Masters Research Handbook

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Chapter 6

Stage 5: Completing your dissertation

Add summary of what has been achieved.

Stage 5 will see you completing your research project and writing up your full dissertation, ready for submission.

This stage assumes that you have made good progress with your data generation and analysis and on the interpretation of your findings. This has given you a contribution to knowledge that aligns•, and that you're ready• to put it all together into a single narrative which you will complete in this stage.

With reference to our 5-stage framework, the activities which are in focus in Stage 5 are summarised in Table 6.1, which also provides some guidance for your interaction with your supervisor during this stage.

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- More or less, there'll be opportunities for fine tuning later! If you don't feel this is the case, there'll also be opportunities to return to specific parts of previous stages.
- You could be almost ready; most of the way towards your goal.

Activity: Understanding the effort needed in this stage #1

Consider Table 6.1 carefully, paying particular attention to the entries in the 'Effort' column. Make a note of the activities which are most prominent in this stage and what their deliverables and learning outcomes are.

Discussion

In this stage, generating and analysing data and interpreting your findings will constitute your major effort (around 60% of your study time), although considerable effort (35%) will also be needed in assessing your research overall and completing your dissertation. You shouldn't underestimate the time needed to complete and polish the dissertation so that is ready for submission, which is why the framework assume

Table 6.1: Research activities addressed in Stage 5 (30% of project length)

Research process activities	**Deliverables**	**Learning Outcomes: by the end of this stage you will:**	**Effort**	**Suggested focus of your interaction with your supervisor**
Identifying the research problem	Final research problem statement		1%	
Reviewing the literature	Full literature review		1%	
Setting your aim and objectives	Finalised aim and objectives, appropriately broken down into tasks		2%	
Developing the research design	Complete account of your research design		2%	
Generating and analysing data	Data appropriately presented and analysed, with extracts from raw data in dissertation appendix, if needed; remaining raw data appropriately stored	be able to organise and store your raw data; be able to apply appropriate data analysis methods; be able to present your data in a concise and effective way	40%	Appropriateness of data analysis and presentation
Interpreting and evaluating findings	Critical summary and evaluation of findings	be able to derive findings from your data analysis and critically assess them in relation to research aim and objectives	20%	Critical and logical thinking
Reflecting and reporting	Full dissertation, including an assessment of the whole project	be able to assess entire research; be able to complete your dissertation to the expected presentation standards	35%	Depth of critical thinking, quality of academic writing, and conformance to standards
Planning work and managing risk	Review of work from previous stage and project risk, with adjustment to work plan for Stage 5	be able to assess risk and revise a work plan	1%	Any major adjustment required to complete the project

a significant effort in this stage.

6.1 Completing your research

Building on Stage 4, in this stage you will complete your work on generating and analysing data, on their interpretation in the context of a contribution tom knowledge. This will give you a substantial start of the presentation of your findings in your dissertation.

Activity: Completing your data generating, analysis, and interpretation #2

Complete your research on generating and analysing data, and the interpretation of your findings in terms of your aim and objectives. Expand on your analysis and summaries from your Stage 4 report.

Guidance

Ensure you continue to manage your raw data carefully, and that your report presents all your data/data, findings and their interpretation in a clear and rigorous manner.
This activity is likely to take up to 40% of your study time, assuming you were able to make good progress with your data collection, analysis and interpretation in Stage 4. If that's not the case, you should discuss with your supervisor what you will be able to achieve realistically in the remaining time for your project, for instance whether it would be possible to reduce the scope of your research or apply alternative, more time-efficient research strategies and methods. Ensure that any changes are appropriately accounted for in your work plan for this stage.

