Preparing your Research Dissertation

Document Category: Guideline

Purpose: The purpose of this guideline is to provide direction for academic employees in relation to the preparation of dissertations.

Scope and Application: All academic employees

Updated: 6 June 2017

Table of Contents

1. Guideline

1.1 Language

Dissertations should be written in English unless otherwise approved.

Where candidates wish to present a dissertation in a language other than English:

1. at least two copies shall be presented in the form of an English translation and the evaluation will be based on those copies; and

2. a (second) Title Page and (second) Abstract shall be provided in English in each non English language copy of the dissertation.

1.2 Style

It is important that a technical dissertation be written in good language and in acceptable style. This means:

- accuracy and clarity
- precision and conciseness
- a high standard of spelling, grammar and punctuation
- a good choice of language
- sound paragraph and sentence construction
- elimination of redundant or ambiguous words, phrases and passages
- a thorough revision before final typing and correction of all typing errors

In short, the dissertation should be clear, concise, correct and complete.

1.3 Length of Dissertation

1. There is no prescribed minimum length for a dissertation due to the research topic and the form of presentation.

2. A dissertation is intended to evaluate the ability of candidates to present a report on their research in a clear and succinct manner; an excessively lengthy dissertation could be counterproductive. Generally, it is expected that dissertations would contain approximately two hundred (200) pages in the main text. For a predominantly written exposition, this implies a range from about 15 000 words up to a maximum of 40 000 words for a Master's degree and up to 100 000 words for a PhD degree.

Exclusive of appendices, the thesis should not exceed 100,000 words for non-science subjects and for scientific subjects; the word length would normally not exceed 50,000 words.

3. Submission of the dissertation in two (2) volumes labelled I and II (Roman capital numerals) may be appropriate in exceptional circumstances when there are large, essential Appendices.

In this case Volume I shall contain the whole of the dissertation Chapters proper; and Volume II the Appendices. The Contents page in Volume I shall refer to both volumes; and Volume II shall commence with a duplicate Title page.

1.4　Format of Dissertation

1.　The temporarily-bound dissertation submitted for examination should be typed or printed on single-sided international A4 paper (297 mm x 210 mm) of good quality bond (at least 73 GSM) with either one and one half or two-line spacing.

2.　The final permanently-bound dissertation may be printed back to back using single or 1½ line spacing.

3.　The Font type recommended is the Australian Standard of Times New Roman for text content. The height of the print size in the final copy shall be not less than twelve (12) points for the main text. The point type and size for captions and other addenda shall be not less than nine (9) points with font type Arial Narrow.

4.　To permit proper binding and trimming, each A4 page of the temporarily-bound dissertation should have a clear left hand margin of approx. 40 mm (includes a gutter of at least 10mm), a top, bottom and right hand margin of at least 23 mm.

5.　If the permanently-bound dissertation is printed back-to-back, the margin at the binding edge of every page must be at approx. 40 mm (includes a gutter of at least 10mm),

6.　Figures, diagrams, maps and computer printouts should conform to all of the above requirements (1.4.1 to 1.4.3 inclusive) as far as practicable; but in all cases it is essential that information be neither lost in photocopying (e.g. if characters are too small or too faint) nor lost in binding and trimming.

7.　The contents of the bound dissertation should normally be in the following order:

- INITIAL PAGES The initial pages may be numbered using roman numerals (i, ii, iii, iv, etc.) centred on bottom of page
- MAIN TEXT (including Figures as appropriate) Pages are numbered in sequence 1, 2, 3, 4 and positioned relevant to required header & footer i.e. odd and even headers and footers
- REFERENCES
- BIBLIOGRAPHY (if appropriate)
- PLANS (if any)
- APPENDICES

Heading Styles

When working out what size the styles should be formatted at, is to start at the normal style, ie Times New Roman, size 12 and go up 2 points in size for the Heading Style font size. All heading styles should be in a block font, eg Arial and Bold, and the sizes will depend on how many Heading Styles are to be used in the document. Shown below is the example of four heading styles and the normal style will be Times New Roman, size 12.

