

A Treatise on Form and Style of Thesis and Dissertation

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Dedicated to the memory of
Rev. Fr. Joseph James, Puthenkandam, C.M.I.
Former Principal of St. Joseph's Training College,
Mannanam



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Foreword

“Engagement in research work is a major pre-condition for creative teaching and stimulation of creativity. ... research atmosphere in the universities and colleges has a direct bearing on the entire character and quality of teachers and through them it influences the identification and development of pupils” (Kothari Commission Report, 1966, p.409).

Recent re-structuring of curriculum in the under-graduate and post-graduate levels and insight into teacher competencies demand necessary skill for taking up minor and major research projects. Reporting the research in the most attractive and lucid form is as important as the research itself. It will contribute to the concerned discipline and thereby to the qualitative and quantitative improvement of education.

St. Joseph's Training College, established in 1957, affiliated to Mahatma Gandhi University and recognised by NCTE, has published several books as a part of its extension services, aided by the Department of Field Services (DFS), New Delhi. In 1981, Late Dr. T. T. Joseph, Lecturer in Physical Science, published a book titled *Modern Trends in Science Education*. Recently, Rev. Dr. K. M. Rajan, the author of the present book, published another book titled *Perspectives in Physical Science Teaching*. Two refresher courses in Education were organised on behalf of the Mahatma Gandhi University for training college lecturers, one in 1993 and the other in 1997 as per the UGC guidelines. A UGC sponsored National Seminar on Education was organised in 1999. The proceedings of the seminar was also published.

I do really appreciate the work done by one of our staff members, Rev. Dr. K. M. Rajan, Senior Lecturer in Physical Science, who devotes much of his time in the mutually supporting activities of teaching and research. The present work titled *A Treatise on Form and Style of Thesis and Dissertation* elaborates all the factors and even the minute details of preparing a research report, and has succeeded in compiling the requisites of a quality research paper. This book is obviously an authentic guide to all students and teachers who are involved in research in one form or another.

Sr. Sicily. K. C.

Principal, St. Joseph's Training College

Preface

Students at various levels of education will have to express their ideas in clear and concise words. In the context of education, formal evaluation of written descriptive items rely much on the language ability. However, 'liberal' evaluation and system of moderation have resulted in low standard in the use of language. It is distressing to see that the so called theses and dissertations have typographic and other errors in abundance. Moreover, the majority of departments have not published instructions or guidelines to follow in the preparation of these documents except samples of dissertations/theses which have been accepted by these departments/universities. It is in this state of affairs that *A Treatise on Form and Style of Thesis and Dissertation* is brought forth.

This book is intended to provide guidance to writers of research papers, project reports, theses and dissertations. Although there are different styles in giving references, this book details the American Psychological Association (APA) style. It is expected that students who will have to prepare project report (for graduate and post-graduate courses), research paper, thesis and dissertation will find this book useful.

October 14, 1999

K. M. Rajan

Acknowledgements

It was 10 years ago that I realised that the writing skills I had developed from my training as a student of Chemistry, teacher educator and researcher was not only inaccurate but drastically off target. Since then I have focused my attention on ways to better my language and style of writing. I was fortunate to have beneficial relationships with scholars such as James T. Dillon, Reba N. Page and Kathleen E. Metz during my doctoral studies at the School of Education, University of California.

I owe a great deal to the encounters I had with Robert B. Burns and my colleagues at the California Educational Research Co-operative (CERC) where I was a Research Fellow. My collaboration with Dr. Kurian Mani, Mr. Jacob Jacob and Dr. Thomas Joseph in the preparation of the book titled *Queen of the Sacraments* provided me a workshop in editing. My colleagues at St. Joseph's Training College are always a source of inspiration in my efforts in writing and publishing.

I am grateful to Rev. Sr. Sicily. K. C., Principal, St. Joseph's Training College, Mannanam for writing a foreword to this book and agreeing to take up the publication. Rev. Fr. Joseph Puthenpura, C.M.I., encouraged and supported the work at various stages. Mr. Jose Augustine and Mrs. Babitha Suresh took the pain to edit and proof-read the manuscript. I express my gratitude to Mr. Sabu and Mr. Binu who were generous to spend their time in typesetting the manuscript. I am thankful to M/S K.E. offset Press, Mannanam, for printing the book to my satisfaction.

My beloved father corrected my language and spelling since I started writing letters to him. My deepest thanks to my wife and daughter who miss me when I sit and write, especially during vacations. I sincerely thank them all.

K. M. Rajan

Introduction

A research report, project report, thesis or dissertation should be the best writing sample of the candidate with respect to the content, organisation and quality of presentation. Carelessness in these are inexcusable for the degree awarded to them speaks of the quality expected of them. Incompetence in the writing of thesis and dissertation is a sufficient ground for suspicion about the quality of the study (Mouly, 1963).

A mastery of standard English tells the reader much about the researcher as a person and as a professional. A document such as a thesis or dissertation should be free from mechanical and typographical errors. In spite of the use of word processing facilities, research reports contain more mistakes than when these were type-written.

A research report is a little different from a thesis or dissertation . However, it should contain the same elements of information in the sequence given below (APA, 1983).

- I. Title Page
- II. Abstract
- III. Introduction
- IV. Method
- V. Result
- VI. Discussion
- VII. Reference
- VIII. Appendix

The title page includes the title, author's name and author's affiliation. The title should be typed in upper and lowercase letters, centred and lines double-spaced. Acknowledgements if any should be given (e.g., funding, technical assistance) as **unnumbered footnotes** near the bottom of the title page.

The abstract summarises the problem under study, characteristics of the subjects, the methodology of the study (e.g., tools, data gathering techniques, data analysis), findings of the study and the conclusion. A good abstract will increase the readership of the article because many persons start their reviews with abstracts (Best & Kahn, 1993, p. 63). A sample of an abstract is given in the appendix 6.4.

An introduction must advance an argument that indicates why the problem is important in terms of theory and practice. The argument should be sharpened by referring to related research literature. The review of literature is not presented in detail in a research report. However, the project report should have adequate support of the research literature. The procedure of collection, organisation and writing of literature and the role of research literature in a study is beyond the scope of this book.

The method section which follows introduction details the procedure of the study. The details should help the reader to replicate the study or a relevant part of the study. The subjects, duration of treatment, tools used, validation procedure, data analysis, design features, technique of controlling the variables, establishing pre-equivalence of groups, etc., should be described.