6.2 Assessing your research

Once you have completed your work on generating and analysing data, and interpreting your findings, it is time for you to reflect on your whole project, evaluate what you have done and draw some overall conclusions. These will form the body of the concluding chapter of your dissertation, for which you are asked to think critically about each of the following:

- **Evaluation against aim and objectives**: you should reflect on the extent your research has met its stated aim and objectives. The interpretation of your findings against aim and objectives is a good starting point to draw these summary conclusions. While your interpretation may be deep and detailed, with reference to specific data, here you are expected to highlight key conclusions based on such an interpretation. It is not necessary for your research to have met your aim and objectives fully: in this section you need to make a critical assessment of what your research has actually achieved.

- **Evaluation against the academic body of knowledge**: this requires you to assess the extent your findings have added to the body of knowledge in your field of study, including whether they support or question findings already known from the literature you have reviewed. You should show awareness of how your own research relates to the wider academic context.

- **Implications for practice (if any):** here you should reflect on ways in which your research may be relevant to professional practice, if applicable, including how it could lead to change and improvement. If your research is purely theoretical, then you can skip this section, and focus on the previous two items instead.

- **Validity of the research**: this require you to assess your research in terms of construct, internal and external validity. You should refer back to Stage 3 materials to refresh your understanding of validity.

- **Further research**: your research may have shed light on aspects of your research problem, or highlighted other related research problems, which you did not have the time to explore in your project. This is the place for you to discuss those of more relevance and to indicate how future research can build on the work you have done.

- **Personal reflection on your research experience**: whether or not your research project is your first experience of academic research, you should reflect on what you have learnt from a personal standpoint in relation to thinking and behaving like an academic researcher. You should address how your mindset and skills have changed, or how you would do things differently should you start anew, and any other relevant thoughts you may have.

Activity: Assessing your research overall #3

Assess your overall research in relation to the above points, and write appropriate summaries of each for inclusion in your dissertation.

Guidance

For each point above, consider the related guidance to help you assess your research overall. Note that this assessment should consider all the work you have conducted in your project.

6.3 Finalising and submitting your dissertation

It's getting exciting – you now have all the data, evidence, and arguments in a form you need to complete your dissertation. You may have nigh-on one hundred pages of carefully written prose that looks very good on your screen. It's now time to finalise your dissertation for submission.

Your dissertation should extend your Stage 4 report by covering the work you have carried on in this stage. The structure and content we recommend are indicated in Table 6.2.

6.3.1 Finding and dealing with gaps

By now, you should have something to say in each of the chapters and sections suggested in Table 6.2. Depending on your chosen research strategy the material for certain sections may extend to many pages: for an experiment, it may be that there is an extensive sections on reflexivity, triangulation, and validation. These sections may be much shorter if they appear at all, in the mathematical thinking research strategy.

Irrespective of which research strategy you have chosen, however, some sections will always have content. These include:

- list here

Some of these may simply not have been written yet• even though you know that they are needed and have things• to say – for instance, we recommend leaving the Abstract, Introduction and Conclusions until quite late in the writing process. Others you will complete next.

• Or not written to D1 – the first complete draft.

• Or will have!