Style	Font	Effect	Size
Heading 1	Arial	Bold	size 18
Heading 2	Arial	Bold	size 16
Heading 3	Arial	Bold	size 14
Heading 4	Arial	Bold	size 12
Normal style	Times New Roman	Regular	size 12

For readability purposes, it is recommended that you use a Sans Serif Font (eg, Arial) for headings as it is quicker to read; and you use a Serif Font (eg, Times New Roman) for the main text of a document as this has been proven easier to read by the majority of people. Serif Fonts actually have small curls at the start and finish of each character, where Sans Serif Fonts are more block-like.

Initial Pages

The order of these pages will normally be as follows:

First Page

This page will be blank as it forms part of the binding process.

Title Page

This page should set out the full title (preferably in large lettering), the award for which the dissertation is submitted (e.g. Master of Engineering), the full name and academic qualifications of the candidate and the year of submission. An example of this page is provided.

Abstract

An abstract is a particular and essential form of summary of academic work. It is not the same as a Summary or Synopsis which would normally be found at the front of any technical report because it does not necessarily summarise every aspect of the work in strict order or proportion to the full work.

An abstract is essentially a concise statement of the major conclusions of the academic work. A brief mention, usually restricted to a sentence or two, of the objectives and methodology is usually given to set these conclusions in context; and similarly any other significant aspects of the work will be mentioned. An **abstract** would normally be approximately 300-400 words.

Great care must be taken when writing the abstract as it is by this page, and often this page alone, that other academics will peruse the work and decide whether to delve into the full dissertation. There exist a number of "Abstract" publications containing entirely academic dissertation abstracts reproduced for this purpose.

Certification Page

This is a statement headed 'Certification of Dissertation ' to the effect that the work contained in the dissertation is the bona-fide work of the candidate, that the work has not been previously submitted for an award, and that, to the best of the candidate's knowledge and belief, the dissertation contains no material previously published or written by another person except where due acknowledgement and reference is made in the dissertation to that work. The signature and date is placed beneath the statement.

In the lower part of this page the supervisors append their signature(s) by way of endorsement that the declaration has been completed. An example of this page has been provided.

Acknowledgements

It is essential that the candidate acknowledge assistance received whilst undertaking the project and preparing the dissertation. The candidate should consider carefully all forms of assistance received - academic, technical, secretarial, administrative and personal (e.g. family) as appropriate. Adequate acknowledgement should not normally exceed one page.

Table of Contents and Notation

The purpose of a 'Table of Contents' is to provide a clear and comprehensive index to the material presented. It should include:
i.   Chapter headings (numbered 1, 2, etc and underlined)
ii.   Headings within chapters (numbered 1.1, 1.2, etc)
iii.   Further subheadings as appropriate (similarly "nested" and numbered 1.1.2.1 etc)
iv.   The heading "References" and it's appropriate page number
v.   The heading "Bibliography" and its page number
vi.   The heading "List of Figures" (Table of Figures) and its page number
vii.   The heading "List of Tables" and its page number
viii.   The heading "List of Plans" and its page number (if appropriate)
ix.   Appendices; each numbered or lettered (A, B, C) in order and with its heading.

The "List of Figures" (Table of Figures), "List of Tables" and "List of Plans" (if used) shall follow in subsequent pages.

For larger tables and figures—if items break over two or more pages place these large tables or figures in the appendices

The Main Text

The main text will usually be divided into chapters. Typical chapter headings might be:

Chapter 1 Introduction

*The first section of the body of the thesis should be an **Introduction** which should make clear the aims and focus of the study, identify its significance, and set the frame and sequence for each of the papers that follow. Its maximum length need only be 20-30 pages.*

Chapter 2 Methodology

A number of chapters, which may be written in the format of a self-contained journal article, will follow. These need not have been submitted to any journal. Each chapter must include by the candidate a signed Statement of Originality and Statement of Contribution by Others.

