



Guidelines for candidates, supervisors and examiners on the 'PhD by Publication' Format

Background

The format of PhD by publication is now available in most Irish Universities and has been an option across several European countries for many years. However, it has traditionally been favoured in particular disciplines (economics for example), and in particular contexts. More recently, the article-based approach has gained interest across science disciplines.

DCU regulations regarding submissions for a PhD award are given in the *Academic Regulations for Postgraduate Degrees by Research and Thesis*, and they allow for submission in the format of published work with an accompanying document. Candidates considering submitting using this format should consult the regulations as well as these guidelines.

There are several potential advantages of this format of submission for PhD which include dissemination of research results with increased rapidity and frequency, fostering a habit of publishing among doctoral candidates and access to external feedback (through the review process) at stages along a doctoral project. This must be balanced against the advantages of a monograph which more readily supports the development of a sustained argument, with inclusion of a synthesis of the relevant literature and an integrated discussion of the methodology.

The Standard of a PhD

It is important that it is understood that, irrespective of what format is chosen for submission of research leading to a PhD award, the standard by which the work is evaluated remains the same. There is no question of the examination becoming a 'tick-box' exercise whereby a certain number of published papers guarantees the awarding of a PhD.

Examiners will consider the coherence of the work, the appropriateness of methodologies used, the rigour of analysis, the quality of presentation, the significance of the contribution to new knowledge, the candidate's contribution to the various aspects of each publication and the quality of the candidate's defence of the thesis at *viva voce*. While the collection of publications constitutes the main body of the thesis, and is thus immensely important, candidates must be aware that the examiners' judgement of the entirety of the thesis is the sole determinant of the outcome. Even with a collection of publications in high quality journals the thesis overall may be deemed to fall short of the required standard. The accompanying document is also an important element in ensuring that examiners are convinced that the work presented as a whole meets the standard of PhD, especially with regards to articulating the coherence of the work and the role the candidate played in collaborative work.

Decision to submit using the 'by publication' format

The decision to opt for this format should be made jointly by the candidate and the supervisor(s). It is important that supervisors provide guidance with regard to the potential duration of the peer review and publication processes. Doctoral candidates may not have a good understanding of this and be unduly delayed in submitting for the award by deciding to submit in this format.

If possible, candidates should indicate at a relatively early stage that they intend submitting in this format. For most students this means at transfer/confirmation stage; in the case of students directly registering as PhD candidates, at the end of year 2. The transfer/confirmation stage provides an opportunity for the student to report specifically on the current status of publications, outline future plans for publications he/she feels are needed and to provide a summary of what the overview will contain. At the transfer/confirmation process it may also be appropriate for the candidate to consider presenting any report/presentation as part of this process in the "by publication" format, with a suitably sized summary and perhaps with manuscripts rather than published/accepted papers, since the transfer/confirmation process is expected to happen in a timeframe such that the publication process may not have reached the accepted/published stage.

Publications

Publications which can be included are limited to those which are based on work undertaken during the student's period of registration.

Excluded publications are those which essentially report the same data or findings to separate readerships, and conference papers which are not the final dissemination of the work concerned.

While the regulations stipulate that novel contribution should be apparent in at least three of the papers in which the candidate is main or key contributor, there is no 'formula for success' in terms of the number of publications included. The criteria candidates and their supervisors should use in judging whether the number of papers is sufficient are the same as the criteria applied to all PhD submissions, and relate to the substance of the contribution to new knowledge made by the candidate.

Only peer-reviewed published book chapters or papers (or papers accepted for publication) in reputable journals or other peer-reviewed reputable publications for the discipline(s) in question can be included. It is up to the candidate to provide evidence of the standing and peer reviewed status of a publication, perhaps by providing a link to information given by the publisher. However, care should be taken that the depth of examination of work during peer review may vary depending on journal title, audience, conference standing etc. A paper having been peer reviewed does not diminish the examiners' right to judge the overall contribution as falling short of what is required for a PhD award.

The candidate's signed statement of their contribution to the work should be independently verified in all cases. Where possible and practicable this should be done by the principal supervisor and all co-authors signing off on their agreement with the candidate's statement. However, in some cases, due to the number of co-authors, or the nature and/or organisation of

the work, it may be more appropriate for the verification to be given by both the principal supervisor, and by the senior or corresponding author of the work (if that person is external to the university), or by another co-author (external to the university) of the work with a suitable overview of the work and the candidate's contribution thereto. 'Sign-off' in this case may be via electronic means.

Publications are defined as having been "accepted for publication" on the basis that written confirmation from an editor has been received of acceptance of the paper in its final form.

Presentation of the Publications within the Thesis

All published work should appear in manuscript format (rather than as journal-ready files, e.g. the PDF file with full journal formatting), and full citation details for the work including a URL link to the journal and ISSN number, where appropriate, must be provided. (Inclusion of final format PDF copies of the published work in an Appendix to the thesis is problematic due to varying views on copyright issues across different publishers). There does not have to be an exact correspondence between the published and thesis versions though generally it is expected that they will be very similar. Slight variations e.g. due to changes made at galley proof stage may be present, but generally the final accepted manuscript will be the document included. This way of presenting also facilitates noting of corrections and revisions to the papers after examination. These should take the form of separate detailed Appendix to the final thesis document rather than being made to the text of the PhD itself since it will contain articles that have already been published. Corrections to the accompanying document can be made by revising it, in the usual manner for monographs.

In line with university policy, PhD theses submitted in 'by publication' format will be made available on the DCU DORAS electronic repository, subject to the same procedures as monographs. The electronic version has to be exactly the same as the printed version. It is important that any issues relating to Intellectual Property and Copyright are resolved prior to submission of the thesis just as for monograph-format submissions. Candidates submitting for PhD by publication are required to ensure the prior agreement of the journal editor or publishers to the deposit of the published material in the DCU Institutional Repository DORAS¹. An embargo can apply to theses submitted in the PhD by Publication format, as it can for the traditional monograph, should it be necessary to secure agreement of publishers.

External Examiners

These guidelines and the relevant extract from the regulations should be provided to potential external examiners at the first stage of (normally informal) contact, so that they can evaluate whether they are comfortable with undertaking the task of examination of a thesis in this format.

¹ Usually publishers are reluctant to allow PDFs of the final versions of papers etc. into DORAS. However they will usually allow variant/early (e.g. Word) versions. Even the latter depends on publishers, so candidates should seek prior approval from the editor or publisher as appropriate. The following text may be useful, and should be modified to suit the specific context: **'I am contacting you to find out whether you permit articles published in [insert journal name] to be uploaded to DORAS, the non-commercial open access Institutional Repository at Dublin City University, Ireland (<http://doras.dcu.ie>). I would like to submit an article which, if published, would be included in my PhD thesis, and publication in DORAS is required to conform to DCU regulations concerning publication of thesis content.'**