Journal Format PhD Theses - Guiding Principles for Students and Staff

This information is provided as supplementary guidance to the main University 'Presentation of Theses' Policy which students should consult before starting to write the thesis. Students can submit their research in the traditional thesis format or the Journal Format and should ensure they read all available guidance before making the final decision on thesis format. In some disciplines the Journal Format thesis is the standard and it is therefore important that students also refer to any discipline specific guidance which is available via the relevant supervisor/ School/ Faculty.

1. INTRODUCTION TO THE JOURNAL FORMAT

- i. Journal Format was formerly referred to as Alternative Format.
- ii. The Journal Format thesis allows students to write sections of their doctoral thesis in a format suitable for publication in a peer-reviewed journal.
- iii. One of the major considerations for submitting in Journal Format is the level of contribution that the student has made to the papers to be included in the thesis. The level of the student's contribution must be made explicitly clear within the thesis.
- iv. Papers within the journal format do not have to be already published or even submitted for publication. It is recognised that eventual publications may differ from the chapters in the Journal Format thesis due to feedback from publishers, further research or developments in the subject.
- v. Not all research projects will produce material suitable to present in Journal Format and consideration should be given to the most appropriate format for the research.
- vi. The thesis should adhere to the basic principles of a traditional thesis, i.e. it must still represent an original contribution to the field of research, demonstrate an understanding of the entire body of work in the thesis, outline the relationship with existing literature and future developments and it must be a coherent body of related work.
- vii. If it is appropriate to do so, and the main supervisor is in agreement, it may be possible to submit an MPhil / MD / Professional Doctorate/ Practice Based/ DBA thesis in Journal Format.

2. ADVANTAGES OF THE JOURNAL FORMAT

- i. Presenting research in the form of papers will help students to develop their skills in writing scholarly papers or other research outputs. These skills will be essential for a career as a researcher. (Note: it is important to recognise that the traditional format thesis will also develop writing skills and consideration should be given to the best approach for the student's research outcomes and discipline area).
- ii. Sections of the paper (e.g. the method section or the results section) can be written-up and prepared as the student progresses through their programme. This avoids having to rewrite parts of the thesis to submit for publication at a later date.
- iii. This format reduces the potential conflict of interest between the drive to publish papers and timely completion of the thesis as both can be achieved simultaneously.
- iv. Encourages faster publication and enhances the student's research profile /career prospects.

3. CHALLENGES OF THE JOURNAL FORMAT

i. Not all Examiners are familiar with the Journal Format thesis. However, a thesis submitted

- in Journal Format is assessed on the same basis as any thesis and guidance is provided to Examiners on this type of thesis submission.
- ii. It can be difficult for examiners to determine the student's individual contribution to publications. However, if the guidance is followed and students clearly document their own contribution throughout the thesis these problems should not arise.

4. DECIDING TO WRITE A JOURNAL FORMAT THESIS

- i. The decision to submit in Journal Format will be part of the planning of the research project and students should discuss the format of their thesis with their main supervisor early on in their programme because this will give time to plan the structure and content of the thesis and also to set aside time to write the papers.
- ii. Students will also be asked to comment on these discussions regarding thesis format as part of the annual expectations form at the start of each year.
- iii. There is a potential conflict between producing multiple papers for the Journal Format thesis and producing 1 high impact paper (1 paper would not be sufficient for Journal Format). In some cases this decision can only be made once the results have been identified but this should be discussed between the student and the main supervisor prior to making any final decision on thesis format. In addition, it is worth noting that a high impact paper can be created from a fusion of thesis chapters formed of smaller papers.
- iv. Depending on how the research develops and the analysis of data, there is flexibility on when students have to make the final decision regarding the type of thesis format submission and it may not be until Year 2 or 3 that students feel in a position to use the Journal Format. As with all aspects of the programme, planning the best approach for students, in conjunction with the main supervisor, will be the most effective way to manage the Journal Format.
- v. If a decision is made to submit the thesis in Journal Format, the student should discuss their intention with their supervisor. The student should then declare their intention on thesis format on the Notice of Submission form.
- vi. If students subsequently decide that a traditional thesis format might be more appropriate, they should carefully consider this course of action in terms of the time it takes to put the thesis together and discuss with their supervisor. Supervisors may not agree if it is felt that the student may not be able to submit on time. It is important that students do not leave this decision too late in the process.

