



# FACULTY OF EDUCATION UNIVERSITY OF MALAYA

GUIDE TO THE PREPARATION OF THESES, DISSERTATIONS & RESEARCH REPORTS

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#### 1. INTRODUCTION

Theses and dissertations of the Faculty of Education, University of Malaya reflect the standards that students need to abide by. As such, the rules and format in this document need to be strictly adhered to.

The guidelines in this document are specifically for the postgraduate students of the Faculty of Education, University of Malaya in the process of preparation of research reports, theses and dissertations. These guidelines follow the American Psychological Association (APA) format.

#### 2. FORMAT

#### 2.1 Binding

A research report/dissertation/thesis submitted shall be bound in one (1) volume. If there is a need for a second volume, special permission must be obtained from the Institute of Graduate Studies.

For the purpose of examination, a research report/dissertation/thesis submitted to the external examiner should be bound in **soft cover** rexine with the colour indicated below:

- Research report: Ocean blue or Light bright blue
- Dissertation: Dark red or maroon
- Thesis: Dark red or maroon

However, for submission to internal reader, student can choose to use simple binding (colour paper and plastic sheet as cover)

For final submission prior to graduation, a research report/dissertation/thesis submitted should be bound in **hard cover** rexine with the colour indicated below:

- Research report: Ocean blue or Light bright blue
- Dissertation: Dark red or maroon
- Thesis: Dark red or maroon

The thesis cover must be of A4 size (210mm x 297mm).

The title of a research report/dissertation/thesis, name of author, name of the university and year of submission must be printed in gold block on the front cover. The letters for the Front Cover should be font size 16, font type Arial Narrow, bold and in uppercase letters.

The examples are shown in Appendices A1 – A5

The spine of a research report/dissertation/thesis should show the title of research, name of author, year of submission and name of degree. The year of submission must be in accordance to the year when the research report/dissertation/thesis is submitted.

The examples are shown in Appendices B1 and B2.

# 2.2 Length of Thesis / Dissertation

A Research Report / Dissertation / Thesis should generally be in the range as given follows:

a) Research Report (12 credit hours) : 14,000 - 17,000 words

b) Research Report (15 credit hours) : 17,000 – 20,000 words

c) Masters Dissertation (Mixed : 20,000 - 25,000 words

Mode) (24 credit hours)

d) Masters Dissertation (Mixed : 25,000 – 30,000 words

Mode) (30 credit hours)

e) Masters Dissertation (Mixed : 30,000 – 40,000 words

Mode) (40 credit hours)

f) Masters Dissertation (Research : 40,000 - 60,000 words

Mode)

g) PhD Thesis (Mixed Mode) : 60,000 - 80,000 words

h) PhD Thesis (Research Mode) : 80,000 - 100,000 words

Justification of Word count: The Minimum/Maximum word count for (f), (g), & (h) do follow the minimum/ maximum limit of word count set by IPS.

The minimum/maximum length of words **excludes** footnotes, references, appendices, tables, figures and prefaces.

Candidates who are unable to meet/ exceed the word length set by the University must seek approval from the faculty before the submission of research project/dissertation/thesis for examination and provide reasons for the inability to adhere to the prescribed length..

#### 2.3 Paper and Duplication

The research report/dissertation/thesis should be printed, single-sided, on high quality white A4 paper ( $201 \times 297$  mm; 80 grams). Computer pin-feed printout paper is not permitted.

The research report/dissertation/thesis, in softcover or hardbound copies, must be typed and duplicated by offset printing or good quality photocopying. All copies must be clean and legible.

## 2.4 Typing

#### 2.4.1 Typing Quality

The research report/dissertation/thesis must be typed using font type **Times New Roman, font size 12** (except for tables and figures) **and justified**, using Microsoft Word version 6.0 or later, or similar word-processing software. Research report/dissertation/thesis in Arabic should be typed using Font type Traditional Arabic in font size 16.

Words in a language that is different from the language of the research report/dissertation/thesis must be typed in *italics*.

For mathematical texts, the use of <u>Equation Editor</u> or <u>LaTeX</u> is advisable. Script fonts are not permitted.

Text should be typed on one side of a paper only. A high quality laser should be used for the printing.

# 2.4.2 Spacing

Double-spacing should be used throughout the text, including abstract. Single-spacing should be used for long tables, quotations, footnotes and bibliographic / reference entries.