Result section provides the data and statistical analysis without going into the implications of the findings. However, rationale of analysis, if it is not a standard procedure of analysis can be detailed in this section. If the analysis is done using computer packages such as SPSS, SAS, etc., it is desirable that the researcher should mention that also, for these packages use different algorithm.

The main body of the report concludes with a discussion section. In this section, the theoretical and practical implications are logically presented.

and reasons for deviations should be critically analysed. The limitations of the study and suggestions for future research are given at the end of this section. It is likely that the research may bring forth more questions than it purports to solve.

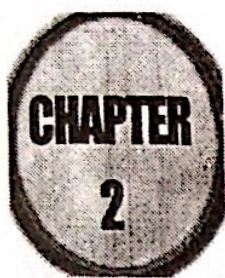
Reference consists of all documents that are **cited in the text of the manuscript**. This is different from a bibliography. A bibliography contains everything in the reference plus other publications that are useful but were not cited in the manuscript. A researcher may start the review of related literature with the help of a working bibliography, but **the report should contain only the reference**.

An appendix may be useful in providing detailed information that would seem inappropriate or too long for the main body of the paper. Each appendix should begin on a new page with the label "Appendix" and its identifying letter, centred (Best & Kahn, 1993).

Theses and dissertations follow almost the same outline as described for the research report. However, theses and dissertations based on an empirical study have five sections in the main body of the report:

1. Introduction (Statement of the problem)
2. Review of related literature
3. Methodology
4. Result
5. Discussion and implication

Best and Kahn (1993) have rightly pointed out that inability to write correctly is a serious limitation in the writing of dissertation. Theses and dissertations contain errors of spelling, non-agreement between subject and predicate, lack of continuity of thought, inconsistent style even within a chapter and several other mismatches. Quality of research report speaks of the competence of the student and research guide alike. Research guides often compromise with the basic norms and the consequences are far-reaching. The guidelines provided here in this book is an attempt to alleviate some of the major problems with respect to form and style of project reports, research reports, theses and dissertations.



Methods of Preparation of Manuscripts

A research manuscript should be prepared carefully for it is a document that should deepen our understanding of the phenomenon under study. The work is a pointer for future researchers. A project paper or a research paper should be written in a form and style that is acceptable to scholars in the field. Although a style and format is a matter of choice, they are based on principles of clarity of organisation and presentation. The important aspects of a thesis or dissertation that need specific attention are detailed in the following pages.

2-1 Language - The dissertation or thesis must be written using English language. Requests for exception to use another language for all or part of the manuscript have been allowed for students in the language programmes or in the Comparative Literature Programme. If an exception is granted, the candidate will be required to present an abstract of the dissertation or thesis in English. If they desire, they may also submit an abstract in the language of the manuscript.

Effective research report writing is not an easy task. Good reports are crafted and revised several times before they are finally presented. Students under the constraint of time often prepare master level thesis which are poor in language and organisation. Standard books on writing and language mechanics should be consulted to help improve writing skills (e.g, Flower, 1989; Willson, Jr., 1980). Departments and research guides are giving a wrong message by approving works that are of low standard. It is known

that most of the master level thesis and quite a few number of doctoral dissertations are not being published in referred journals for obvious reasons..

In the interest of objectivity, the personal pronouns, I, we, you, my, our and us should not be used in the writing of thesis/ dissertaion (Best, 1963). These personal pronouns can be avoided by the use of expressions such as "the investigator" or "the researcher." Most people believe that the masculine pronouns (he, his, him) are no longer appropriate in research reporting (Willson, Jr., 1980). Past tense should be used in describing research procedures that have been completed. Numbers at the beginning of a sentence should be spelled out. Percent and such notations should be spelled out except in tables and figures. However, numbers used with the word percent should not be spelled out.

2.2 Paper Quality - The dissertation or thesis must either be typed or printed, on a high-quality, durable, white paper, 8½ X 11 inches in size of archival quality selected for its permanence and must be acid-free with a minimum of 2% alkaline reserve. Standard bond-paper approximates these requirements.

2.3 Typeface/Typesize - The type size used must be no smaller than 12-point (elite), including those used on graphs, charts or illustrations. (Pica is a 10-point size and is acceptable). The print should be black, and the characters consistently clear and dense. Use the same type face throughout the manuscript. Do not use script or italics as the main type face; use it only as necessary for book titles, Latin nomenclature, etc.

If you are producing your manuscript electronically (word processor, computer, etc.), it is especially important to select your printer carefully for the final draft since dissertations produced by a standard dot-matrix printer is not acceptable to most of the departments and universities. Letter-quality printing such as that from an impact or laserjet printer is the only acceptable print for a thesis or dissertation. All lettering, symbols, graphs, musical notation and other forms that cannot be reproduced by means of a typewriter or word processor are to be stencilled or drawn in the official copies with permanent black ink.

2.4 *Margin* - Margins of at least one and one-half inches on the left and top, one inch on the right and bottom of the page must be observed. Be aware that some photocopy machines produce copy at 102%, which enlarges the text and makes the margins smaller, so be careful with your margins. Tables, charts, maps, etc., as well as appendices must have the same margins as required for text. If they necessitate the use of larger than 8½ X 11 size paper, follow the instructions for oversized materials given in section 2.12.

Word processing software will allow you to set margins easily. However, if you are using a typewriter there are two methods (Sabin, 1985, p.312) to control the bottom margin - - (1) To control the bottom margin of each page when using a typewriter, draw a pencil mark 6 lines above the point where the last line is to be typed. (Make the mark before inserting the paper into the machine; then erase it later on.) and (2) Another way to control the bottom margin is to prepare a page-line guide as follows: Simply type a column of numbers-from 1 to 66-down the right edge of a fresh sheet of paper. Insert this sheet behind the paper on which you type; position it so that the column of numbers appears beyond the right edge of the top sheet. Then as you type and advance the paper, the column of numbers at the right will tell you how close you are to line 60.

2.5 *Spacing*- The text must be double-spaced, except for the following which will ordinarily be single spaced: captions, footnotes, long quotations (those of more than three lines) and material in tables and appendices. Start the reference list on a new page. Type the word References (Reference, in the case of only one) in uppercase and lowercase letters, centred, at the top of the page. Double-space all reference entries. Although some theses and dissertations use single-spaced reference lists, **single-spacing is not acceptable for manuscripts submitted to journals because it does not allow space for copy editing and printer's marks.** Type the first line of each entry flush left; indent the second and the succeeding lines three spaces. (Five spaces instead of three is also acceptable).

