the research in terms of:

i. Motivation
ii. Issues/Problems and
iii. Gap

Research questions are framed to address the problem.

2.9 Literature Review

i. Literature review serves as the major way of defending and justifying any research. It exposes the need for such research.

ii. It also serves as the justification for the process.

iii. This involves reading the past literatures on the related areas of study.

iv. Discussion of research findings is also linked to the previous literature to showcase the contribution to the body of knowledge.

v. Literature review is identified as the first research step in quantitative research.

vi. The statement of problem is substantiated with evidences from the past literature.

e.g. There is still scanty research effort to improve the machine learning capabilities (Jimoh, 2011).

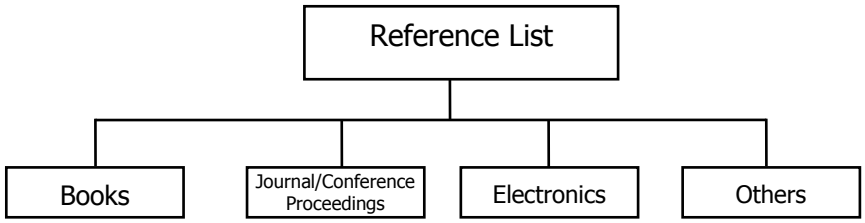
2.1.1 Referencing

i. Referencing is an essential component of academic writing.

ii. It is used to prevent laying claims to intellectual property that does not belong to one.

iii. In this chapter, interest is in American Psychological Association (APA) referencing standard. E.g.

Referencing



References or REFERENCE involve a list of some references, especially those uttered within the body of this chapter.

EXERCISES

1. List any 10 rules in academic writing
2. With relevance examples, show how in-text citation is done using APA referencing guide.
3. What are the main components of a statement of Problem ?.

MODULE III

UNDERGRADUATE PROJECT IN COMPUTER SCIENCE

3.1 RESEARCH DESIGN IN COMPUTER SCIENCE

Standard research in computer science may be restructured in the following format:

Chapter One: Introduction;

Chapter Two: Literature Review

Chapter Three: Methodology

Chapter Four: Implementation/Simulation

Chapter Five: Summary, conclusion and recommendation

Chapter One: Introduction

Chapter one of a research design report should normally address the following:

1.1 Background of the study

This section of a research design reporting should clear show the background to the study. The background/introduction of the study should be written in a way that it will establish the context of the study based on literature/experience/expressed need/expert opinion.

1.2 Statement of the problem

What Research Problem is the study addressing?

Statement of the problem should clearly be written to show the motivation for the study or knowledge gap(s) that a researcher is trying to fill.

1.3 Aim and Objectives of the study

This section of a research design should address the question "What is the aim of the study?" The aim of the study should be consistent with the problem/rationale/ justification of the study.

The main aim of the study should be broken down into measurable objectives, so that by the time each of the objectives is carried out, the main aim of the study would have been achieved.

For example,

The main aim of this study is to develop models for addressing the research challenges.

The objectives to achieve the main aim of the study are:

(i) to study the existing relevant body of knowledge in the area of the study;

(ii) to use the knowledge gained from the study to design model for addressing the research challenges;

(iii) to implement the model designed; and

(iv) to evaluate the implemented model.

1.4 Methodology

This section should clearly show the methodology for addressing the problem by stating the method (tools and application) for each objectives and the strategies you will use for deploying the methods. Note that a research has one methodology but may have many methods.

1.5 Significance of the study

1.6 Organization of the Thesis

This section should present the structure of the thesis as follows:

Chapter one of the thesis introduced the study;
Chapter two of the thesis presented the Literature Review;
Chapter three discussed the Methodology for addressing search challenges;
Chapter four discussed the implementation/simulation of the model designed;
Chapter five presented the summary, conclusion and recommendation.

Chapter Two: Literature Review

The Literature Review chapter consists of the existing body of knowledge relevant to the study. The tasks before the researcher at this level are to review and to synthesize previously published literature as associated with the problem. A central activity in Computer Science research is the literature review. The literature review involves a systematic study and analyse of documented ideas in the areas of study. This is with the aim of finding relationships between different ideas and to understand the nature of the problems to be addressed and the structure of a desirable solution. Ideas in the literature may be used to justify the research approach, the selection of methods, and to demonstration that the research contributes something new to the present state of knowledge (E. C. Osuala, (2005), (C Harts, 1998).