#### 2.5 Margins

The stipulated margins for the general text are as follows:

Top : 2.5 cm Right : 2.5 cm Left : 4.0 cm Bottom : 2.5 cm

The following guidelines also need to be followed as far as possible:

- Typing should not extend more than one line below the bottom margin and then only to complete a footnote or the last line of a chapter, subdivision or a caption.
- All tables and figures including their captions should conform to margin requirements.
- A new paragraph at the bottom of a page must have at least two full lines of text or it should begin on the next page.

 There should be only double spacing between paragraphs (the start of a paragraph must be indented).

# 2.6 Pagination

All page numbers are to be placed without punctuation 1.0 cm from the bottom edge at the right hand side. The recommended Font and size for the page numbers are Font type Times New Roman and font size 10.

In addition, the page numbering system must conform to the following rules:

- The Preliminaries include the Title Page, the Original Literary Work Declaration, Abstracts, Acknowledgement, Table of Contents, List of Tables, List of Figures. List of Symbols / Abbreviations / Nomenclature and List of Appendices. The Preliminaries are numbered in consecutive lower case Roman Numerals (i, ii, iii, iv, etc.)
- The title page is considered as page i, but the number is not typed. The Roman numeral ii appears on the first page that follows the title page and continues through for all the *Preliminaries*.
- The whole body of text, the Bibliography / References and the Appendices are numbered consecutively in Arabic numerals (1, 2, 3, etc.) beginning with 1 on the first page of the text.

# 2.7 Footnotes, Endnotes and Notes

APA does not recommend the use of footnotes and endnotes. Nevertheless, the APA format suggests using footnotes for two types of information: content comments and copyright permission.

#### 2.8 Tables

Tables are useful for presenting a large quantity of information clearly and concisely. They typically display numerical data in columns and rows for easy classification and comparison. Tables do not duplicate text, but rather present information. They should be interpretable without the text.

Basic Presentation and Formatting:

- **1. Numbering**: Each table is preceded by the capitalized word "table" followed by an Arabic number (e.g., Table 1.1, Table 1.2, Table 2.1, Table 2.2 and so on according to the Chapter). The number given to a table is determined by the order in which that table is referred to in the text (i.e., the first table discussed is Table 1.1, the second is Table 1.2, and so on). Capitalize "table," and do not bold or italicize the text.
- **2. Titling**: Each table has a unique title written directly below the table number. Titles should be brief yet descriptive. Capitalize each major word in the title (but not of, on, in, and, etc.). Italicize titles. Don't put a period. Example: Mean Performance Scores of Students with Different College Majors

- **3. Spacing**: Tables in the new 6th edition APA format can be double-spaced or single-spaced with readability as the primary consideration. Spacing should be consistent throughout the table.
- 4. Ruling: Put lines in a table only when they are necessary for clarity. Horizontal lines are permissible; vertical lines are not.
- 5. There can be notes for the table

An Example:

Table X.X

Kolmogorov-Smirnov and Shapiro-Wilk Tests for Normality Distribution

Group	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk			
Group	Statistic	df	Sig.	Statistic	df	Sig.
Control group	0.094	41	0.200*	0.96	41	0.12
Experimental group	0.106	39	0.200*	0.97	39	0.55

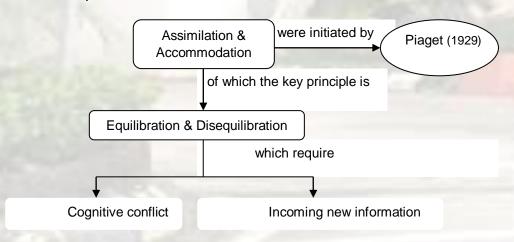
Note. a. Lilliefors Significance Correction

# 2.9 Figures

The 6th Edition of the APA Publication Manual gives the following guidance in relation to figures: A good figure:

- 1. Augments rather than duplicates the text, conveys only essential facts, omits distracting material, and is carefully planned.
- 2. Be certain in figures of all types that lines are smooth and sharp, units of measure are provided, axes are clearly labeled, and elements within the figure are labeled or explained.

## An Example:



<sup>\*.</sup> This is a lower bound of the true significance.

#### 3 LAYOUT / ARRANGEMENT OF CONTENTS

The structure of the research project, dissertation or thesis is based on a standard format which contains the three main sections; **Preliminary**, **Main Text** and **Supplementary**.

# 3.1 Preliminary

This section consists in order of the following:

1. The Title Page : Appendix D1 – D5

2. Original Literary Work Declaration Form: Appendix E1 - E2

3. (a) Abstract : Appendix E 3 (a) (b) Abstrak : Appendix E 3 (b)

The abstract should be written as one paragraph, double-spaced and should not be more than 500 words.