Chapters of the thesis and self-contained articles need to be integrated and therefore need to flow cogently from one to another. It needs to be made clear how the chapters are linked and how they contribute to each other.

Chapter 3 Results

Chapter 4 Discussion of results

Chapter 5 Conclusions

> *The final chapter should provide integrative **Conclusions**, drawing together all the work described in the journal-article-format parts of the thesis and relating this back to the issues raised in the Introduction*

Of these only **two are compulsory**. The first, "**Introduction**" which must also include a clear statement of the objectives of the research project, often as a specific subsection; and the last, "**Conclusions**", which will normally include suggestions for further work in the topic, as appropriate.

List of References

Any dissertation must indicate its relation to other literature in the field and this is usually accomplished by means of citation (referencing).

Referencing of documentation is also a formal mechanism for giving appropriate acknowledgement of the work of others within the main text. Proper documentation enables an author to avoid any suspicion of plagiarism to refer to the source or authority for statements made in the text, and to indicate where fuller details on a particular point may be found.

Well known facts do not require documentation but documentation is required for a statement such as "The success of Cook's Voyages has been attributed, in part, to improved means of navigation and nutrition." This is achieved by an immediate in text reference of the form (Smith, 1972, p27) with details of Smith, 1972 being given in the LIST OF REFERENCES. Details of the required format are set out in section 5 Writing at UNE.

Bibliography (if appropriate)

The Bibliography is a list of books which the candidate has found useful in an overall way, but for which there are no direct in text references - for example, books on dissertation presentation which the candidate has read, and background textbooks to the dissertation topic.

As with References, they are described by the Author, Title, Year, Place, Publisher and sometimes the specific Chapter or subsection.

The Bibliography should be in alphabetical order.

Plans, Diagrams, Tables, Photographs

Small diagrams and tables and photographs should be incorporated into the text and numbered.

A chapter based numbering system is usually most convenient, e.g. Figure 2.1, Table 3.1. If a set of Figures or Tables are always considered together they may be labelled Figure 2.2(a) and 2.2(b), etc.

Each Figure, Table or Photograph should be designed as 'stand-alone' which means that the item should be able to be read and understood without reference to the text.

Captions must, therefore, be provided and be informative with adequate definition of characters, symbols, etc. used in the table or figure. Recommend font type for captions is

Arial Narrow with font size being no less than nine (9) points. This will visually separate these items from the main content. This font type can also be used for the table text with a font size ranging from 10 to 12 depending on volume of content within the table.

Table captions are always placed above the table: Figure captions (ie for diagrams, photographs or other illustrations) are always placed below the figure. Assembly of the dissertation is sometimes made easier if figures and tables are presented in separate pages which are then "interleaved" with the text before pagination. Beware excessive photo reduction of diagrams, which can render labelling or dimensions too small to be adequately legible.

In general, it is preferable to have only one figure per A4 page - only if the diagram is very simple will two fit on a single page. Occasionally, some dissertations involve the preparation and presentation of material in large tables or plans of A4 or greater size. Where this occurs, all such diagrams, tables or plans should be placed after the main body of the dissertation and bound in such a manner that they are able to be opened out and read even when the rest of the dissertation is closed.

This requires provision of a left hand margin of between 215 and 220 mm. Care should be taken that all plans, diagrams, tables and photographs are fade proof and professionally fixed in place. Where photographs are numerous it may be preferable to include a number on a whole page for photographic copying. Everyday adhesive tape is NOT suitable for fixing diagrams or photographs to a page.

To facilitate conciseness in the main body of the dissertation, it is advisable to place essential, but voluminous material such as experimental results and computer program listings in appendices. Other areas of literature, theoretical or experimental investigation undertaken, but not central to the dissertation should be reported, as concisely as possible, in appendices.

Appendices should be labelled Appendix A, B, etc with the order being determined by the order in which they are referred to in the main body of the text.

Page numbering may be carried through to the appendices or separate pagination such as A1, A2, A3 used if more convenient as frequently appendices are prepared in advance of the final draft of the text.