The text must be arranged in such a way that no "holes" or white spaces appear within major sections. The only blank space

that shall appear is at the end of major sections to allow the first typing of the next major section to begin on a new page. Avoid widows (only one line of text from the end of a paragraph appearing at the top of a sheet of paper) and orphans (a heading or subheading at the bottom of a page that is not followed immediately by text on that page).

2.6 Pagination - Theses and dissertations are to be paginated as suggested in this section. The title, copyright, and approval pages are **counted** in the pagination **but not numbered**. The remaining preliminary pages are numbered with **lower case Roman numerals** centred within the text at the bottom of the page, three-fourths of an inch above the edge. Preliminary pages include: title, copyright (if desired), approval, acknowledgements or dedication (if desired), abstract (usually not included in Master's thesis), table of contents, list of tables, and list of illustrations; and are counted in that order.

The main body of the text is numbered with **Arabic numerals** beginning with page "1" of the introduction and continuing throughout, including text, illustrations, references and appendices. Page numbers are centred within the text at the bottom of the page three-fourths of an inch above the edge. (This is usually a space and a half below the last line of text on a full page.) **All pages** except the title page, copyright page and the approval page are to be numbered and should appear **without periods, parentheses or dashes**.

2.7 Levels of Headings - All headings at the same level should be parallel in the structure of organisation of the content and prove the logical hierarchy. For example, chapter titles in dissertation should be of the same level. Mouly (1963) suggested that pages headed by a chapter title carry the line CHAPTER, about two inches from the top of the page, followed three spaces below by the title of the chapter in capital letters. The first line the text begins three spaces below the title. The first level of heading should be centred (centred head), the second level placed at the left-hand margin (side head), and the third level indented into the paragraph (Run-In head). The APA (1983) style of headings provide for five levels of headings each of which is given below.

One or two levels

Centred Uppercase and Lowercase Heading

Flush Left, Underlined, Uppercase and Lowercase Side Heading

Three levels

Centred Uppercase and Lowercase Heading

Flush Left, Underlined, Uppercase and Lowercase Side Heading

Indented, Underlined, Lowercase paragraph heading ending with a period.

Four levels

Centred Uppercase and Lowercase Heading

Centred, Underlined, Uppercase and Lowercase Heading

Flush Left, Underlined, Uppercase and Lowercase Side Heading

Indented, Underlined lowercase paragraph heading ending with a period.

Five levels

CENTRED UPPERCASE HEADING

Centred Uppercase and Lowercase Heading

Centred, Underlined, Uppercase and Lowercase Heading

Flush Left, Underlined, Uppercase and Lowercase Side Heading

Indented, Underlined, lowercase paragraph heading ending with a period.

At least one paragraph of text should be placed between any two levels of headings. The headings should be used to clarify the organisation of the thesis and should not be used to cover-up inadequate organisation, incoherent development or insufficient transitions. The paragraphs in a sequence should make sense to the reader even in the absence of headings. The argument advanced in a thesis should be logical from the reader's point of view. The headings should be conceptual rather than a list of items included in the thesis. The practice of numbering in the thesis

has brought in conceptual holes and very often lacks smooth transitions.

2.8 *Corrections* - Your manuscript must be attractive and error-free. Correction of typographical errors should be made with care. Do not use correction fluid or type-out tape on the copies submitted; these materials are known to flake off the page after several years. Pages with illegible changes or changes likely to be unclear in photographic reproduction or microfilming, will be rejected and you will be required to replace them. If the copies which you bring to submit have been produced by a photocopy process, the type shall be straight on the page with no blurred images.

2.9 *Abbreviations* - You should use only standard abbreviations in your thesis/dissertation. The Gregg reference manual has given the following guidelines in the use of abbreviations (Sabin, 1995, pp. 105-119). The abbreviation of a single word requires a period at the end. For example, Mrs., pp., wed., Inc., Nos., Oct., etc. Almost all small-letter abbreviations made up of single initials require a period after each initial but **no space after each internal period**. For example, a.m., i.e., p.m., e.g., etc. However, units of measurement are now commonly written without periods. For example, rpm, mph, etc.

Abbreviations of academic degrees and religious orders require a period after each element in the abbreviation but **no internal space**. For example, B.Sc., Ph.D., LL.B., M.D., S.J., M.B.A., B.Arch., etc. When academic degrees follow a person's name, **do not use** such titles as Dr., Mr., Ms., Miss, or Mrs. before the name. For example, Dr. Mathew Thomas **OR** Mathew Thomas, M.D. (**BUT NOT**: Dr. Mathew Thomas, M.D.). However, other titles may precede the name as long as they do not convey the same meaning as the degree that follows. For example, Professor A. Sukumaran Nair, Ph.D., The Reverend John Thomas, D.D., etc.

Do not abbreviate names of days of the week and months of the year except in tables or lists where space is limited. In such cases the following abbreviations may be used for days of the week: Sun., Mon., Tues. or Tue., Wed., Thurs. or Thu., Fri., and Sat. For the months of the year the following abbreviations

may be used: Jan., Feb., Mar., Apr., May, Jun., Jul., Aug., Sept., Oct., Nov. and Dec. However, when space is extremely tight, the following one-and two-letter abbreviations may be used. For days of the week, use Su, M, Tu, W, Th, F and Sa; for months of the year, use Ja, F, Mr, Ap, My, Je, Jl, Au, S, O, N and D (without a period)..

Many foreign expressions contain short words, some of which are abbreviations and some of which are not (Sabin, 1985, pp. 118-119). Use periods only with abbreviations.

c. OR ca.	(<i>circa</i> , meaning "approximately")
cf.	(<i>confer</i> , meaning "compare")
e.g.	(<i>exempli gratia</i> , meaning "for example")
et al.	(<i>et alii</i> , meaning "and other people")
etc.	(<i>et cetera</i> , meaning "and other things", "and so forth")
<i>ibid.</i>	(<i>ibidem</i> , meaning "in the same place")
idem	(meaning "the same")
i.e.	(<i>id est</i> , meaning "that is")
loc. cit.	(<i>loco citato</i> , meaning "in the place cited")
N.B.	(<i>nota bene</i> , meaning "note well")
op. cit.	(<i>opere citato</i> , "in the work cited")
supra	(meaning "above")
ult.	(<i>ultimo</i> , meaning "in the last month")
viz.	(<i>videlicet</i> , meaning "namely")

APA (1983) has listed acceptable abbreviations in the reference list for parts of books and other publications (p. 112). Those abbreviations are given below.

chap.	Chapter
ed.	edition
rev. ed.	revised edition
2nd ed.	second edition
Ed. (Eds.)	Editor (Editors)

Trans.	Translator(s)
p. (pp.)	page (pages)
Vol.	Volume (as in Vol. 4)
vols.	volumes (as in 4 vols.)
Pt.	Part
Tech. Rep.	Technical Report
Suppl.	Supplement

2.10 *Tables, Graphs and Illustrations* - Tables are difficult to organise but they communicate the quantitative aspects of data effectively. Ehrenberg has given the following guidelines to help organise data in tables so that their significance is obvious at a glance (cited in APA, 1983, p. 84). They are: (1) rounded-off values may display patterns and exceptions more clearly than precise values, (2) a reader can compare numbers down a column more easily than across a row and (3) ample spacing between rows and columns can improve a table because white space creates a perceptual order to data.