A good abstract should consist of brief description of the following:

- (a) Statement of Problem (this includes the gap in literature briefly)
- (b) Objectives of the Study
- (c) Methodology (i.e. research design, sample size, and instruments used)
- (d) Findings
- (e) Conclusion

An Example of a good abstract is shown in: Appendix E3

- 4. *Acknowledgements*: Most Research Reports / Dissertations / Theses will include a brief statement of thanks in recognition of any assistance.
- 5. Table of Contents: Appendix E 4
- 6. List of Figures : This list should use exactly the same numbers and captions that appear below the figures in the text and the appendices. The numbering system is according to chapter, for e.g.: figures in Chapter 1 are numbered sequentially: Figure 1.1, Figure 1.2 and so on.
- 7. List of Tables : This list should use exactly the same numbers and captions that appear above the tables in the text and the appendices. The numbering system is according to chapter, for e.g.: tables in Chapter 1 are numbered sequentially: Table 1.1, Table 1.2 and so on.
- 8. List of Symbols and Abbreviations

and Abbreviations: If necessary to the presentation of the thesis, this list appears after the list of Tables and Figures

9. *List of Appendices*: This list contains the titles of appendices at the end of the research report/ dissertation / thesis

#### 3.2 Main Text

The text is organized into chapters. There is no restriction on the total number of chapters but has to be agreed upon by the supervisor and the candidate. Opinions of the examiners and examination board can be taken into consideration. Generally, the basic structure of the thesis or dissertation is as follows:

#### 1. Chapter 1 : Introduction

This chapter introduces the problem to be investigated and its background; the aim, the research objectives and research questions must be all aligned logically; the operational definitions; the scope of the study and the limitation of the study.

Note: The conceptual and theoretical frameworks can be included here or as seen appropriate in other sections of the thesis.

# 2. Chapter 2 : Literature Review

A critical review of past literature written by accredited scholars and researchers relevant to the study must be discussed carefully. The candidate can review in depth research conducted as necessary from older publications but must include recent/current publications as well.

#### 3. Chapter 3: Methodology

The research design and procedures of sampling, data collection and analytical procedures must be explained and described in detail with all the necessary justifications and examples for the chosen approach.

#### 4. Chapter 4: Findings and Discussion

Findings must be presented via the written text, tables and figures and displayed clearly. The interpretation of the findings must be discussed in a scholarly manner.

Note: The candidate may choose to separate Findings & Discussion into different Chapters as seen appropriate.

### 5. Chapter 5: Discussion and Conclusion

The study findings must be summarized, discussed, the implications, suggestions from the study, suggestions for future research and a conclusion presented.

An example of main text layout is shown as follow:



#### 1.1 Background of the Study

The education of students with disabilities began with 'special education.' Though intentions were positive, this special school learning was taking place outside the mainstream and therefore there was discrimination.....

Society needed a paradigm shift in its education system to bring about a change in its thinking and to create a future inclusive world where disability is seen as normal not abnormal....

#### 1.2 Rationale of the Study

This study is in line with the Blue Print of the Malaysian Ministry of Education, (2013) that highlighted the importance of inclusive education....

# 3.3 Supplementary

This section includes the following:

#### 3.3.1 Table of Content

The following format is only applicable to students' intake from Semester 1, Session 2017/2018.

The Table of Contents lists the chapters, topics and sub-topics together with their page numbers. Sub-topics and topics should be labelled according to the chapter, for example:

# **Chapter 1: Title**

- 1.1 Heading 1
  - 1.1.1 Heading 2
    - 1.1.1.1 Heading 3
      - a. Heading 4
        - i. Heading 5
  - 1.1.2 Heading 6
- 1.2 Heading 7

Double Spacing

**Chapter 2: Title** 

2.1 Heading 1

2.1.1 Heading 2

2.1.1.1 Heading 3

a. Heading 4

i. Heading 5

2.1.2 Heading 6

2.2 Heading 7

.

This numbering system provides a clear picture of the relationship between chapters and topics and shows how they are connected.

# 3.3.2 Bibliography / References

When citing in the text of the thesis (in-text citations), there are several rules to remember:

1. Direct quotations (APA Manual, p.170-171)

In addition to the author and the date, **direct quotations must also include the page number** (or paragraph number for non-paginated sources). For example, (Smith, 2005, p. 27) or for a non-paginated source, such as online material: (Smith, 2008, para. 4). Use the abbreviation pp. for multiple pages.

2. Paraphrasing

When paraphrasing, you do not need to include page or paragraph numbers. However, the *APA Manual* states page numbers *may be* included to help your reader locate the material you used in the original source.

