



OLLSCOIL NA GAILLIMHÉ

UNIVERSITY OF GALWAY

College of Arts, Social Sciences, and Celtic Studies Local Guidelines on the Operationalisation of QA245 for PhDs

1. Introduction

QA245, the University Guidelines for Research Degrees, contains information and regulations relevant to *all* research postgraduates at the University of Galway. This document is intended to serve as a local supplement to QA245. As such, it contains additional information specific to the College of Arts, Social Sciences, and Celtic Studies and offers guidance on how University-wide policies and procedures are to be operationalised.

The information in this document applies to both 'Structured' and 'Traditional' PhDs in the College. It is not tailored to address the specifics of NFQ Level 10 'Professional' (taught) PhD Programmes.

'The core of doctoral education' is described as 'deep engagement with a question, problem or hypothesis at the frontier of knowledge, and advancement of this frontier under the guidance of expert and committed supervision' (https://hea.ie/assets/uploads/2017/04/national_framework_for_doctoral_education_0.pdf).

Students who conduct doctoral-level research in the College of Arts, Social Sciences, and Celtic Studies gain the knowledge and tools to make a difference in the wider world, raising novel questions and addressing societal challenges while simultaneously cultivating a wide range of transferable skills. The PhD Graduate Skills Statement of the Irish Universities Association (IUA) usefully showcases the types of transferable skills that PhD students may expect to develop (<https://www.iua.ie/wp-content/uploads/2021/07/IUA-PhD-Graduate-Skills-Statement-2021-final.pdf>).

A great diversity of research methodologies and approaches are employed across the College. Local adaptations of University and College policies are reflected in handbooks and policy documents that contain additional information specific to individual Schools, programmes, and/or disciplinary areas. PhD students and supervisors are therefore advised to also be aware of local norms and resources.

The Structured PhD is a formalised, integrated programme of research, training, and personal and professional development activities. Structured PhDs are standard within the University of Galway and include at least 30 ECTS credits of structured modules and training. This is the format that is promoted in the University's marketing materials. Registration for the Traditional PhD is available on an exceptional basis.

2. PhD Supervision

The roles and responsibilities of PhD supervisors are outlined in detail in QA245. PhD students may have a single supervisor or multiple co-supervisors. In all cases of co-supervision, a primary supervisor must be designated. It is permitted for co-supervisors to be sourced from outside of the institution, where appropriate. Academics should normally refrain from taking on sole supervisory roles when they are within five years of retirement.

Supervisors will meet with PhD students on a regular basis and be responsive to queries either by email or in person. Correspondence between supervisors and students should always adhere to the University of Galway Guidelines on email etiquette (see <https://www.universityofgalway.ie/goodemail/>). The expected frequency and purpose/format of supervisory meetings should be clarified between

supervisors and supervisees; it is anticipated that these aspects will evolve as the student reaches different milestones in the PhD journey.

Newly appointed academics are encouraged to avail of training in PhD supervision as soon as possible after appointment. Suitable training is organised on an annual basis by the Dean of Graduate Studies. There are also workshops available from the Irish Universities Association (IUA). Details of both are available here: <https://www.universityofgalway.ie/graduate-studies/staff/researchsupervision/>.

It is good practice for PhD students to keep records of formal meetings with their supervisor(s). This means that they will be able to trace the history of how their project developed over time. These records may also help to prevent misunderstandings and will assist with reminding both supervisor(s) and supervisee of deadlines agreed, action points to be taken, or issues to follow up. It is up to individual supervisors and supervisees to determine what sort of record keeping system will work best for them. A sample Supervision Record Form that can be potentially used or further adapted by PhD students is available online at: <https://www.universityofgalway.ie/colleges-and-schools/arts-social-sciences-and-celtic-studies/phd-research-degrees/supervisionrecordform/>

3. The Graduate Research Committee

3.1 GRC Membership

Information on the composition of Graduate Research Committees (GRCs) is outlined in QA245. The GRC must be made up of a minimum of three members of academic staff. Supervisors are never members of their own students' GRCs. The GRC may be interdisciplinary and may have more than the minimum three members. In addition, a GRC member may be sourced from outside of the institution, where appropriate. In situations where a supervisor has not yet supervised a PhD to completion, at least one member of the GRC should be an experienced supervisor.