Table 6.2: Dissertation structure and guidance

Dissertation template	**Guidance**
Title	Your title should capture succinctly your research problem and aim
Abstract	Your abstract should providing a succinct account of your research
Chapter 1: Introduction 1.1 Background to the research 1.2 Justification for the research 1.3 Fitness of the research	This chapter should provide an introduction to your research topic in its wider context (as background) and your justification of why the research is worth pursuing. Its purpose is to introduce and justify your intended research in overview, before entering the detailed work of the subsequent chapters. It should be well argued and supported by appropriate citations. In this chapter, you should also argue how the research fits within the scope of your qualification, and meets any other personal, professional or organisational criteria.
Chapter 2: Literature review 2.1 Review of existing relevant knowledge 2.2 Critical summary, including knowledge gap to be addressed by the research	Your review should provide a critical account of your in-depth engagement with the academic (and other) relevant literature, including identifying key trends, ideas and possible knowledge gaps. Most of your citations should point to academic articles. Your critical summary should highlight key insights from your review and provide a strong justification for your proposed research. Both coverage and depth of your review matter. You should ensure that your review is well structured, with a logical narrative flow and your arguments are well supported by data
Chapter 3: Research definition 3.1 Problem statement 3.2 Aim, objectives, tasks and deliverables 3.3 Knowledge contribution	You should ensure that your research problem is well articulated and appropriate for your course and your personal and professional circumstances, that your aim and objectives are consistent with research problem, that tasks and deliverables break down your objectives appropriately and are clearly related to your chosen research methods, and that the intended knowledge contribution of your research is clearly articulated
Chapter 4: Research design 4.1 Data 4.2 Research strategy and methods 4.3 Research procedures 4.4 Ethical, legal and EDI considerations	This chapter should demonstrated your critical engagement with all elements of research design, including a detailed account of the data needed in your research, the research methods and research strategies chosen, with justification, and applied within your project. Your account should be supported by a clear rationale and insights from the related literature, and appropriately justified in relation to your research problem, aim and objectives. It should also demonstrate your careful consideration of ethical and legal matters, and that your research

Activity: Putting your dissertation together #4

Using your word processor of choice, and starting from your previous report, complete your dissertation by applying the structure and guidance in Table 6.2, and making good use of your notes and summaries from all related activities you have carried out.

Guidance

Although the dissertation structure and guidance we provide is fairly standard, it is possible they don't not match exactly the requirements of your own course, which may provide a different template for you to follow. Indeed you should check and apply your course guidance, and map the structure and guidance in Table 6.2 to what is required in your course of study.

6.3.2 Revising your draft for compliance to requirements

Now that you have a complete draft of your dissertation, you should revise it to ensure it meets your course requirements.

In our experience, a Masters dissertation is usually in the range of 10,000 to 15,000 words. Often, references, abstract and appendices are excluded from the word count, but figure and table captions are included. In general, there is an expectation that the content of your dissertation is balanced across the different chapters, although it is normal for some chapters to be more substantial than others. Our recommended distribution of content across the full body of your dissertation, based on our recommended dissertation structure, is indicated in Table 6.3, as a percentage of total. This is not a hard and fast constant, but can provide a baseline for you to get an idea of the relative weight of the different chapters of your dissertation. In adapting it to the needs of your own project and course, however, you should ensure you maintain a good balance across the whole piece.

There is also an expectation that your dissertation conforms to some standard presentation conventions, which we have summarised in Table 6.4.

Activity: Reviewing your dissertation #5

Review you current dissertation draft and make all necessary adjustments to ensure it meets the guidance and requirements above, or similar requirements and guidance from your own course.

Table 6.3: Breakdown of dissertation content

Element	Breakdown	Recommended word count distribution	Equivalent for 10,000 word dissertation	Equivalent for 15,000 word dissertation
Chapter 1 Introduction	Background to the research Justification for the research Definitions (if any) Dissertation outline	10%	1000	1500
Chapter 2 Literature review	Review of existing relevant knowledge Critical summary, including knowledge gap	20%	2000	3000
Chapter 3 Research definition	Problem statement Aim, objectives, tasks and deliverables Knowledge contribution	10%	1000	1500
Chapter 4 Research design	Data Research strategy and methods Procedures Ethical considerations	15%	1500	2250
Chapter 5 Analysis and interpretation	Summary and analysis of data Summary of key findings Interpretation in relation to aim and objectives	30%	3000	4500
Chapter 6 Evaluation and conclusion	Evaluation against aim and objectives Evaluation against the academic body of knowledge Implications for practice (if any) Validity of the research Further research Personal reflection on your research experience	15%	1500	2250