If a table is large enough to occupy more than half a page, it should be placed centred on a page. The word table is centred between the page margins with table number in Arabic numeral without hyphen or period in between the word table and number. Tables are numbered consecutively throughout the thesis or dissertation. The caption or title of the table is placed two spaces below the table number and arranged in an inverted pyramid form. No terminal punctuation is used (Best, 1963). The top of the table is placed three spaces below the last line of the caption. Rulings or lines are used only if they facilitate reading of the table. Only horizontal lines are drawn to indicate column headings. A horizontal line is also placed at the bottom to separate the table from the material which follows three spaces below. Table footnotes are placed just below the table, rather than at the bottom of the page. When no data are available for a particular cell in a table, indicate that by a dash rather than by a zero.

Tables, full-page diagrams, pages with illustrations and mounted photographs require the same margins as required for

typewritten pages. Full-page illustrations may have accompanying caption pages facing them; such illustrations and their caption-pages must be counted and numbered. It is recommended that figures and tables be placed as near to the part of the text they illustrate (as possible). This is to allow those who read your manuscript greater ease of access to the information contained in this illustrative material at the point they first read about it; this is especially important since most dissertations will be read in microfilm form.

Figure and table numbering must be either continuous throughout the dissertation or thesis, or continuous within each chapter (i.e., 1.1, 1.2, 2.1, 2.2, etc.). The numbering method chosen must be consistent throughout the thesis or dissertation. There cannot be two figures, for example, which bear the same number.

Where line-drawn plates form part of a thesis or dissertation, the original copy will include either the original drawings, or photographic or clear Xerox reproductions of such plates. Blueprints are not acceptable as reproductions. Any original illustrative material to be submitted should be rendered with a permanent, non-water soluble, black ink (e.g., Indian ink, Koh-i-noor rapidograph waterproof drawing ink, etc.). This includes music scores. Do not use pencil. Do not use felt-tip pen since the colour bleeds through to the adjacent pages. Avoid the use of colour; it will appear as a slightly varying shades of gray when it is either photocopied or microfilmed. Thus, lines on a graph should be identified by labels or symbols rather than colours. Similarly, shaded areas such as countries on a map have better contrast if cross-hatching is used instead of colour.

2.11 Photographs - Submit only black and white photographs. If a colour photograph is absolutely necessary, a photograph of the same object in black and white should be included since colour photographs tend to fade with time. Also, you should bear in mind that colour does not reproduce well on microfilm. It is preferable to have the photographs printed on 8 x 11 inches sheet of light-weight or single-weight polyfiber photographic paper with a glossy finish and included without further mounting. Margins must meet those defined for typewritten pages. If the printed photographs are

produced at less than 8 x 11 inches, then they shall be mounted (using methods described below) on a single sheet of paper.

Adhesives adequate for small mounted illustrations are dry mount tissue (made by Kodak and others), "Positionable Mount Adhesive" (Scotch brand No. 568) or other high quality sealant of guaranteed permanency. **Do not use** rubber cement, aerosol spray glues, mucilage, gummed or cellophane tapes, ordinary glues, or spray adhesives and dry-mount cements. **Staples or paper clips are not to be used.** Try to distribute the bulk of small illustrations by placing a portion towards the tops of some pages and an equal amount towards the bottom of other pages to even out the thickness of the manuscript when it is bound.

2.12 Oversized Materials - It is recommended that the use of oversized pages should be avoided unless absolutely necessary. They require special care during both the binding and the micro-filming processes. Try a different layout for the chart or table to see if it can be placed on a standard page, or use a photographic reduction of the graphic material. If such a photographic reduction is done, then make sure that the type is reduced to no less than 12-point (elite) size. The same physical specifications as listed under "paper quality" must be applied to all oversized materials, including minimum type size and margin requirements (a one inch margin is required on the binding edge).

2.13 Manuscript Preparation Using a Computer - The majority of post-graduate students and research scholars prefer to use word processing equipment to facilitate the preparation of their final manuscript copy. The text can be easily revised and the layout can be readily controlled and adjusted. From the first rough drafts to the final copy, all revisions are easily printed and the amount of proof-reading needed is greatly reduced compared to typing each version again. (The time spent in learning to use these electronic systems is repaid in time saved in retyping and proof-reading). **However, the use of such equipment in no way relieves the student of responsibility for complying with the instructions contained in this book or set by the department.** It is recommended that you take the time to consult with a typing or

computer centre for the time requirement, cost per page, proof-reading and other operational details. It is desirable to have a sample page of the final copy before entering into a contract.

The printer which you use to produce the final copy of your manuscript must produce letter-quality type. The type size must be 10 or 12-point and the print, black with the characters consistently clear and dense. (Be especially careful if you choose to bold-face some of your text that the type does not become so thick that the letters begin to "fill" in). The use of a character-at-a-time impact printer, such as a "daisy wheel" or type ball printer, or a laser-jet printer is recommended. Type produced using dot-matrix or line printers is not acceptable since these printers do not produce the high quality type required. The only exception to this for doctoral students is the use of such printers to output computer programmes which are to be included as an appendix to the dissertation.

Additionally, it is desirable that you establish proper margins for your final copy at the **very beginning** of putting your manuscript on a word processor. Many students have had to spend much valuable time trying to reformat margins for the production of the final copy of their thesis or dissertation, a problem which could have been avoided. The choice of whether or not to justify the right-hand margins is left to your discretion and your research guide. However, you may use right-justified margins only if your printer does this well and **does not leave large gaps in the text or separate punctuation from text characters**. For this, some word processing softwares have an option to activate which is not available by default. The floppy disks which hold your dissertation could prove useful to you in the future. It is suggested that you carefully store the disks which contain your final copy, and make a back-up disk in case anything happens to the first disk.