3.2 GRC Procedures

More comprehensive details about the roles and responsibilities of GRCs are provided in QA245. In accordance with this policy, the GRC will meet each PhD student annually, usually in April or May. Normally, these meetings are held in person. A minimum of three GRC members must be present for the meeting, and the supervisor(s) do not attend. If a GRC member is on leave or otherwise unavailable, a replacement GRC member must be sourced to ensure that a minimum of three members are present for all annual meetings. Each GRC will have a designated chair who is responsible for finalising and submitting the annual GS050 form and undertaking other correspondence on behalf of the committee.

Supervisor(s) should make incoming PhD students aware of the identities of their GRC members as early as possible and facilitate introductions, as students may wish to have contact prior to their first annual meeting.

In advance of the annual meeting, both the PhD student and supervisor(s) submit reports (GS030 and GS040, respectively) to the GRC. Along with GS030, the PhD student may be required to submit supplementary documents to the GRC, as locally requested by Schools, programmes, and/or disciplinary areas.

It is normal practice for the PhD student to make a short oral report to the GRC, describing their progress since the last meeting and their plans for the coming year. At the discretion of Schools, programmes, and/or disciplinary areas, this oral report may be delivered in public. All other aspects of the annual GRC meeting process are strictly confidential, and the PhD student should feel free to discuss their relationship with their supervisor(s) or any other sensitive issues affecting progress.

The GRC committee will confirm that the student has completed the requirements for the structured modules for which they are registered and that 30 ECTS of structured modules have been completed by the end of year 3.

Following the annual meeting, the GRC chair submits GS050. GS050 is the only form officially submitted to and held by the College and should therefore incorporate and reflect any information supplied in GS030 and GS040 that the GRC has deemed relevant and significant to record. In addition, the GRC chair liaises with the PhD supervisor(s) and supplies them with a copy of GS050 as soon as possible after the meeting. The chair should endeavour to draw any substantive points or concerns to the attention of the supervisor(s). The PhD student should also receive feedback from the GRC as soon as possible after the annual meeting and must be directly supplied with a copy of GS050.

When annual progress is not as expected, the GRC may request an action plan from the PhD student and/or supervisor(s) to address the situation and the GRC chair will organise timely follow-up meetings, as required.

3.3 *The GRC's Role in Supervisory Changes*

In exceptional cases, a student may wish to change supervisor. It is then the responsibility of the GRC to try to understand and resolve the issues that have arisen, including meeting the supervisor(s) and the PhD student individually. If the issues cannot be resolved, then the GRC should identify an alternative supervisory arrangement. Relevant Head(s) of School must be informed of any supervisory changes. If a new supervisor comes from a different discipline or School, the student's registration data must be updated to ensure that FTEs are allocated correctly. It is crucial that the College be apprised of all changes in supervisory arrangements to ensure that this is accurately reflected in relevant records.

4. **Problem Resolution**

When issues arise that significantly impact the PhD student's research work, they should be addressed as early as possible, preferably in an informal way. The student should, in the first instance, search for solutions locally (i.e. discuss with supervisor(s), followed by GRC, followed by the Head of School and/or the Vice Dean of Graduate Studies). If necessary, the Head of School or Vice Dean of Graduate Studies can decide to escalate an issue to the Dean of the College and/or the Dean of Graduate Studies. PhD students should also be aware of the availability of representatives from the SU, College administrators, Student Counselling and other services. Finally, students have the right to make a formal complaint to the Dean of Students, following University of Galway procedures (<https://www.universityofgalway.ie/media/student-services/files/QA611-NUI-Galway-Student-Complaints-Procedure-1910.pdf>).

5. **PhD Timelines and Milestones**

The full-time Structured PhD degree is designed to be completed within four years and the part-time Structured PhD within six years. In cases where the work continues beyond the expected timeframe, it is recommended that the GRC meet the PhD student more frequently in order to guide them to timely completion.

Schools, programmes, and/or disciplinary areas should develop local guidelines outlining milestones that students are normally expected to achieve in each year of their PhD journey. This information should be included in relevant local handbooks. Appendix 1 contains a sample list of PhD milestones that may be adapted locally in accordance with disciplinary norms and individual circumstances.