5. STRUCTURE/CONTENT OF JOURNAL FORMAT THESES

i. Examples of other theses that have been successfully submitted in Journal Format (previously called Alternative Format) should be available via the supervisory team, the Graduate Office or via the institutional repository. It may not be possible to find an example in the exact research area so students are advised to review a few examples of successful submissions in the first instance. Full guidance on the format and structure required is provided in the Presentation of Theses policy. The thesis should include a general introduction and literature review to set the context and hypotheses. This should also include the details of each paper contained within the thesis and ideally a narrative of how these papers constitute a coherent body of work and relate to each other. It is particularly important for the Journal Format thesis that the aims and objectives are written to emphasise how the body of work interconnects. Furthermore, students can also include chapters on methodology and their

- critical evaluation of their studies, including a more detailed discussion and critique, than allowed for in a journal paper.
- ii. The majority of results chapters should be presented as a 'paper' with an abstract, introduction, materials and methods, results, discussion and references.
- iii. A final concluding discussion chapter (which should not be a repetition of previous chapters) should bring the thesis together and provide a critical evaluation of the findings, justify decisions made and set out ideas for future work. If not contained sufficiently within the papers, students may want to include supplementary information such as statistical data. The main supervisor can advise on relevant information to include.
- iv. The number of papers included in the Journal Format thesis may vary according to discipline and is not prescribed, but should reflect the quantity, quality and originality of research and analysis expected of a candidate submitting a traditional thesis. There is no upper limit, but three to five papers or equivalent results chapters is typical. Students should also speak to their Faculty/ School about any discipline specific guidance and consult with their main supervisor for advice. Ultimately the examiners will judge whether the quantity and quality of the work, the critical analysis and originality of the research and the defense of the thesis in the Viva Voce, justifies the award of a PhD so this must be taken into consideration when writing the thesis.
- v. Students should ensure that the thesis is not weakened by lack of continuity and reasoning between chapters or by the separation of figures from the text they refer to.
- vi. It is recommended that separate versions of the paper be inserted and that the pagination sequence should flow throughout the thesis rather than inserting pre-prints. Ideally, to ease readability, figures/tables and accompanying legends should be included at the appropriate point in the text of the papers, and not at the end of the text as would be typical for a manuscript submitted for publication.
- vii. The journal Format offers flexibility in that students may include papers that have already been published or submitted or draft papers that have not yet been submitted or are not yet suitable for publication. Chapters can include various kinds of data and results including reviews, preliminary studies, pilot data, trial designs and lab results. Students are not precluded from presenting 'negative' results as long as they form a coherent part of the thesis. It is important to note that journal chapters which have not yet been submitted for publication may subsequently change when submitted for publication following input from co-authors, journal editors or peer review. Therefore journal formatted chapters may form a stepping stone towards a subsequent publication and there may be a long lag from thesis submission to publication.
- viii. It is expected that students will have taken the major role in ALL aspects of production of the papers including: planning and execution, data acquisition, analysis and writing the paper. Where students have collaborated or co-authored any papers, the level of contribution must be made explicitly clear in the introduction of the thesis. Where students include a published paper which includes content authored by themselves within their thesis they must make it clear that the paper has already been published in order to avoid issues with self plagiarism.
- ix. If data is not contained in sufficient detail within the published papers and is important to the thesis, it should be included in the same way as supplementary material for the journal i.e. in journal style (e.g. statistical data or a more detailed description of methods). Space restrictions do not apply to a thesis in the same way as restrictions on published work (see the Presentation of Theses Policy for information on word count restrictions). Examiners will still want to see evidence of the detailed thought processes that led to the research design (including experimental design) and conclusions that are presented.

- x. It is possible to add information to papers which are already in press or published. If the content from a published paper is significantly revised students will need to reference the paper at all appropriate points, otherwise this could be considered as self-plagiarism. See also sections related to IP/ Copyright/ Plagiarism.
- xi. As noted in point vi it is not recommended to include pre-prints in the thesis but instead students are advised to insert a version of the paper. Where this presents problems, students can bind off-prints straight into the thesis. However, students may wish to consider reformatting if they are much smaller than A4 (or different sizes), so to be consistent with the overall presentational style of the thesis.
- xii. All figures and tables should be legible and appear as close to the relevant text in the thesis as possible; this applies to both published and non-published material that is included in the thesis. Sometimes images/figures in published papers need to be placed according to best space fit.
- xiii. As each paper will have a self-contained list of references and individual style depending on the journal requirements, students will need to consider making minor formatting / stylistic adjustments so that the thesis has consistency (e.g.: references should all be provided in the same format). Papers should be presented in such a way as to assist the examiners' reading of the thesis in the best way possible. References associated with the introduction and concluding chapters should be presented in the most appropriate format. Students should consult their main supervisor and any discipline-specific guidance on this.