3. *Author's name in tag line*Smith (2009) studied psychomotor ability in football players.

4. Author's name in parentheses

Complex psychomotor skills were explored by observing numerous football games (Smith, 2009).

5. Two authors

You need to cite both names every time you refer to a work by two authors. If the names are referred to in the text, only the year appears in parentheses; if the names are not referred to in the text, include the names in the parenthetical reference joined by an ampersand (&).

Smith and Harrison (2007) found a high rate of collaborative learning activity among the participants. A high rate of collaborative learning activity was found among the participants (Smith & Harrison, 2007).

#### 6. Three, four, or five authors

You must cite all authors, either in text or parenthetically, the first time they are referenced. From then on, use only the surname of the first author, followed by *et al.* Notice in the following examples that *et al.*, which means "and others," is not italicized and ends with a period.

First time authors referred to in the text: Smith, Harrison, and Nelson (2004) conducted an experiment related to active learning.

Subsequent references to the same authors in the text: Smith et al. (2004) found that the subjects found active learning stimulating.

First time authors referred to in the parenthetical reference: Participants in the study conducted an experiment related to active learning (Smith, Harrison, & Nelson, 2004).

Subsequent parenthetical references to same authors: The subjects in the study found active learning stimulating (Smith et al., 2004).

#### 7. Six or more authors

When there are six or more authors, use the last name of the first author followed by *et al.* for the first citation in the text as well as subsequent citations. Follow the same format for the parenthetical reference. Example, Smith et al. (2007)

#### 8. Secondary sources (APA Manual, p. 178)

Cite from original sources whenever possible. If you need to cite something that was mentioned or quoted in someone else's work, describe the original work in the text of your paper, but cite the secondary source in your parenthetical reference and in the reference list. An example, if Harrison's work is cited in Smith's work and you did not read Harrison's work, you will mention Harrison's work in the text of your paper, but reference Smith's work, both parenthetically and in the reference list as follows:

Harrison's study (as cited in Smith, 2007)

In this example, Smith's work will be the one listed in your reference list.

#### 9. Work listed by title

If no author is given, use the article title (in quotation marks) or book title (italicized) in the text of your paper and in the parenthetical reference. You may use just the first several words, if the title is lengthy. For example, a parenthetical reference to the article "Integrating Technology into Education" which appeared in *New Social Science* without an identified author, can be cited as ("Integrating Technology," 2010).

#### 10. Personal communications (APA Manual, p.179)

Personal communications that are not recoverable, such as personal or phone interviews, email messages, and memos are cited in the text only and are not included in the reference list. (A. M. Smith, personal communication, September 8, 2011)

For more detail referencing style on multiple authors, authors of different ethnicity (e.g. Malay, Chinese, Indian, Punjabi, etc.), please refer to "APA Formatting and Style Guide by the University of Malaya Library" at:

https://umlib.um.edu.my/scontents.asp?tid=31&cid=129&p=1&vs=en

#### 3.3.3 Appendix / Appendices

The Appendix section supports the main written text of the thesis. The Appendices may consist of research instruments, raw data, letters of consent, long results tables, photographs and such. Appendices can be labelled as APPENDIX A, APPENDIX B and so on.

#### 4 MISCELLANEOUS NOTES / GENERAL INFORMATION

#### 4.1 Use of Copyright / Plagiarism

Postgraduate candidate of the University of Malaya are expected to produce original academic work. Plagiarism is defined as the use of original work, ideas or actual texts created by others, without acknowledging the original source. Hence, failure to acknowledge the work of others in their work means the candidate is guilty of plagiarism and may be subjected to disciplinary action under the University of Malaya (Discipline of Students) Rules 1999.

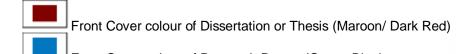
Postgraduate candidates are strongly advised to read the "How to Avoid Plagiarism: A Handbook for Postgraduate Students", which outlines the rules and regulations pertaining to acts of plagiarism.