6. **Starting the PhD**

6.1 *Orientation*

New PhD students are required to attend all of the following:

- (i) the orientation session organised by the Graduate Studies Office (offered three times per annum)
- (ii) the orientation session organised by the College (offered three times per annum)
- (iii) any additional local inductions organised by Centres/Schools/disciplines/supervisors

6.2 *Registration and Module Selection*

PhD students must register online each academic year. It is the student's responsibility to ensure that they are correctly registered. Students should contact reghelp@universityofgalway.ie if their record is incorrect. Registration guides are available at: <https://www.universityofgalway.ie/registration/how-to-register/>

All Structured PhD students normally complete 30 ECTS of modules within the first three years of their programme. Modules function on a Credit/No Credit basis at PhD level, and numeric marks will not appear on the final degree transcript. Successful completion and examination of the research is the basis for the award of the degree.

The University Marks and Standards for Structured PhDs can be found here: <https://www.nuigalway.ie/media/registry/exams/QA236-Marks-and-Standards-for-Postgraduate-Taught-Masters-Programmes-June-2021.pdf>

GS535 Induction and Professional Development is a core 5 ECTS module for Structured PhD students in the College, and all programmes should treat it as such unless a derogation has been granted. Students select additional modules in consultation with their supervisor(s) and GRC in line with any other local requirements. Module registration is online and is completed by the student.

Further information on PhD module selection is available here: <https://www.universityofgalway.ie/colleges-and-schools/arts-social-sciences-and-celtic-studies/phd-research-degrees/structured-phd/selectingphdmodules/>

6.3 *Personal Development Plans*

Each incoming PhD student will develop a Personal Development Plan (PDP) and review it with their supervisor(s). The PDP is put in place during the PhD student's first year of registration and must be completed prior to the first GRC meeting. Please note that many funders now require the completion of a PDP within the first six months of a PhD student's registration.

The PDP is a living document that should be reviewed and updated annually. Compliance is monitored via the GRC process. Relevant workshops and other resources on PDPs are available from the Researcher Development Centre, and all students registered in GS535 Induction and Professional Development will receive training.

In instances where students are not registered for GS535 Induction and Professional Development (e.g. because they are pursuing a Traditional PhD), it is the responsibility of the supervisor(s) to ensure that they are aware of and engage with training opportunities and materials. A Guide to Personal Development Planning and a PDP template can be found on the Researcher Development Centre portal ([https://nuigalwayie.sharepoint.com/sites/rdc/SitePages/Personal-Development-Planning-\(PDP\).aspx](https://nuigalwayie.sharepoint.com/sites/rdc/SitePages/Personal-Development-Planning-(PDP).aspx)).

This PDP requirement comes into effect for all new PhD students registering in the 2023-24 academic year and thereafter. PhD students who began their studies prior to the 2023-24 academic year are not strictly required but are nonetheless strongly encouraged to develop a PDP.

6.4 *Research Integrity Training*

'Research Integrity relates to the performance of research ... to the highest standards of professionalism and rigour, and to the accuracy and trustworthiness of the research record in publications and elsewhere' (<https://library.nuigalway.ie/openscholarship/researchintegrity/>).

All PhD students are required to complete training in Research Integrity during their first year of registration. This requirement must be fulfilled prior to the first GRC meeting, and compliance is monitored via the GRC process. All students who successfully fulfil the requirements for GS535 Induction and Professional Development will complete this training. In instances where students are not registered for GS535 Induction and Professional Development (e.g. because they are pursuing a

Traditional PhD), it is the responsibility of the supervisor(s) to ensure that they are aware of and engage with an appropriate training option.

This requirement may be satisfied in any one of the following ways:

- (i) successful completion of the 5 ECTS module GS5110 Research Integrity
- (ii) submission of a certificate demonstrating the successful completion of core modules 1-8 from Epigeum's online training course on Research Integrity (for access to this online course, please email researchintegrity@nuigalway.ie)

This Research Integrity training requirement comes into effect for new PhD students registering in the 2023-24 academic year and thereafter. PhD students who began their programme of study prior to the 2023-24 academic year are not strictly required but are nonetheless strongly encouraged to engage with Research Integrity training opportunities.