Research is like an on-going debate about a topical issue. Before you can make an informed contribution to that debate, you need to understand what the issues are, and a sense of the direction the debate is heading. The literature review will allow you to do this in the research process. For a proper literature review, the following questions should be explored:

(i) what are the basic ideas, concepts and terms in the area of research?
(ii) where is the source(s) of the current body of knowledge in the area of research and how is it presented?
(iii) how is knowledge structured and organised in the areas of research?
(iv) who are the key authorities and how are sources cited and listed in the research communication?
(v) what are the major current questions, issues and debates about in the area of research?
(vi) what are the techniques currently used in conceptualising, representing, analysing designing, implementing and evaluation in the research area;
(vii) how is your research related to the questions currently being addressed (context)?

Chapter Three: Research Methodology in Computer Science

Research Methodology chapter is where a researcher is expected to make contribution to existing knowledge. It is not suppose to be another literature review. Various tools such as mathematical tools, UML tools, etc. may be adopted to present the results of analysis and designs of models. The

methodology chapter in computer science is made up of two parts depending on the researcher area of study: (i) analysis; (ii) design.

(i) Analysis

The analysis part of the methodology chapter is meant to present the result of the analysis of the problem domain using use case diagrams.

(ii) Design

The design part of the methodology chapter consists of various levels of designs such as:

(i) Architectural design;
(ii) Object design;
(iii) Process design;
(iv) Database design;
(v) Algorithm design; and
(vi) Interface design.

Chapter Four: Implementation/simulation

This chapter consists of how the actual implementation/simulation of the models and Designs presented in chapter three are carried out, and the discussion of the results of the implementation.

Chapter Five: Summary, conclusion and recommendation

The summary chapter of the study consists of four paragraphs which should normally include:

(i) statement of the problem which should clearly show the motivation for the study or gap(s) that the researcher is trying to fill, follow by aim and objectives of the study;
(ii) the methodology adopted for carrying out the research;
(iii) the findings resulting from carrying out the research; and
(iv) conclusion(s) arising from the finding(s) of the study, follow by recommendation for future research.

CONCLUSION

In conclusion, it must be noted that a well research design will not only identify the research problem clearly and justify its selection, particularly in relation to any valid alternative designs that could have been used, but reduce time wasting in carrying out research and essentially improve research output.

EXERCISES

1. Select a research topic in any field of computer science and engineering.
   (i) In this exercise, you are required to produce a document exploring the issues of research protocol writing as they relate to your research topic. If you have not selected a research area, you may select a tentative or hypothetical research topic.
   (ii) You will be required to defend your research protocol.

2. (i) Download a paper relevant to the research topic selected from any of

the following set of journal publisher websites listed sections A – C below:

(ii) Also download the instruction for authors as contained in the journal website.

Try to structure rough outline of the paper you are proposing in line with the instruction for authors.

A Dictionary

1) http://www.yourdictionary.com
2) http://www.thefreedictionary.com
3) http://www.answers.com
4) Goggle on Cambridge Advanced learners Dictionary
5) Goggle on Wikipedia

B Free on-line Journal website

Goggle on these:

1. citeseerX (http:/citeseer.ics.mit)
2. Scopus (http:www.scopus.com)
3. Highwire
4. Global Development network (Very useful but you may need to regis-ter)
5. MUSE (John Hopskins University)
6. ResearchResearch.com
7. JSTOR

Another way to get free paper is to send email to one of the authors (the corresponding author for example). Make sure you have read some work by the author or that you are familiar with his work. Another way to get free paper is to download complementary copy from Journal website (e.g. Elsevier has free complementary copy for each of its journal)

C Journal Publishers' Website

You will find the following journal publishers' website very useful:

1. Elsevier Journals
2. Spinger Valerge Journals
3. Taylor and Fransis Journals
4. Oxford Press Journals
5. MIT Press Journals
6. IEEE Journals