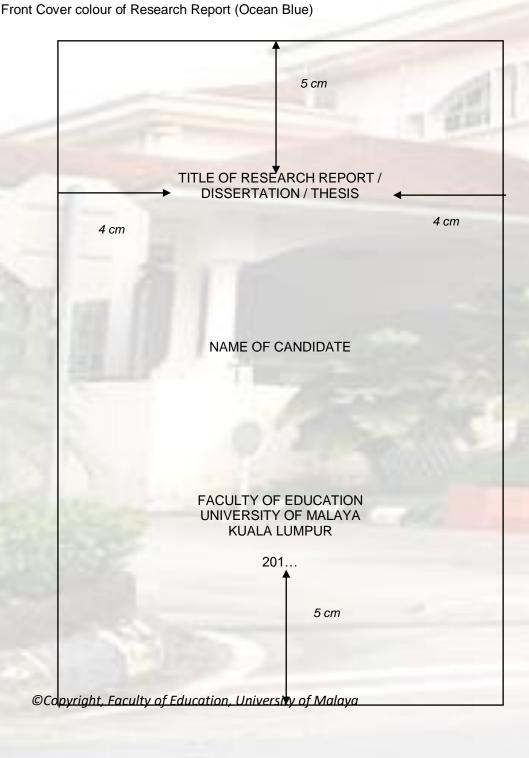
The University also highly recommends the usage of Turnitin, an online web-based plagiarism detection application to avoid plagiarism and ensure academic integrity. The similarity index percentage should equal to or less than 15% (≤15%)

#### 5. APPENDICES

**A** 1

Example of the Front Cover of a Research Report / Dissertation / Thesis

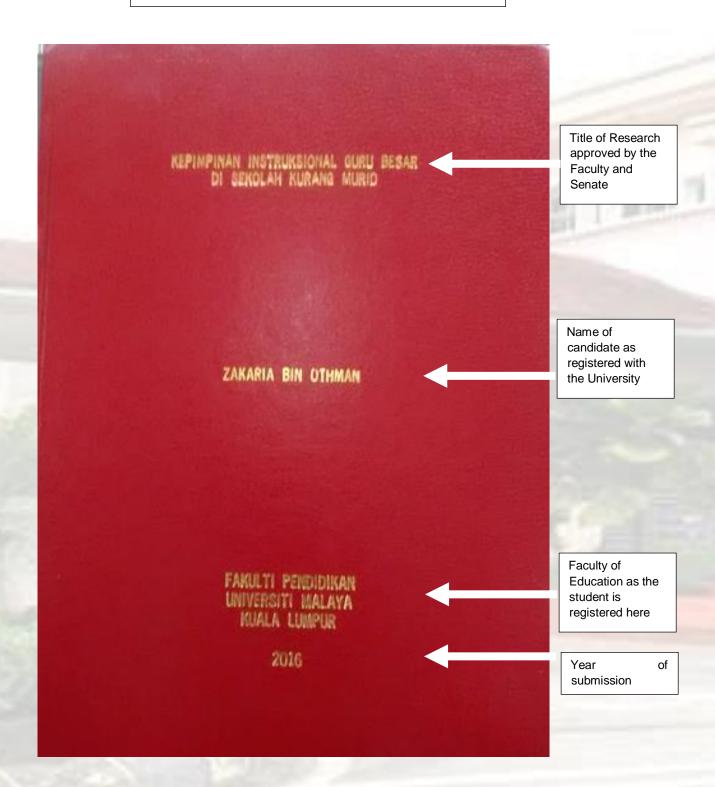




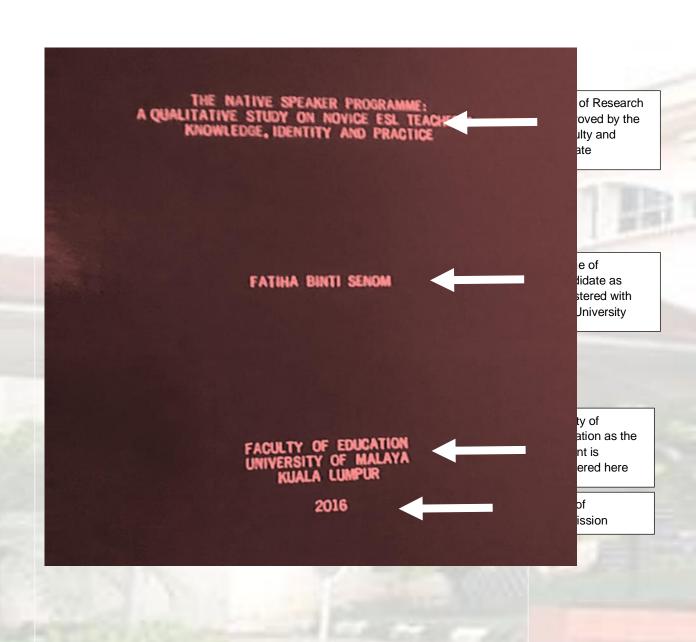
# Font: Arial Narrow (Gold Lettering) Size: 16, Bold