7. The 'Mini-Viva'

All PhD students are required to undergo a 'Mini-Viva' process within two years of initial registration. This 'Mini-Viva' is organised and conducted by the GRC. Individual Schools, programmes, and/or disciplinary areas have the discretion to decide the point within the first two years at which the 'Mini-Viva' will be held, noting that practice should be consistent for all PhD students in that School, programme, and/or disciplinary area.

The 'Mini-Viva' process involves the PhD student's advance submission of written work. The nature of this written submission is locally determined by the relevant School, programme, and/or disciplinary area, with specifications communicated to the PhD student at the programme's outset and clearly articulated in relevant handbooks. Normally, the written submission will take one of the following forms:

- (i) A 'Mini Viva' report (Appendix 2 contains a brief description of the components that might be included in such a report)
- (ii) A written submission of another nature (e.g. literature review or thesis chapter), as determined by and appropriate to the discipline

This submission of written material is complemented by the PhD student's oral delivery of a formal presentation on their project's overarching aims, approach, and design. This presentation may be held in public (e.g. as part of a Graduate Research Day event). The oral presentation must be followed by a substantive question period (i.e. 'examination'). This format will allow GRC members to meaningfully engage with and offer constructive commentary on various aspects of the PhD student's preliminary research plans. The recommended duration of a 'Mini-Viva', including both the formal presentation and the question period, is a minimum of 30 and a maximum of 45 minutes.

By agreement, a 'Mini-Viva' may optionally replace one annual GRC meeting, provided that the PhD student is additionally offered the opportunity to confidentially discuss any other concerns arising with the GRC, should they so desire. In cases where the 'Mini-Viva' is replacing an annual GRC meeting, the completion and submission of GS030, GS040, and GS050 remain compulsory.

The 'Mini-Viva' process will help the PhD student to confirm that they:

- (i) have a clearly defined and realistically scoped research plan and schedule
- (ii) are aware of relevant literature and methodologies
- (iii) have demonstrated capability to conduct independent research to a high standard

This 'Mini-Viva' requirement comes into effect for new PhD students registering in the 2023-24 academic year and thereafter.

8. Article-Based Theses

8.1 *Overview*

In some Schools, programmes, and/or disciplinary areas, the PhD thesis may be based on published articles. An article-based thesis will be no less rigorous academically than a monograph-style thesis and should still not exceed 80,000 words as per University of Galway norms.

In line with QA245, only articles based on research that has been undertaken by the student while registered for the PhD are admissible.

The decision of a student to avail of this thesis format, where available, should be made early in the PhD in accordance with the norms of the discipline and with the agreement of the supervisor(s) and GRC.

8.2 *Relevance to Disciplines within the College*

It is recognised that article-based PhDs are not equally relevant to all Schools, programmes, and/or disciplinary areas within the College. Certain disciplines or sub-disciplines are more likely to encounter greater take-up of this format among their doctoral students. There is no obligation on any School, programme, and/or disciplinary area within the College to offer article-based PhDs or to promote the article-based format over the more traditional c. 80,000-word monograph-style thesis format.

8.3 *The Number and Status of Required Publications*

A minimum number of articles, based on disciplinary norms, should make up the core of an article-based PhD thesis:

- (i) In **Geography, Psychology, and Education**, a minimum of two articles must have been accepted for publication by highly regarded peer-reviewed journals relevant to the discipline in question, with a third article submitted for review.
- (ii) In **Political Science and Sociology** and **Journalism and Communication**, a minimum of three articles must have been accepted for publication by highly regarded peer-reviewed journals relevant to the discipline in question.
- (iii) In **Archaeology**, a minimum of two single-authored articles must have been accepted for publication by highly regarded peer-reviewed journals relevant to the discipline in question, with a third single-authored article submitted for review.

In any cases where articles have been jointly authored, the PhD candidate must be credited as the primary author and must be capable of clearly demonstrating the substantial extent of their individual contribution.

All articles must be of excellent quality. In the case of any materials accepted for but still pending publication, the student's supervisor(s)/GRC must be able to verify that the manuscript has passed all stages of the peer review process.