2.14 Number of Copies - Two official bound copies are required of all theses and dissertations. In addition, you should prepare sufficient bound copies for the use of your guide, your library/department, and yourself. For the necessary number of such additional copies you should consult the department or university. Be sure that each copy of your manuscript is properly collated and

that no pages are missing or duplicated, placed in the incorrect order, or turned sideways.

2.15 *Recorded Sound* - If necessary you may submit recorded sound with your manuscript. To do so, you must meet the requirements given below concerning the quality of the tape and the recorded sound. These guidelines are based on those adopted by the American Library Association in their publication *Preparation of Archival Copies of Theses and Dissertations*, which rely heavily on information contained in Jerry McWilliam's book, *The Preservation and Restoration of Sound Recordings*, 1979. (cited in University of California, 1988).

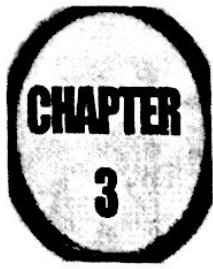
You must use reel-to-reel magnetic tape which has 1.5-mil polyester (Mylar) backing. For archival storage this tape must have low noise and high output. The following brands are generally reliable and of good quality: Ampex, AGFA, Scotch (3M), TDK, BASF, and Maxell. Cassette tapes are not suitable for long-term storage.

Two copies of the recording must be submitted. You should retain the individual box in which the tape is stored when purchased. This box will be needed when you file your dissertation or thesis for the permanent physical protection of the reel as well as protection of the tape from dust. Since these boxes are not made of acid-free material, tapes should be stored first in a polyethylene bag and then placed in the box. The box must be identified with the same information which appears on the title page of the dissertation or thesis; this information must be firmly affixed to the box. Annotated information must be firmly affixed to the box. Annotated information consisting of your name, and the title and year of your degree should be affixed to the reel. The final, archival copy of the tape should have no splicing. If possible, standard test tones should be recorded at the beginning of the tape so that when the tape is played on different machines they can be more easily adjusted for accurate reproduction. McWilliams gives the following information on test tones: typical test tones include 15 KHz for head alignment. 10KHz for high-end equalisation, and 80Hz and 40 Hz for low-end equalisation; all recorded to give a 0 VU playback level. Inaccuracy in the response of received tapes that do not have test tones can be compensated for by the use of a graphic

equaliser, as can tapes recorded at other than the NAB standard or those which, for various reasons, do not conform to that standard.

2.16 *Video Recording* -If necessary and approved, you may submit video recordings with your manuscript. To do so, you must meet the requirements given below concerning the quality of the tape and the video recording.

Two copies of the video recording must be submitted. At least one of these must be done using Umatic tape; the other may be done using Umatic, Beta or VHS tape. Umatic tape is 3/4 inch format tape which is considered to be of archival quality. The final, archival copy, should have no splicing. The video recordings should be filed in their original containers, and should be enclosed in a Manila envelope which has the same information as requested for your title page on the front. **The video recording should have the same information included visually at the beginning of the recording to identify your work.**



Style and Format of Theses/ Dissertations

A standard style and format of thesis/dissertation will help research scholars in the identification of different elements of a research report. The conventions and suggestions made in this book are those that are suitable and acceptable for different types of project and research works. You may choose the one that is appropriate for your work. The thesis/dissertation is to be prepared using the format detailed in this chapter. The elements include title page, copyright page, approval page, acknowledgements and dedications, abstract, table of contents, text, notes, references and appendices. Each of these elements is briefly described in the following pages.

3.1 Title Page - Each copy of the thesis or dissertation must include a title page prepared in accordance with either of the attached sample sheets given in Appendices 6.1(a-d). A title should represent the content and breadth of the study or project reported (Bordage, 1989). The title should be worded in such a manner to indicate the scope of the study. The title must be sufficiently indicative of the study that it does not mislead the reader (Mouly, 1963). A reader may decide to read a research report or thesis simply because of the fact that the title appeals to him/her. Excessively long titles will have to be effectively shortened without sacrificing the quality of the title. The title is spaced in inverted pyramid when its length calls for more than one line of writing (Mouly, 1963, p. 489). Any standard book on research method (e.g.,

Best & Kahn, 1993; Goetz & Lecompte, 1984; McMillan & Schumacher, 1989; Mouly, 1963) may be referred for the purpose of formulating an appropriate title.

You should use words in your title that are descriptive of the manuscript content. You should eliminate words in the title which add little or nothing to an understanding of the content. (The title page is counted in the pagination but should not be numbered). The title page presents the title, the full name of the writer, and the submission statement, which includes the department and university, and the month and year in which the degree is to be granted. A particular department may require different combinations of the details given above or may require additional information such as writer's previous academic degrees.

3.2 Copyright Page - When a dissertation is to be copyrighted a statement to that effect must be enclosed on a separate page following the title page. A sample copyright page is given in Appendix 6.2. Copyright will discourage possible plagiarism of your work. (The copyright page is counted in the pagination but should not be numbered).

3.3 Approval Page - Each copy of the thesis or dissertation must include an approval page signed (in black ink) by the guide or members of the committee as the case may be. The approval page is to be prepared in accordance with the samples given in Appendices 6.3 (a-c). The approval page is to follow the title page or if the dissertation is to be copyrighted, the copyright page. **The original signed approval page must be included** in one of the two copies of the thesis or dissertation. (The approval page is counted in the pagination but should not be numbered.).

3.4 Acknowledgements and/or Dedication - You may desire to include a brief note of dedication or an acknowledgement of help received from particular people. Such notes should follow at this point. If you are using published materials in the main body of the manuscript, you must enclose an acknowledgement to your first publisher. (This page should be numbered using **lower case Roman numerals**. This is the first page to be numbered and normally it is page iv).