Spacing: 1.5

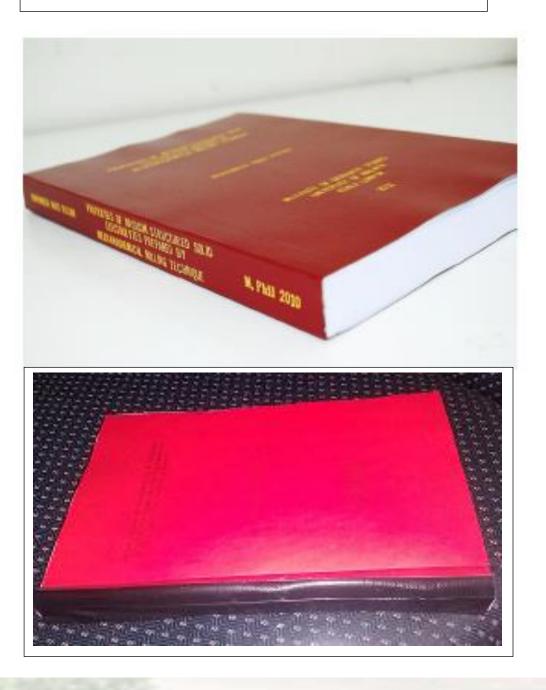
A 2 – SAMPLE HARD BOUND COPY FOR FINAL SUBMISSION – BAHASA MALAYSIA



# A 3 – SAMPLE HARD BOUND COPY FOR FINAL SUBMISSION – ENGLISH



# A 4 -SAMPLE OF SOFTBOUND COPY FOR EXAMINATION

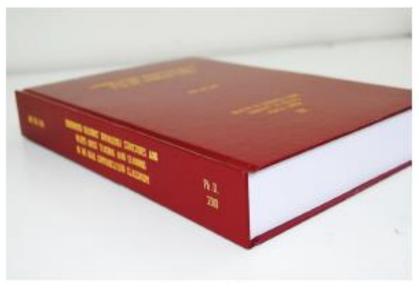


For PhD. Thesis for examination, the softbound copy must be in soft red rexine.

For Masters Dissertation for examination, the softbound copy must be in red

Note: For Internal Examiner, the copy can be just simple binding, with colour paper and plastic sheet as cover.

# A 5 – SAMPLE OF <u>WHOLE HARD BOUND COPY</u> FOR FINAL SUBMISSION



Example of hardbound thesis / dissertation (dark red/ maroon)



Example of hardbound research report (ocean blue)

# **B1-SPINE FORMAT**



Approximately 2 cm

# B 2 – SAMPLE OF SPINE FORMAT FOR FINAL HARD COPY

KERIMPINAN INSTRUKSIONAL GURU BESAR PH.D ZAKARIA BIN OTHMAN DI SEKOLAH KURANG MURID 2016

## **C – ELECTRONIC SOFT COPY**

The submitted electronic copy of the research report / dissertation / thesis in the form of a CD (in PDF format), is required to be labelled with the following details:

Name (Nama):

Matric Number (Nombor Matrik):

Title of Research Report / Dissertation / Thesis (*Tajuk Laporan Penyelididkan / Disertasi / Tesis*):

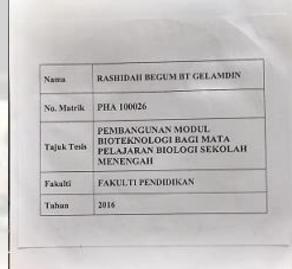
Name of Faculty (Nama Fakulti):

Year of Submission (Tahun Penyerahan):

#### Example:

Name	
Matric Number	
Title	
Faculty	
Year of Submission	





**The Title Page** is the first page after the front cover and should include:

- a) The final research title which has been approved by the Faculty;
- b) Name of candidate according to the registration records;
- c) The statement as the following (according to mode of programme):

	Master's Degree	Doctoral Degree		
Research Report	Dissertation	Dissertation	Thesis	Thesis
(Coursework	(Mixed mode)	(Research	(Mixed	(Research
mode)		mode)	mode)	mode)
RESEARCH	DISSERTATION	DISSERTATION	THESIS	THESIS
REPORT	SUBMITTED IN	SUBMITTED IN	SUBMITTED IN	SUBMITTED IN
SUBMITTED TO	PARTIAL	FULFILMENT	PARTIAL	FULFILMENT
THE	FULFILMENT	OF THE	FULFILMENT	OF THE
FACULTY OF	OF THE	REQUIREMENTS	OF THE	REQUIREMENTS
EDUCATION,	REQUIREMENTS	FOR THE	REQUIREMENTS	FOR THE
UNIVERSITY OF	FOR THE	DEGREE OF	FOR THE	DEGREE OF
MALAYA, IN	DEGREE OF	(Name of	DEGREE OF	(Name of
PARTIAL	(Name of	Programme)	(Name of	Programme)
FULFILMENT OF	Programme)		Programme)	
THE				
REQUIREMENTS				
FOR THE				
DEGREE				
OF (Name of	100			
Programme)	-	12-00		