8.4 *Required Contextual Material*

In addition to copies of the requisite number of articles, the submitted PhD thesis is expected to include all of the following contextual elements, subject to disciplinary norms:

- (i) a thorough critical review of previous scholarship and literature on the topic
- (ii) a chapter locating the candidate's work within the existing scholarship, which will explicitly articulate the key research question(s) addressed by the candidate and the chosen methodology/theoretical framework, as appropriate
- (iii) a concluding chapter, which draws the substantive material in the articles together so as to demonstrate their coherence and the full extent of their contribution to knowledge
- (iv) in the case of jointly-authored papers, precise information about the candidate's contribution to the authorship and content
- (v) a full bibliography

The final format and contents of the thesis must be agreed between the student, the supervisor(s) and the GRC.

8.5 *Supporting or Supplementary Material*

As appropriate to the discipline, the PhD thesis may be supported by appendices consisting of, but not limited to, the following kinds of information:

- (i) databases of key evidence
- (ii) lists and examples of archival material consulted
- (iii) research questionnaires, such as those used in the social sciences
- (iv) statistical analyses of full data sets

Such detail is often inappropriate in the context of a journal, where word counts are at a premium, but are essential in the context of a PhD thesis for a PhD.

8.6 *Local Guidelines*

Any Schools, programmes, and/or disciplinary areas within the College permitting the submission of article-based PhD theses as an alternative to traditional monograph-style theses must provide students with written information on local guidelines (e.g. in the relevant handbook).

8.7 *Special Considerations Regarding Examiners*

The external examiner must be fully informed and supplied with written copies of the local guidelines that apply to article-based theses.

During the viva, close attention should be paid to the nature and quality of the articles, and in the case of jointly-authored material, to the student's role in it. It must be emphasised that examiners retain final judgement on the quality of the thesis.

9. **Practice-Based Theses with Non-Traditional Outputs**

9.1 *Overview*

In some Schools, programmes, and/or disciplinary areas, PhD research may be practice-based. Doctoral education by practice-based research provides students with an opportunity to engage professionally with their area of practice. Expectations and requirements for practice-based PhDs vary considerably across disciplines, particularly with reference to the function of the practice-based element and the format of the final thesis submission.

In some cases, practice-based PhDs may culminate with the examination of a traditional monograph-style PhD thesis (sometimes considered in tandem with a professional portfolio or similar). In other instances, the thesis submitted for examination will itself take a non-traditional format. It is the latter type of thesis that this section addresses: that is, instances in which **the thesis submitted for examination deviates significantly from a c. 80,000-word monograph-style thesis**. Practice-based theses falling into this category are most commonly found in digital humanities and/or the creative arts, broadly defined, but they may also be appropriate in other domains. In such instances, the PhD student's original contribution is demonstrated by a combination of outputs, including a substantive critical component and one or more additional elements that may include images, music, designs, models, digital media, text-based works, films, performances, exhibitions, or other non-traditional outputs, as appropriate to the discipline. A practice-based thesis submission that includes non-traditional outputs will be no less rigorous academically than a monograph-style thesis.

In line with QA245, only practice-based research that has been undertaken by the student while registered for the PhD is admissible.

The decision of a student to avail of a non-traditional practice-based thesis format, where available, should be made clear at the time of the student's application to and acceptance on the PhD programme. In many Schools, programmes, and/or disciplinary areas, it is standard for such practice-based PhD projects to be co-supervised.

9.2 *Relevance to Disciplines within the College*

It is recognised that practice-based PhDs are not equally relevant to all Schools, programmes, and/or disciplinary areas within the College. Certain disciplines or sub-disciplines are more likely to encounter greater take-up of this format among their doctoral students. There is no obligation on any School, programme, and/or disciplinary area within the College to offer practice-based PhDs or to promote an alternative practice-based thesis format involving non-traditional outputs over the traditional monograph-style thesis format.

9.3 *Critical Component and Contextual Material*

The inclusion of a written critical component is mandatory in instances where a practice-based PhD will include non-traditional outputs among the materials submitted for examination. Norms vary across Schools, programmes, and/or disciplinary areas, but it is anticipated that this critical component will typically situate and appraise the literature, processes, and methods relevant to the project and provide a discursive analysis of the practice-based element(s). This ensures that the PhD student is able to effectively showcase doctoral-level analytical skills and demonstrate their mastery of contextual knowledge in a form that is accessible to and auditable by knowledgeable peers.