3.5 *Abstract* - In the case of a post-graduate level thesis no abstract is required unless your department requires it. For a doctoral dissertation an abstract not exceeding 2,450 characters (approximately 35 printed lines or 350 words) is to be included. The abstract should (a) state the research problem briefly, (b) describe the methods and procedures used in gathering data or studying the problem, (c) give a condensed summary of the findings of the study. The abstract should be prepared according to the attached sample sheet given in Appendix 6.4. The abstract must include the title of the dissertation, your name, the degree, name of the institution, date of award of degree, and the name of your guide or committee chairperson. Abstract should be prepared with care since it will be published in ***Dissertation Abstracts International (DAI)***. Your department/university may require **one additional copy of the abstract** (without page numbers) that has to be submitted with the dissertation for this purpose. You will be required to rewrite the abstract should it exceed the 2,450 character limit. University Microfilms, Inc. (UMI) makes available to you reprints of your abstract as it appears in DAI. These are available immediately after their publication by UMI which occurs about 4 months after the award of your degree. They are available in units of 100 and can be ordered from UMI. The mailing address of UMI is given below:

University Microfilms International
A Bell & Howell Information Company
300 N. Zeeb Road, Ann Arbor,
Michigan 48106, U.S.A.

3.6 *Table of Contents (including Figures, Tables, and/or Illustrations)* - Each thesis or dissertation is expected to have a table of contents for the convenience of the reader. If illustrations (i.e., maps, diagrams, charts, tables, photographs, etc.) are to be scattered throughout the text, or if a large number of illustrations are used, then a separate "List of Figures or Tables or Illustrations" must be included after the "Table of Contents."

3.7 *Text* - The text of the thesis or dissertation follows at this point. Begin using **Arabic numeral** here to number the pages beginning with page 1. Textual material should be double-spaced, with triple-spacing between paragraphs (Best, 1963). Words should not be divided at the end of the line, if at all a word is divided, a dictionary should be consulted for correct syllabication. Direct quotations not over three type written lines in length are included in the text and are enclosed in quotation marks. However, **quotation of more than three lines are set off from the text in a single spaced paragraph and indented three spaces from both left and right margins.**

3.8 *Notes* - Notes may appear as footnotes or as endnotes. Footnotes are given at the bottom of individual pages. Endnotes appear collected at the conclusion of the text, numbered consecutively, and listed under the title "Notes" (Winkler & McCuen, 1974). Footnote or endnote is used for two purposes - - (1) to present an explanatory statement that may interfere with the logic and continuity of textual material and (2) to provide information about the sources from which the idea is extracted. Footnote is placed at the bottom of the page, and are separated from the text by a two-inch horizontal line drawn from the left margin. Footnote is single spaced, with double-space between citations (Best, 1963, p. 260). This is a matter of preference which you should discuss with your guide. **The use of footnote for indicating reference is not acceptable as per the APA (1983) style.**

Special attention must be paid if footnotes are used for the purpose of explanation. At the bottom of page, you will have to leave enough space for the required number of footnotes. Use three spaces to separate the body of your paper from the first footnote. Use a separate line for each footnote. Single space each footnote, but double-space between notes (Winkler & McCuen, 1974, p. 235).

3.9 *References* - A reference section usually follows after the text and notes. The order of the reference and its arrangement is another matter for discussion with your guide or committee. The sources of ideas, facts and opinions, whether quoted directly or indirectly or derived from primary or secondary sources should be

acknowledged properly. This will provide the reader with an accurate account of the materials on which you base your conclusion (Campbell, Ballou & Slade, 1986). Omissions in documentation result in plagiarism. Plagiarism is the use of another person's ideas or wordings without giving proper credit. However, sources of facts that are common knowledge and can be verified easily would not need to be documented.

The purpose of listing references is to enable readers to retrieve and use the sources. Therefore, the data must be correct and complete. The accuracy of each reference should be checked carefully against the original publication. Authors are responsible for the accuracy and completeness of each reference. Your credibility as a careful researcher rests with your style of writing and giving references.

There are three basic systems for documentation of materials. They are: (1) Notes and bibliography known as the Chicago Manual of style, (2) Parenthetical reference with an accompanying list of works cited known as Modern Language Association (MLA) style and (3) American Psychological Association (APA). APA uses an author-year format which is different from the Chicago and MLA styles.

Your choice depends on the requirements of the department/ university or your own personal taste. The widely accepted form is the Chicago style. If you want to use more abbreviated bibliographical forms and parenthetical reference, you will probably want to select MLA. The APA style has received wider acceptance during the last one-and-a-half decades and most of the educational journals are insisting on this style. There is no clear-cut agreement among subject-specialists about the construction of bibliographic information. However, there are a few professional organisations such as American Psychological Association which has agreed upon a style and format as early as 1929 (APA, 1983).

The most common examples of references in the APA (1983) style are given below .

Book

Rajan, K. M. (1999). *Perspectives in physical science teaching*.
Kottayam: Vidyarthi Mithram.

Name - Invert all authors' name, i.e., last name first; leave one space after the period of initials in personal names. Use commas to separate authors and to separate surnames and initials. With two or more authors, use an ampersand (&) before the last author.

Date of Publication - Give the year the work was copyrighted. For unpublished works, this is the year the work was produced. For magazines and newspapers, give the year followed by the month and day (e.g., 1978, July 23).

Title - Capitalize only the first word of the title and of the subtitle, if any. Enclose additional information such as 3rd ed. or Vol. 2 in parentheses immediately after the title. Do not use a period between the title and parenthetical information.

Publication information - Give the name of the city and state (if the city is not well known or could be confused with another place) where the publisher is located. If two or more publisher locations are given, give the location listed first in the book or the main office of the publisher. Finish the element with a period. There is only one space after the colon that follows the publisher location. However, there are two spaces after the periods that separate parts of a reference citation.

Edited Book

In a reference to an edited book, the editor(s) name is placed at the author position and "Ed." or "Eds." for editor(s) is enclosed in parentheses after the last editor. For example,

Vaidya, N., & Rajput, J. S. (Eds.). (1977). *Reshaping our school science education*. New Delhi: Oxford & IBH Publishing Company.

Book - third edition, corporate author, author as publisher

American Psychological Association. (1983). *Publication manual* (3rd ed.). Washington, DC: Author.

Book, revised edition

For revised edition of a book, after the title "rev. ed." is given in parentheses.

Journal Article

Rajan, K. M. (1996). A comparative study of three modes of presenting analogies in chemistry. *Perspectives in Education*, 12(4), 215-229.

Only the first word of the article title (and of the subtitle, if any) is capitalised. The article title is not underlined or placed within quotation marks. **The title of the journal is given in full, in upper and lower case letters and is underlined.** The volume number is underlined followed by issue number given in parentheses. Commas are used to separate parts of the elements.