Figures, tables, etc, when used exclusively in an Appendix, may conveniently be labelled Figure A.1, Table A.1, etc.

Raw Data

Ideally all raw data should be presented to enable future researchers to confirm results and derive maximum benefit from the work. However, with the use of program data loggers, now commonplace, the data volume is often vast so that reproduction in the dissertation is clearly impractical. It is left to the candidate and supervisor together to determine the appropriate level of raw/semi processed/processed data to present.

Remember that in most cases graphical presentation is preferable to numerical presentation because it is much easier for the reader to comprehend at a glance.

(On rare occasions an examiner may wish to view raw data not directly presented in the dissertation. Hence candidates are advised to maintain their raw data in an accessible and presentable form).

Computer Programs

Computer programs should be listed, as appendices, only when they have been written by the candidate. Note that the listing(s) MUST BE PRODUCED BY DIRECT COMPUTER OUTPUT FROM AN OPERATIONAL PROGRAM. They must not be retyped in any way as this is almost guaranteed to introduce errors.

Each program should be adequately "self-documenting", that is adequately furnished with comment panels outlining language, machine requirements, library function/subroutine requirements (where non-standard), input and output variables, etc. Flow charts are not specifically required, but if there is a suite of programs or interactive subroutine one (or more) structure charts may be appropriate.

Other Supplementary Material

Supplementary material such as rolls of film, floppy disks or magnetic tape, etc., which cannot be bound together with the dissertation should be placed in a stout storage container which will ensure its protection.

1.5   Binding

Temporary binding at the time of submission for examination shall be strong enough to prevent damage to the dissertation during the ordinary course of handling or postage.

Students undertaking a Research Master degree must provide **two** soft-bound copies and students undertaking the higher degrees must provide **three** soft-bound copies to Research Services.

However, students should check with their Faculty/School to ascertain if additional copies are required.

The permanent binding shall consist of sewing and binding with full cloth stiff covers. The spine lettering should include the author's initial(s) and surname, the title (a shortened version may be used if necessary) and the year the dissertation was presented. The lettering should run from top to bottom of the spine.

Any corrections, amendments, deletions, or amplifications required by the examiners should be made neatly and in such a way as to be unobtrusive.

1.6   Referencing, Citation and Footnotes

Citation

Candidates should consult with their supervisor(s) regarding the most appropriate referencing and citation style for their discipline.

The Reference List

All references cited in the body of the dissertation MUST be listed here in strict alphabetical order.

The format of each reference must commence with the first author of the citation, or any abbreviation so that the reader can find the entry rapidly and without ambiguity. The remainder of the reference must be COMPLETE such that the reader could go to a library and have adequate information to find the paper, book or document. The Harvard System sets out a fixed format for the referencing of academic publications in journals as books, and permits certain abbreviations of international journal titles which must be conformed with to avoid ambiguity.

(Note, for example, that JAER is NOT the permitted abbreviation for the Journal of Agricultural Engineering Research.) *If in doubt do not abbreviate.*

Recent work which you have received informally from a colleague as a draft or preprint may not yet exist as a full publication and hence should be referenced using the phrases "Submitted to .... Journal" or "In press" as appropriate.

Use of the phrase "personal communication" in this way to refer to someone else's idea is sometimes necessary, but should be avoided.

To conserve space, the Reference list must be typed single spaced, with a line space between each reference.

Footnotes

The Traditional footnoting system provides within the text superscripted numerals that direct the reader to references at the bottom of the page. A bibliography is also provided with this system. Text used for footnotes will be font type Arial Narrow and nine (9) font size and should be placed at the bottom of a page but not within the footer region.

When to footnote:

You should indicate the source of quotations, information, ideas or interpretation in a footnote. In the case of information, only substantial information or possibly contentious statements of fact need to be documented. For example, the following three sentences would not normally require footnotes.

1.7   Previously Published Material

1. Material previously published by the candidate may be used in the body of the dissertation, but should be properly acknowledged as with any other previously published material.