#### D 1 - TITLE PAGE FOR RESEARCH REPORT

TITLE OF RESEARCH REPORT
TAJUK LAPORAN PENYELIDIKAN

NAME OF CANDIDATE

NAMA CALON

SUBMITTED TO THE FACULTY OF EDUCATION, UNIVERSITY OF MALAYA, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF COUNSELING

DISERAHKAN KEPADA FAKULTI PENDIDIKAN, UNIVERSITI MALAYA SEBAGAI MEMENUHI SEBAHAGIAN KEPERLUAN BAGI IJAZAH SARJANA KAUNSELING

201...

Font: Arial Narrow Size: 12 Spacing: 1.5

#### D 2 - TITLE PAGE FOR DISERTATION BY MIXED MODE

TITLE OF DISSERTATION

TAJUK DISERTASI

NAME OF CANDIDATE

NAMA CALON

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION (LANGUAGE EDUCATION)

DISERTASI DISERAHKAN SEBAGAI MEMENUHI SEBAHAGIAN KEPERLUAN BAGI IJAZAH SARJANA PENDIDIKAN (PENDIDIKAN BAHASA)

FACULTY OF EDUCATION
UNIVERSITY OF MALAYA
KUALA LUMPUR
FAKULTI PENDIDIKAN
UNIVERSITI MALAYA
KUALA LUMPUR

201...

Font: Arial Narrow Size: 12 Spacing: 1.5

#### D 3 - TITLE PAGE FOR THESIS BY MIXED MODE

TITLE OF THESIS

TAJUK TESIS

NAME OF CANDIDATE

NAMA CALON

THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY
TESIS DISERAHKAN SEBAGAI MEMENUHI SEBAHAGIAN KEPERLUAN BAGI
IJAZAH DOKTOR FALSAFAH

FACULTY OF EDUCATION
UNIVERSITY OF MALAYA
KUALA LUMPUR
FAKULTI PENDIDIKAN
UNIVERSITI MALAYA
KUALA LUMPUR

201...

Font: Arial Narrow Size: 12 Spacing: 1.5

#### D 4 - TITLE PAGE FOR DISSERTATION BY RESEARCH

TITLE OF DISSERTATION

TAJUK DISERTASI

NAME OF CANDIDATE

NAMA CALON

DISSERTATION SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION

DISERTASI DISERAHKAN SEBAGAI MEMENUHI KEPERLUAN BAGI IJAZAH SARJANA PENDIDIKAN

FACULTY OF EDUCATION
UNIVERSITY OF MALAYA
KUALA LUMPUR
FAKULTI PENDIDIKAN
UNIVERSITI MALAYA
KUALA LUMPUR

201...

Font: Arial Narrow Size: 12 Spacing: 1.5

#### D 5- TITLE PAGE FOR THESIS BY RESEARCH

TITLE OF THESIS

TAJUK TESIS

NAME OF CANDIDATE

NAMA CALON

THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

TESIS DISERAHKAN SEBAGAI MEMENUHI KEPERLUAN BAGI IJAZAH DOKTOR FALSAFAH

FACULTY OF EDUCATION
UNIVERSITY OF MALAYA
KUALA LUMPUR
FAKULTI PENDIDIKAN
UNIVERSITI MALAYA
KUALA LUMPUR

201...

Font: Arial Narrow Size: 12 Spacing: 1.5

# **E1- ORIGINAL LITERARY WORK DECLARATION FORM** (ENGLISH)

# UNIVERSITI MALAYA

Name	e of Candidate:	(I.C/Passport No:	)	
Regis	stration/Matric No:			
Name	e of Degree:			
Title	of Project Paper/Research Repo	ort/Dissertation/Thesis ("this Work"):		
Field	of Study:			
1 d	o solemnly and sincerely declare	e that		
(1)	I am the sole author/writer of	this Work;		
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(4)	I do not have any actual know	wledge nor do I ought reasonably to know to	hat the makin	
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,	Cardidale's Signature	Date		
Subs	cribed and solemnly declared be	efore,		
	Witness's Signature			