Article or chapter in an edited book.

diSessa, A. A. (1983). Phenomenology and the evolution of intuition. In D. Gentner & A. L. Stevens (Eds.), *Mental models* (pp. 15-33). New Jersey: Lawrence Erlbaum.

Doctoral Dissertation

If abstracted in Dissertation Abstract International (DAI) and obtained on university microfilm, the reference may be given as follows:

Brown, D. E. (1987). Using analogies and examples to help students overcome misconceptions in physics: A comparison of two teaching strategies (Doctoral dissertation, University of Massachusetts, 1987). *University Microfilms International*, 8805897.

Unpublished thesis or dissertation

Rajan, K. M. (1982). *Construction and standardisation of an achievement test in chemistry for standard IX, based on Bloom's taxonomy (Cognitive Domain)*. Unpublished master's thesis, University of Calicut.

Compiling of a reference list may often seem to be very difficult. The basic APA (1983) rules for the **preparation of reference list** are summarised below: (1) Alphabetise the entries by the last name of the first author, (2) When there are several works by the same first author, single author entries precede

multiple author entries, (3) In multiple author entries, the second and third author entries are arranged alphabetically by the last name, (4) References with the same author's are arranged by the year of publication, the earliest is given first, (5) Works by different authors with the same last name are arranged alphabetically by the first initial, (6) Corporate authors such as National Council for Teacher Education are alphabetised by the first significant word of the name. Full name should be used rather than abbreviation (e.g., NCTE) and (7) The works by the same author with the same publication date should be identified in reference list and in text citations by the suffixes a,b,c after the year (e.g., Rajan, 1997a, 1997b).

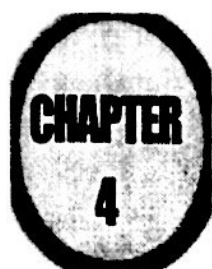
Citation of an author's work in text is given in the author-date method. That is, the surname (last name) of the author and the year of publication are inserted in the text at the appropriate point. A few examples are given below to get a feel for the style to be followed in the text. John (1985) compared spatial ability of ... or In 1985, John compared spatial ability of ... or In a study of spatial ability (John, 1985) ... In multiple-author citation, the names are joined by the word and. In parenthetical material, the names are joined by an ampersand (&). For example, Vaidya and Rajput (1977) suggested that ... or There are objections to these recommendations (Vaidya & Rajput, 1977). When two or more works by different authors are cited within the same parenthesis, list them in alphabetical order (not by year) by the first author's surname and separate them by semicolons. For example, any standard book on research method (e.g., Best & Kahn, 1993; Goetz & Lecompte, 1984; McMillan & Schumacher, 1989; Mouly, 1963) may be referred ... When text citations include two or more authors with the same surname, include the author's initial in all text citations to avoid confusion, even if the year of publications are different (APA, 1983, p. 109).

3.10 Appendices - A last section may contain supporting data for the text in the form of one or more appendices. If the appended data should include oversize maps or illustrations, **do not fold this material**, but submit it as described in section 2.12. If the

appended data is presented using computer printout, you may refer to section 2.13.

3.11 Altered Format - If approved by your guide/department, you may use a format for your dissertation which presents the results of your research as a series of papers. Reports of research that you have undertaken during graduate study, and which have been published in appropriate media or which have been prepared in a format suitable for such publication, may be used as individual chapters in your dissertation or thesis. For published material, you must follow the guidelines in section 4.1. Also, qualitative research reports may require variations from the standard format. If you choose to present your dissertation using an alternate format, it must contain the following elements:

- * an abstract
- * A general introduction containing a thorough review of the relevant literature followed by,
- * major chapters prepared in a format generally used for publishing articles, and then
- * a general conclusion section which presents, discusses and integrates the main findings of the research.



Use of Published Material and Filing of Thesis

The use of published work in dissertation/thesis is an important aspect that needs consideration. Also, the date for submitting thesis is very important for certain universities accept doctoral dissertations only twice or thrice a year. A checklist of the minute details are incorporated in this chapter to help students in scrutinising the requirements of the thesis/dissertation.

4.1 Use of Previously Published Material - No thesis or dissertation incorporating reprint material which has been copyrighted will be accepted without appropriate authorisation. Students preparing theses or dissertations are reminded that plagiarism is a serious offence. Any material of another, either in direct quotations or paraphrase, must be given proper credit in footnote citation. Direct quotations of 150 words or more from another author's work must not be used without permission in writing from the copyright owner. Additionally, reproductions of photographs, charts, data, drawings, tables, standardised tests, or any other reproductions made directly from any published work (such as newspapers, magazines, professional journals, or books) may not be used without such written prior permission from the copyright owner. Failure to observe these regulations may result in non-acceptance of the thesis or dissertation. Additionally, it is recommended that students protect their own work against plagiarism by copyrighting their dissertation or thesis.

4.2 *Filing of your Thesis or Dissertation* - Dates for submitting the thesis or dissertation are announced in the official calendar published by the department/university. It is your responsibility to know these dates. This deadline is strictly observed.

4.3 *Checklist for Filing Thesis/Dissertation* - When you submit your dissertation or thesis check the following items:

4.3.1 *Name* - The name that appears on your dissertation/thesis must be your name **exactly** as it is recorded in your S.S.L.C. book. (If your first and middle names are abbreviated on your official records it must appear in this manner in your dissertation/thesis).

4.3.2 *Date of Degree* - The (month and) year that the degree is to be awarded should be the date your degree will be conferred (This is on the title page and abstract). Note that it consists of only a month and year with no specific date listed.

4.3.3 *Dissertation/Thesis Guide or Committee* - This must be the committee (or guide) approved by the university in the case of doctoral work.

4.3.4 *Abstract* - It **must not be** longer than 2,450 characters (approximately 350 words or 35 lines). If your dissertation/thesis is in a foreign language, you must submit an abstract in English. An abstract is not always required for a master's thesis.

4.3.5 *Format*

- Title page
(begin counting here for preliminary page numbers)
- Copyright page (optional)
- Approval page
- Acknowledgements and /or dedication
(begin **numbering** at this page with small Roman numerals (beginning with "iv" normally))
- Abstract
- Table of contents
(list of figures and tables to follow if applicable, these are all preliminary pages)

- Text
(begin to use Arabic numbers at this point starting with page "1," **every page should be numbered**)
- Notes
(can appear as footnotes, at the end of the chapter or at the end of the text)
- References
(see section 3.9 for details)
- Appendices
(see section 3.10 for details)

4.3.6 *Page Number* -The page numbers in the main body of the text should be centred within the text at the bottom of the page, $\frac{3}{4}$ of an inch from the bottom of the page. **Every** page should be numbered consecutively throughout, including tables, figure captions, figures, and appendices.