2. Where the thesis contains supporting articles and/or papers which have been authored jointly, the candidate is required to indicate the extent and nature of their own and others' contributions.

    The nature and extent of the candidate's input must be precisely expressed for each paper at the end of the *Statement of Originality*.

The nature and extent of the intellectual input by others must be explained clearly and acknowledged in the *Statement of Contribution by Others*. Where publications of others have been used, these must be stated, and clear and appropriate acknowledgment must be made to the other authors. The name of the principal author must be clearly stated.

Two statements shall appear at the end of each chapter, the Statement of Contribution by Others, and the Statement of Originality. These must be signed by the candidate and the Principal Supervisor, who must certify that all co-authors have given their consent for having their work included in the thesis and that they accept the student's contribution as indicated in the Statement of Originality.

Quotations should be clearly identified, for example, by using either quotation marks, italics or indenting. Refer to your required Referencing style for formatting for example APA long quotes are indent 2cm on both the left and right side.

On exceptional occasions it may be appropriate for candidates to present their previously published material in its original published format as an appendix.

1.8   Confidential Dissertations

1.   It is expected that the final copy of dissertations accepted for the award of a UNE research degree will immediately be made available to the wider community. It is also expected that students will publish as part of the candidature process and that they and their supervisors will endeavour to ensure informed consent to publication has been granted.

2.   In demonstrated exceptional circumstances, an application to embargo access to the dissertation can be made for a period of up to 24 months from the date of lodgement of the dissertation.

1.9   Copyright

The author of a dissertation shall normally retain the copyright, unless otherwise agreed in writing, for example as a prerequisite requirement of an external project sponsor.

1.10   Presentation of Dissertation

1.   The copies of a dissertation presented for examination shall be submitted to the Research Services Directorate.

2.   Correspondence concerning the dissertation and advice on award of the degree will be conducted through the Research Services Directorate.

After processing of the dissertation including the permanent binding (arranged by the candidate) the original and/or electronic copy will be forwarded to the (University) Library, and one copy will be returned to the Faculty/school. Remaining copies will be returned to the candidate.

Note that additional copies of the dissertation may be required by any sponsoring body as a precondition of their sponsorship.

1.11 Library Guidelines

Candidates may wish to refer to the documents available from the UNE Library:

Thesis and dissertation guide: Master of Education, Master of Curriculum Studies, Master of Education (Intercultural Studies) / Department of Social, Cultural and Curriculum Studies, University of New England. *UNE Library - 008038220*

A Thesis and dissertation guide: for students of the Faculty of Education, Nursing and Professional Studies, U.N.E. / edited by T.W. Maxwell. *UNE Library – 008145960*

2. UNE Research Services

Research Services facilitates and supports the University's research effort through provision of administrative services and support to manage, develop and promote research, research training, knowledge transfer and innovation. Research Services administers all aspects of the University's research activities their website is http://www.une.edu.au/research/hdr

Higher Degree Research (HDR)

http://www.une.edu.au/research/hdr/my-study

HDR RAP - Resources and Advice Portal

The University has a resources portal for HDR students and their supervisors called Higher Degree Research Resources and Advice Portal — or HDR RAP for short. The portal is in Moodle and all HDR students and their supervisors are automatically enrolled in the site. HDR RAP is designed to assist you in navigating your path through your HDR Candidature at UNE.

http://www.une.edu.au/research/hdr/hdr-portal

Instructions for Submission of a Higher Degree Research Thesis:

All Higher Degree Research students are required to submit their thesis electronically in PDF format, which can be emailed to hdrexam@une.edu.au.

The electronic copy of the thesis should be submitted in Adobe pdf format and preferably as one document. If the thesis is submitted in more than one document, each document must not be larger than 30 megabytes. Any colour photos or graphics must be no higher than 300 dpi.

If an examiner requires a physical copy of the thesis, Research Services will contact the student, who will be responsible for the printing of the soft-bound copy(ies). Printing and binding of a thesis can be organised by Fujixerox whose contact details are: UNEDSC@aus.fujixerox.co or phone (02) 67712420.