# E2- ORIGINAL LITERARY WORK DECLARATION FORM (BAHASA MALAYSIA)

## UNIVERSITI MALAYA

	PERAK	CUAN KEASLIAN PENULISAN	
Nan	na:	(No. K.P/Pasport:	)
No.	Pendaftaran/Matrik:		
Nan	na Ijazah:		
Taju	ık Kertas Projek/Laporan Penyel	lidikan/Disertasi/Tesis ("Hasil Kerja ini"):	
Bida	ang Penyelidikan:		
S	aya dengan sesungguhnya dan	sebenarnya mengaku bahawa:	
(1)	Saya adalah satu-satunya pen	garang/penulis Hasil Kerja ini;	
(2)	dilakukan secara urusan yang petikan, ekstrak, rujukan atau hasil kerja yang mengandur	-mana hasil kerja yang mengandungi hakcipta g wajar dan bagi maksud yang dibenarkan dan a u pengeluaran semula daripada atau kepada mana ngi hakcipta telah dinyatakan dengan sejelasny irafan tajuk hasil kerja tersebut dan pengarang/pen Kerja ini;	pa-apa a-mana a dan
(4) (5)	Saya tidak mempunyai apa-ap bahawa penghasilan Hasil Kerj Saya dengan ini menyerahka hakcipta Hasil Kerja ini kepa sekarang adalah tuan punya pengeluaran semula atau peng	pa pengetahuan sebenar atau patut semunasabahn ja ini melanggar suatu hakcipta hasil kerja yang lain; in kesemua dan tiap-tiap hak yang terkandung di ada Universiti Malaya ("UM") yang seterusnya mu kepada hakcipta di dalam Hasil Kerja ini dan a ggunaan dalam apa jua bentuk atau dengan apa jua ba terlebih dahulu mendapat kebenaran bertulis dari	dalam ila dari pa-apa ga cara
(6)	Saya sedar sepenuhnya sekir melanggar suatu hakcipta has	ranya dalam masa penghasilan Hasil Kerja ini say sil kerja yang lain sama ada dengan niat atau seba n undang-undang atau apa-apa tindakan lain sebag	a telah aliknya,
	Tandatangan Calon	Tarikh	
Dipe	erbuat dan sesungguhnya diakui	di hadapan,	
	Tandatangan Saksi	Tarikh	
Nam	na: atan:		

#### E3 - SAMPLE OF A GOOD ABSTRACT (ENGLISH)

Issues about low problem solving and mathematics performance in Malaysia has led to the need of deep understanding about factors that affecting mathematical problem Statement of Problem solving among Malaysian students. This study examined the effects of metacognitive Objectives and problem solving strategies training on mathematical problem solving of lower of the Study secondary school students in Kuala Lumpur. A quasi-experimental research design was adopted. Three intact classes were randomly assigned into treatment group, comparison Methodology group and control group. The total number of participants in all the three groups was 86 where they were pre-tested and post-tested on mathematical problem solving. Prior to inferential testing, preliminary checks were conducted to ensure that there was no violation of the ANCOVA assumptions. After adjusting for mathematical problem solving pre-test scores, ANCOVA results reveal that metacognitive and problem solving strategies training has significant effect on mathematical problem solving, at p<.05 level for between the groups [F (2,82)=19.635, p=.000, partial eta squared=.324]. This result is consistent with the theories. Furthermore, planned Findings contrasts for ANCOVA were conducted using Bonferroni adjusted alpha levels of .017 (.05/3). The finding reveals that problem solving strategies training only has no significant effect on mathematical problem solving. This means that the significant increase in mathematical problem solving is merely due to metacognitive and problem solving strategies training. In addition, the interaction effect of gender is not significant, with F(2,82)=.047, p>.05, which suggests that gender did not give effect to the training. Thus, it can be concluded that metacognitive and problem solving Conclusion strategies training is more effective than problem solving strategies training only; and it is applicable and effective for both gender.

NOTE: If the thesis is written in English the English Abstract need not have a title. The Bahasa Malaysia title needs to be shown in the BM Abstract

If the thesis is written in Bahasa Malaysia the BM Abstract need not have a title. The English title needs to be shown in the English Abstract

Both the ABSTRACT/ABSTRAK and the TITLE must be in Capital letters and in Bold Font

# **E4- SAMPLE OF TABLE OF CONTENTS FOR QUANTITATIVE RESEARCH**

(Note: Students are encouraged to discuss with the supervisors on the relevant sub-topics that need to be included in the write up. This is just an EXAMPLE only)

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