MODULE IV

SOME USEFUL MATHEMATICAL AND STATISTICAL TOOLS

The following are some of the areas in the field of mathematics and statistics that provide platforms for research methodology in computer science.

i. Differential Equations
ii. Abstract Algebra e.g. set theory, matrix algebra
iii. Real Analysis e.g. functions, sequences and series
iv. Regression analysis
v. Operations research
vi. Correlation theory
vii. Bayesian statistics

4.1 EXPECTED DEGREE OF RESEARCH CONTRIBUTION IN COMPUTER SCIENCE

In this section, the following are explicitly explained:

A. Expected degree of research contribution for a B.Sc degree programme in computer science.
B. Expected degree of research contribution for M.Sc degree programme in computer science.
C. Expected degree of research contribution for Ph.D programme in computer science.

4.1.1 B.SC PROGRAMME

The expectations are:

i. Mastery of a programming language, measured by the development of a workable program for an applied problem. [*software project*]

ii. Construction of a prototype electronic device that is working to specification. [*hardware project*]

iii. Writing and running a programme in a modern language for solving a problem in numerical analysis. [*application*]

Sample themes of a standard B.Sc. research project include:

i. Design and Implementation of software for computing students' examination results.

ii. Development of a student record management system.

Note: The originality expected at this level may not go beyond the ability to write a workable source code for an applied problem, in any modern programming language.

4.2 IEEE REFERENCE FORMAT

A standard reference format provides uniformity for listing/citing of references in academic writing. Some of the standard formats include IEEE format, APA (American Psychological Association) format, and Harvard format. It is normally advisable that a uniform format is used in any

postgraduate/academic report. Normally, every institution specifies the format which should be followed.

In particular, the IEEE format is a format developed by IEEE (Institute of Electrical and Electronics Engineers) Inc., USA. It is the world's largest technical/professional association for advancement of technology. The institute, established in 1884, provides standards for various products and publications. The reference format is used in all the institute's publications, including journals, conference proceedings, magazines etc. The format is also widely used in non-IEEE academic publications.

Basic guideline of IEEE reference format is CITE AS IS i.e. a reference is listed in the order in which it is cited within the body of the publication, without listing in alphabetical order. The following are the categories available in IEEE reference format:

i. Format for books
ii. Format for books (when available online)
iii. Format for periodicals
iv. Journals (when available online)
v. Format for reports
vi. Format for handbooks
vii. Format for reports and handbooks (when available online)
viii. Format for conference proceedings (published)
ix. Format for papers presented at conferences (unpublished)
x. Format for papers presented at conferences (when available online)
xi. Format for patents
xii. Format for patents (when available online)
xiii. Format for Theses (M.Sc) and Dissertations (Ph.D)
xiv. Format for computer programs and electronic documents (when available online)
xv. Format for most common types of unpublished references
xvi. Format for standards

4.4 BOOKS

J. K. Author, "Title of chapter in the book," in *Title of His Published Book, x*th ed. City of Publisher, Country if not
USA: Abbrev. of Publisher, year, ch. *x*, sec. *x*, pp. *xxx–xxx.*

EXAMPLE:
'D. Oluwade, *Mathematical Representation of Computer Character Data*. Germany: Lambert

Academic Publishing, 2012.

4.5 JOURNALS AND PERIODICALS

J. K. Author, "Name of paper," *Abbrev. Title of Periodical*, vol. *x,* no. *x,* pp. *xxx-xxx,* Abbrev. Month, year.

EXAMPLE
'D. Oluwade, "Modelling fractal patterns via the qualitative equivalence of a nonlinear ODE," *Nonlinear Analysis,* vol. 63, no. 5-7, pp. e2409–e2414, 2005.

4.6 CONFERENCE PROCEEDINGS

J. K. Author, "Title of paper," in *Abbreviated Name of Conf.*, City of Conf., Abbrev. State (if given), year, pp. *xxxxxx.*

EXAMPLE:
'D. Oluwade and A. O. Osofisan, "Application of the technique of code presentation to pulse code modulation," in *Proc. ICTEI,* 2002, pp. 135–138.