Table 6.4: Presentation conventions

Fonts	Use a standard font that is easy to read, e.g. Times New Roman or Arial, with font size 11 or 12
Margins and spacing	Leave appropriate margins on both the left and the right of the page, typically around 2 cm. Use 1.5 line spacing
Your identifiers	Include your name and student identifier, possibly as a header or as part of the title page
Title page	Include a title page containing your research title. Usually the following statement is also required: "A dissertation submitted in partial fulfilment of the requirements for the degree of <name of degree>", where you should replace <name of degree> with your own degree title
Table of content	Include a table of content after the title page
Page numbers	Number all pages, including references and appendices. In particular, use lower-case Roman numerals on the preliminary pages – iii, iv, v, etc. – and Arabic numerals starting from page 1 at the beginning of Chapter 1.
Chapter and section numbering	Number chapters sequentially using Arabic numerals starting with 1. Number sections sequentially starting with the chapter number, e.g. 1.1, 1.2, etc. for sections in Chapter 1. Number sub-sections sequentially starting with the section number, e.g. 1.1.1, 1.1.2, etc. for sub-sections in Section 1.1. You should avoid sub-sub-sections, but if needed, number them sequentially starting with the sub-section number, e.g. 1.1.1.1, 1.1.1.2, etc. for sub-sub-sections in Sub-section 1.1.1.
Figures and tables	Number all figures and tables sequentially, starting with their chapter number, e.g. 1.1, 1.2, etc. for figures in Chapter 1. Include appropriate captions positioned after figures and before tables
Lists of figures and tables	List all figures and tables after your table of content. For each include both their number and caption
Citations and references	Apply the required bibliographical style throughout
Verb tense	Your dissertation is an account of what you did in your project, so you should report your work using the past

Guidance

While our recommendations are fairly standard, it is essential that you ensure they align with your own course requirements and guidance: if not, you should of course apply the latter. Whichever guidelines you follow, you should ensure that your dissertation fits within the overall word count, its content is appropriately balanced, and all required presentation conventions apply.

6.3.3 Final check and submission

Before submitting your dissertation, you should perform a final check, focusing on the following aspects:

- **Logical coherence**: you should ensure that all research elements of your dissertations are coherent and consistent with each other, so that there is a logical progression from research problem, to aim and objectives, to research design and its execution, to findings and conclusions.

- **Academic writing**: you should ensure that academic arguments are well formed, including being well-supported by secondary and/or primary data, that the language you use is clear and precise, and there is a good balance between description and critical reflection.

- **Proof-reading**: you should remove grammatical errors and typos, and ensure that punctuation is correct. You should also check that the narrative makes sense to the reader, for which we strongly advise you ask for help from a friend or family member: even if they are not experts on the topic of your project, they should be able to follow what you have written and get the gist of your work.

- **Conformance to presentation conventions**: you should ensure that your dissertation conforms to the the requirements of your course, follows its presentation conventions, its length is within the word limit, and its content is well balanced between chapters.

Activity: Performing your final check #6

Assess your dissertation draft against each of the points above. Revise and iterate until you are ready to submit.

Guidance

Revising your dissertation for submission is very important as you can lose a substantial proportion of marks should any of these aspects not be addressed carefully and to the expected standards.

You should now be ready to submit your dissertation. You should, of course, follow the instructions for your course of study to do so.

6.4 How your dissertation will be assessed

After submission, your dissertation will go through your university's assessment process, which is designed to ensure that your work is assessed fairly against Masters research benchmarks and your course learning outcomes. The specifics of this process will depend on your own university and course (or programme) of study, something you should investigate carefully.

Make this an activity earlier in the process.

You should also investigate the assessment criteria applied to your work. Typically, your Masters dissertation will be assessed from the following perspectives, although the specific marking scheme applied within your course may break each further:

And this

Is this earlier too?

- **Research definition and research design**: this refers to an appropriate articulation and justification of the research problem in its wider context, including your critical review of the academic literature to contextualise and justify your research problem and knowledge contribution, a well developed and justified research design, and well constructed academic arguments
- **Data generation, analysis, interpretation, and conclusion**: this refers to a competent execution of your research design, an adequate amount of data gathered and analysed, an appropriate interpretation of your findings, and a critical evaluation of your research overall
- **Presentation**: this refers to how your dissertation is put together, its cohesiveness and logical flow, including abstract•, and its conformance to conventions, including an appropriate use of tables, figures and diagrams to summarise and present your work.