4.3.7 *Margin* -Remember that the left margin should be $1\frac{1}{2}$ inches, the right margin should be 1 inch, the top margin should be $1\frac{1}{2}$ inches and the bottom margin should be 1 inch. The margins of figure captions are likely to be wrong, so check them.

4.3.8 *Altered Format*- If you plan to compile your dissertation/thesis using chapters most of which are self-contained and written in a format normally used for publication in a scientific journal, be sure to include a general introduction and a general conclusion to your dissertation/thesis.

Please note that no two tables (or figures) have the same number. Tables and figures may be numbered consecutively throughout the dissertation/thesis, or they may be numbered anew with each chapter. In the latter system a form such as table 2.1 or table 2-1 would be used to indicate the first table of chapter 2, Table 3.4 or Table 3-4 to indicate the fourth table of Chapter 3 and so on.

4.3.9 *Type or Font style* -The dissertation/thesis cannot be done on a dot matrix printer. You should plan to use an impact, letter quality printer for the dissertation/thesis. If you are reducing

charts and graphs please check the smallest acceptable type size.

4.3.10 *What can be handwritten?* Nothing should be handwritten in the dissertation/thesis unless it **cannot be produced by a typewriter or computer/word processor**. For example, foreign accent marks are generally handwritten. If something is handwritten in the dissertation/thesis it shall be done in Indian ink.

4.3.11 *Photographs* - Original photographs are needed in both copies of the dissertation/thesis submitted to the university/department. All photographs should be black and white.

4.3.12 *Has white-out been used?* Although it has been accepted in the past, dissertations/theses corrected in this manner are no longer accepted because the correction eventually fades.

4.3.13 *Colours* - You must use black and white photographs. Do not use colours in your charts and graphs. Colours cannot be reproduced in reprographic systems.

4.3.14 *Copies* - You should submit **two good clean copies** of your dissertation/thesis. One of them must contain the original approval page signed by your dissertation/thesis guide or committee. Your department/university may have other requirements and may need additional copies of your thesis/dissertation. It is always desirable to get an orientation for the whole process in advance.

References

- American Psychological Association. (1983). *Publication manual* (3rd ed.). Washington, DC: Author.
- Best, J. W. (1963). *Research in education*. New Delhi: Prentice-Hall of India.
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- Willson Jr., R. F. (1980). *Writing: Analysis and application*. New York: MacMillan Publishing Company.
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Appendices

(6.1 a SAMPLE TITLE PAGE)

UNIVERSITY OF CALIFORNIA
RIVERSIDE

A Comparative Study of Three Modes of Presenting
Analogies in Chemistry

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Philosophy

in

Education

by

Kannanayakal Mani Rajan

August, 1993

Dissertation Committee:

Professor Robert B. Burns, Chairperson
Professor Reba N. Page
Professor Kathleen E. Metz

(6.1b SAMPLE TITLE PAGE)

USING ANALOGIES AND EXAMPLES TO HELP
STUDENTS OVERCOME MISCONCEPTIONS
IN PHYSICS: A COMPARISON OF TWO
TEACHING STRATEGIES

A Dissertation Presented

By

DAVID ERIC BROWN

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

September 1987

Education

(6.1c SAMPLE TITLE PAGE)

**Construction and Standardisation of an
Achievement Test in Chemistry
for Standard IX Based on
Bloom's Taxonomy
(Cognitive Domain)**

RAJAN. K. M. M.Sc; B.Ed.

**Thesis
submitted to the
University of Calicut
for the Degree of
Master of Education
1982.**

(6.1d SAMPLE TITLE PAGE)

Teacher Education for the 21st Century

**Students' Pre-instructional Understanding of
Content and Pedagogy of the
21st Century**

**K. M. Rajan
Lecturer (Senior Scale) in Physical Science
St. Joseph's Training College
Mannanam, Kottayam - 686 561
Kerala**

**A paper presented at the XIth Annual Conference of
the All India Association for Educational Research,
held at G. H. G. Harparkash College of Education for
Women, Sidhwan Khurd, Ludhiana on 28th and 29th
of September, 1998.**

(6.3a SAMPLE SIGNATURE PAGE)

The Dissertation of Kannanayakal Mani Rajan is approved:

.....
.....
.....

Committee Chairperson

University of California, Riverside

(6.3b SAMPLE SIGNATURE PAGE)

**USING ANALOGIES AND EXAMPLES TO HELP
STUDENTS OVERCOME MISCONCEPTIONS
IN PHYSICS: A COMPARISON OF
TWO TEACHING STRATEGIES**

A Dissertation Presented

By

DAVID ERIC BROWN

Approved as to style and content by:

Klaus Schultz, Chairperson of Committee

John Clement, Member

Arnold Well, Member

**George E. Urch, Acting Dean
School of Education**

DECLARATION

I,, do hereby declare that this thesis (Project) "....." has not been submitted by me for the award of a Degree, Diploma, Title or recognition, before.

Place,
Date.

Sd/-
(Name)

CERTIFICATION

I,, do hereby certify that this thesis is a record of bonafide study and research carried out by(Name) under my supervision and guidance.

Place,
Date.

Sd/-
Name

Designation
Institution

(6.4 SAMPLE ABSTRACT PAGE)

ABSTRACT OF THE DISSERTATION

**A Comparative Study of Three Modes of Presenting
Analogies in Chemistry**

By

Kannanayakal Mani Rajan

Doctor of Philosophy, Graduate Program in Education

University of California, Riverside, August, 1993

Professor Robert B. Burns, Chairperson

**Begin typing the abstract here, double spaced,
and limit to 2,450 characters
(i.e., approximately 35 lines).**

(6.5 SAMPLE OF A TABLE)

TABLE 1

Summary of Two-way ANOVA for the Post-imagery Test

Source	df	SS	MS	F	P
Teacher	2	132.15	66.07	8.23	S
Treatment	2	56.93	28.47	14.02	S
Teacher x Treatment	4	8.12	2.03	.25	NS
Residual	257	2062.27	8.02		
Total	265	2259.04	8.52		

Note: S indicates a significant p and NS indicates a non-significant p at the .05 level

(6.6 SAMPLE OF REFERENCE PAGE)

References

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**A Treatise
on
Form and Style
of
Thesis and Dissertation**

K. M. Rajan