4.7 THESES AND DISSERTATIONS

J. K. Author, "Title of thesis," M.S. thesis, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

J. K. Author, "Title of dissertation," Ph.D. dissertation, Abbrev. Dept., Abbrev. Univ., City of Univ., Abbrev. State, year.

EXAMPLES:
B. Oluwade, "Design and analysis of computer – coded character sets," Ph.D. thesis, Dept. Comp. Sc., Univ of Ibadan, Ibadan, Nigeria, 2004.

B. Oluwade, "Qualitative equivalence of autonomous ordinary differential equations," M.Sc. thesis, Dept. Math. O. A. U., Ile-Ife, Nigeria, 1999.

4.8 PRACTICAL SESSIONS

Every student should describe his/her project topic, and share experiences on why and how a particular research methodology is chosen. Guidance should be provided by the supervisor based on the student's description.

4.9 CONCLUSION

This chapter has delved on aspects of postgraduate research, with a view to sensitizing students on expectations from them towards achieving results that will fairly meet global standard.

EXERCISES

1. 2. Discuss the systems development life cycle in relation to any practical project.

3. Discuss the similarities and differences between design in computer science and design in information technology.

4. 5. Explain research methodology as it relates to each of the following fields/areas of study:

(i) Mathematics

(ii) Physics

(iii) Engineering

(iv) Computer Science

6. By first identifying the keywords/phrases and what should constitute the central theme of the research, discuss the detailed steps when carrying out the following projects:

i. Performance evaluation of SUMMIT UNIVERSITY internet network.
ii. Usability evaluation of SUMMIT UNIVERSITY websites.
iii. Design and Implementation of a novel electronic voting system.
iv. Design, construction and testing of an electronic device.
v. Development of an android-based application for computing students' results.

7. Discuss the reference formats for books, journals, conference proceedings and other publications as it relates to:

(i) APA format

(ii) Harvard format

(iii) IEEE format

REFERENCE

1. Okeola, O. G. (2011): Writing Final Year Project Proposal & Report. A guide for undergraduates, Department of Civil Engineering University of Ilorin, Ilorin.

2. Oluwade, B., Jimoh, R. G. & Babatunde, A. O. (2010): Tips on Successful Postgraduate Research in Computer Science. Department of Computer Science, University of Ilorin, Ilorin, Nigeria

3. Bailey S. (2006). Academic writing A handbook for international students, second, London, taylor and frances group.

4. Thaiss, Chris and Terry Zawacki. Engaged Writers & Dynamic Disciplines: Research on the Academic Writing Life. Portsmouth: Boynton/Cook, 2006. Print.

5. Jordan, R. R. (1999). Academic writing course: Study skills in English (3rd ed.). Harlow, MA: Pearson Education.

6. Leki, I. (1998). Academic writing: Exploring processes and strategies. (2nd ed.). Cambridge, England: Cambridge University Press.

7. Lester, J. D. (1996). Writing research papers: The City University style manual (8th ed.). New York, NY: Harper Collins.

8. Lester, J. D. (1999). Writing research papers: A complete guide (9th ed.). New York, NY: Addison-Wesley Educational Publishers.

9. Van der Krogt, C. (2001). Academic writing: Study guide. Palmerston North, New Zealand: College of Education, Massey University.

10. Stephen, B. (2006). *ACADEMIC WRITING, A handbook for International Students*, (Second Edition), London: Routledge, *Taylor & Francis Group.*

11. Ember, C. R. & Ember, M. (2001). Cross-cultural research methods. Walnut Creek, CA: AltaMira.

12. Ercikan, K. & Roth, W. (in press). Constructing data. In Clif Conrad & Ron Serlin (Eds.), SAGE handbook for research in education. Thousand Oaks, CA: Sage.

13. Garfinkel, H., Lynch, M., & Livingston, E. (1981). The work of a discovering science construed with materials from the optically discovered pulsar. Philosophy of the Social Sciences, 11, 131-158.

14. Latour, B. (1987). Science in action: How to follow scientists and engineers through society. Milton Keynes: Open University Press.