• And extended abstract, if needed.

The assessment of your work under these criteria will contribute to your final grade, which will be established by your examiners in relation to Masters level quality benchmarks, including those• summarised in Table 6.5.

• These are the typical criteria for the UK. Those in your country may vary.

Add source

Activity: Assessing your own dissertation #7

Apply the three perspectives above together with the benchmarks of Table 6.5 to your dissertation. Write down your own assessment of your work as a result.

Table 6.5: Typical grade benchmarks for Masters dissertations, based on UK quality standards

Grade	Quality descriptor
Distinction	All elements of the dissertation are present, including abstract and any required appendix, and are of a high standard. In particular, the dissertation demonstrates: advanced, authoritative understanding and analysis of key issues and complex problems; strong data of a critical approach to own work and that of others; competent use of a wide range of data in support of academic arguments; appropriate and well justified selection of research strategies and methods, applied competently to own research; originality and independence of thought; compelling narrative which is coherently and logically presented; excellent presentation standards; excellent research potential
Merit	All elements of the dissertation are present, including abstract and any required appendix, and are of a good standard. In particular, the dissertation demonstrates: good understanding and analysis of key issues; good data of a critical approach to own work and that of others; good use of data in support of academic arguments; appropriate selection of research strategies and methods, applied reasonably well to own research; some originality; coherent and logically presented narrative; good presentation standards; good research potential
Pass	Some elements may be weak or missing, but all three perspectives above are sufficiently addressed. In particular, the dissertation may data some of: limited understanding and analysis of key issues; limited data of critical approach to own work and that of others; limited use of relevant data in support of academic arguments; some appropriate choices of research strategies and methods, but with limited application to own research; plausible narrative; adequate standards of presentation
Weak fail[b]	Many elements of the dissertations are very weak or missing, and not all three perspectives above are sufficiently addressed. In particular, the dissertation may data many or all of: superficial understanding and analysis of key issues; weak data of critical approach to own work and that of others; gaps in the use of data in support of academic arguments; inappropriate choice or application of research strategies and methods; weak narrative; poor standards of presentation
Complete Fail	The dissertation has critical flaws and omissions, so that is not recoverable via a resubmission. In particular, the dissertation demonstrate many or all of: lack of understanding and analysis of key issues; lack of critical approach to own work and that of others; little or no use of data in support of academic arguments; inappropriate choice or application of research strategies and methods; incoherent and confused narrative; inadequate standards of presentation

[a] In this case, a course may allow some remedial work and resubmission.
[b] In this case, a course may allow some remedial work and resubmission.

Guidance

Your course of study may provide some detailed guidance on how your dissertation will be assessed. If that's the case, you should compare that guidance to the advice in this handbook, and apply it in your own assessment of your dissertation. You should only assess the content of the dissertation as is, disregarding all other knowledge you will have of your research which is not reported.
You should take an objective stance, considering both strengths and weaknesses of your work. You could also ask a friend or a family member to assess your dissertation, then compare their assessment with yours.

6.5 Takeaways

- Completing your project and finalising your dissertation are substantial tasks, so that you must ensure you have sufficient time in your work plan.
- Your overall assessment of your project must address several dimensions, including the extent your aim and objectives were met, any new knowledge generated, its wider significance, the validity of your research and its implications for future work.
- Your dissertation should meet a range of requirements on both coverage, structure, length and presentation convention. You should ensure your work meets the requirements and follows the guidelines provided by your course of study.
- Your dissertation will be assessed following a process defined by your own course of study and university. Grade benchmarks are likely to apply, which may be based on national, or even international, benchmarks.