6. IP / COPYRIGHT / PLAGIARISM

- i. Students will be required to sign a declaration that the thesis is their own work and that they have not submitted the work for another qualification. Students should explain and fully justify the nature and extent of their own contribution and the contribution of co-authors and other collaborators in the introductory part of the thesis and anywhere else appropriate throughout the body of the thesis. Students should consult <u>University guidance on plagiarism</u> for further guidance.
- ii. It is advisable for students to discuss their stated contribution to each paper with their main supervisor and co- authors. Even if the student is the first author, the main supervisor or others may have contributed to the paper and the student needs to clarify the contribution of others. In some cases, it may be reasonable for a student to be asked to revise a paper chapter in order to reflect their own contribution more directly. Examiners will expect students to defend all of the work in any paper that forms part of the thesis, even if the work has been done (and acknowledged as such) by someone else.
- iii. If appropriate, students can state their contribution in individual chapters relating to specific publications.
- iv. Generally, unless IP has been signed over to a third party, and the student has solely created the IP and is not a member of staff, the student owns the IP they have created. However, it is expected that the student obtains permission from all co-authors for any paper that is included in the thesis. Most publishers request that students sign over copyright of any published material once published. Students should seek copyright permission from the publisher for any published work included in the thesis that isn't published in an 'open-access' journal. Where the publisher owns the copyright, permission from collaborators/co-authors would not therefore be needed.
- v. Any concerns about IP should be discussed with the main supervisor in the first instance. UMIP also offer advice on IP and copyright regulations.
- vi. Any sections which are copied from any published materials must be referenced

appropriately, otherwise the student would be plagiarising material, even if the student was the original author of this material. If sections of the student's own papers are used without the appropriate references this will be considered as self-plagiarism.

7. EXAMINATION OF JOURNAL FORMAT THESES

- i. The examination process will be exactly the same as for a traditional thesis. The examiner will be informed that the thesis has been presented as Journal Format and the School/Faculty office will provide them with the links to University guidance and policy documents on thesis submissions and Journal Format. It should be made clear to examiners that there will inevitably be some degree of repetition in the Journal Format thesis due to chapters being self-contained papers and background literature and issues being repeated. Students should not be penalised or asked to correct work on the basis of repetition within journal style chapters.
- ii. A major consideration when preparing a Journal Format Thesis is that the examiners can follow and understand the thesis as a coherent body of work. Students should ensure that their thesis does not lack a full explanation of technical detail and consideration of controls because it is in the publication style format. The examiners will expect the thesis to demonstrate rigour in all aspects of the research. As noted earlier supplementary chapters containing methodological details such as raw data etc. may be included.
- iii. The entire thesis is subject to scrutiny, **including** any peer-reviewed or published papers. The examiners are effectively another set of peer reviewers who are looking at the published papers in the context of the whole thesis. There are often examples where peer-reviewed work contains mistakes, errors or points of contention and so the student may still be required to correct, supplement, or explain all work presented for examination, even if it has already passed through a separate peer review as part of the publishing process.
- iv. It is recommended that supervisors and/or internal examiners speak to the external examiner prior to submission to ensure they are aware of the requirements of submitting a thesis in Journal Format.

8. PUBLICATIONS AND OPEN ACCESS

- i. Students should discuss their 'publication strategy' with their supervisors and check with their Faculty/ School for local discipline –specific guidance, from an early point in the programme. Students would need to consider the journals that they would target for publication of their papers and review their position on prior publication of work. Most publishers do not view work that has appeared in a thesis as 'prior publication' and in these scenarios, the thesis should be made open access, but the viewpoint of each publisher can vary. If in exceptional circumstances, a publisher does consider the thesis as prior publication, advice must be sought from the publisher to determine whether making the thesis open access would impact future publication of the work.
- ii. The access setting on the theses may also be dependent on funder terms and conditions and students should check with their funder whether there are any contractual requirements.