Thesis Submission and Examination:

http://www.une.edu.au/research/hdr/submission-examination

Ethics and Grants

http://www.une.edu.au/research/ethics-and-grants

The Academic Skills Office

The University of New England's Academic Skills Office (ASO), located in Teaching and Learning Support (TaLS), provides assistance to all enrolled students to help them succeed in their studies and to become independent and confident learners.

http://aso-resources.une.edu.au/

For external students, assistance is also available by phone, or online by email (asohelp@une.edu.au) or Skype (asohelp.une). First year external students can contact the external first year advisor for assistance through the First Year Academic Skills Support Moodle unit.

Academic Writing:

The Academic Writing site has been written as a self-managed training program that can also be used as a resource for a specific learning need.

http://learninghub.une.edu.au/tlc/aso/aso-online/academic-writing/academic-essays.php

Referencing styles used at UNE:

http://www.une.edu.au/current-students/resources/academic-skills/referencing

UNE ASO Factsheets:

http://www.une.edu.au/current-students/resources/academic-skills/fact-sheets

3. Referencing

There are a number of referencing styles in use at UNE:

- AGLC3
- AGPS
- APA
- MLA

- Chicago (Author-Date)
- Chicago (Footnoting)
- Footnoting (History)
- Vancouver

Each Faculty/School and Discipline has one or more preferred styles.

IMPORTANT: Please check your Unit Handbook for the information on the referencing style you need to use for each unit. If your unit information is different from the style listed for your discipline on this page, **YOUR UNIT INFORMATION TAKES PRECEDENCE**.

PLEASE NOTE: Your unit guide may advise you to follow the **APA** referencing style. A **APA referencing style is any author-date referencing style** in which an in-text citation is given within the text and is followed by a full list of references in alphabetical order at the end of the text. The above are Referencing styles for referencing in use at UNE: **APA, Chicago (author-date), AGPS, MLA.** If you are asked to use Harvard, check the particular styles approved for your school.

4. Bibliography

Anderson, J and Poole, M (1998). Assignment and Thesis Writing. 3rd Ed. Brisbane, John Wiley and Sons.

Gibaldi, J (1999). MLA Handbook for Writers of Research Papers. 5th Ed. New York, Modern Language Association of America.

Paradis, J G and Zimmerman, M L (1997). The MIT Guide to Science and Engineering Communication. Cambridge, Massachusetts, MIT Press.

Strunk, W Jr, and White, E B (2000). The Elements of Style. 4th Ed. Boston, Allyn and Bacon.

Style Manual for Authors, Editors and Printers. (2001). 6th Ed. Canberra, Australian Government Publishing Service. Walker, J R and Taylor, T (1998). The Columbia Guide to Online Style. New York, Columbia University Press.

University of New England: "Using Microsoft word 2007 to create a thesis", at http://www.une.edu.au/__data/assets/pdf_file/0003/65064/Create-a-Thesis-in-Word-2007.pdf

University of Southern Queensland: "Guidelines for the Preparation of Research Dissertations" at http://policy.usq.edu.au/policy/files/guidelines%20for%20the%20preparation%20of%20research%20dissertations.htm

5. Appendix

Initial Pages of a Thesis may include the following:

- Title Page – sample attached
- Abstract
- Certificate Page – sample attached
- Acknowledgements
- Table of Contents including
  - Table of Figures
  - List of Tables

Title Page (Specimen Only)

UNIVERSITY OF NEW ENGLAND

DISSERTATION
TITLE

A Dissertation submitted by

Arthur B Candidate, M Eng

For the award of Doctor of Philosophy

Year XXXX

Certification Page (Specimen Only)

Certification of Dissertation

I certify that the ideas, experimental work, results, analyses, software and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.

_____   _____

Signature of Candidate   Date

ENDORSEMENT

_____   _____

Signature of Supervisor/s   Date

_____   _____

Signature of Supervisor/s   Date