The length of the critical component is normally between 30,000-50,000 words, with a precise quantity established for each PhD student in accordance with the norms of the discipline (as outlined in College-approved local guidelines) and the demands of the particular project proposed. Expectations are established for each individual PhD project with the agreement of the supervisor(s) and GRC. Once established, the length of the critical component may only be revised only with the explicit approval of the supervisor(s) and GRC.

It is expected that practice-based PhD theses involving non-traditional outputs will include most or all of the following contextual elements, subject to disciplinary norms and the particulars of the project:

- (i) a thorough critical review of previous scholarship and literature on the topic
- (ii) a chapter locating the candidate's work within the existing scholarship, which will explicitly articulate the key research question(s) addressed by the candidate and the chosen processes/methodology/theoretical framework, as appropriate
- (iii) a discursive analysis of the practice-based element of the project
- (iv) a full bibliography
- (v) supporting or supplementary materials related to the practice-based project (which may include copies of or documentation relating to creative outputs)

The final format, contents, and substance of the thesis must be agreed between the PhD student, the supervisor(s) and the GRC.

9.4 *Local Guidelines*

Any Schools, programmes, and/or disciplinary areas within the College permitting the submission of practice-based PhD theses with non-traditional outputs as an alternative to monograph-style theses must provide students with written information on local guidelines (e.g. in the relevant handbook). These local guidelines must be College-approved (for currently approved guidelines, see Appendix 3).

9.5 *Special Considerations Regarding Examiners*

In those cases where the viva examines both the practice and the research, it may sometimes be appropriate for a leading professional in the field of practice to act as joint examiner with a leading

scholar. Any external examiner(s) must be fully informed and supplied with written copies of the local guidelines that apply to practice-based theses.

In instances where the practice-based element of the work is performance-based or otherwise ephemeral in nature, it is recommended that the examiner(s) be appointed six to eighteen months before the expected submission date of the thesis in order to allow them to engage fully with the project.

It must be emphasised that examiners retain final judgement on the quality of the thesis.

Appendix 1

Sample PhD Milestones for Local Adaptation

Schools, programmes, and/or disciplinary areas should develop local guidelines outlining the milestones that students are normally expected to achieve in each year of their PhD journey (with the understanding that the timing—and, indeed, the relevance—of these milestones will vary according to the particulars of each student’s research project). Information on anticipated milestones should be included in local handbooks.

The following list suggests some sample PhD milestones that may be adapted in accordance with disciplinary norms and individual circumstances.

Year 1

- Establish supervisor and supervisee expectations.
- Begin completing the 30 ECTS of modules/training required for the Structured PhD.
- Complete Research Integrity training.
- Deepen understanding of the ‘problem’ or key issues around the research.
- Narrow and refine the research topic and question(s).
- Create an overarching project plan, including setting objectives for each stage.
- Assess training needs and knowledge required to undertake the research project.
- Agree the Personal Development Plan.
- Situate the project within wider scholarly conversations, typically via a literature review.
- Identify and learn to use relevant methodologies, resources, techniques, and equipment.
- Develop an outline of how the data for the project will be collected and the timelines envisaged.
- Gain ethics approval (where required).

Year 2

- Demonstrate effective project management through the setting of interim research goals and prioritisation of activities.
- Review training needs and knowledge required to continue with research project.
- Update the Personal Development Plan.
- Continue completing the 30 ECTS of modules/training required for the Structured PhD.
- Complete the initial stages of fieldwork/data collection.
- Show clear evidence of progress towards submission (e.g. X% of thesis written, as appropriate to the discipline).
- Complete the ‘Mini-Viva’ process (if not previously completed in Year 1).

Year 3

- Demonstrate effective project management through the setting of interim research goals and prioritisation of activities.
- Review training needs and knowledge required to continue with research project.
- Update the Personal Development Plan.
- Finish the 30 ECTS of modules/training required for the Structured PhD (if not previously completed in an earlier year).
- Complete fieldwork/data collection.
- Reflect upon and evaluate collected data.

- Show clear evidence of progress towards submission (e.g. X% of thesis written, as appropriate to the discipline).
- Disseminate research findings.

Year 4

- Demonstrate effective project management through the setting of interim research goals and prioritisation of activities.
- Update the Personal Development Plan.
- Complete drafting and polishing of all thesis chapters.
- Disseminate research findings.
- External examiner selected.
- Internal examiner selected.
- Submission date agreed.
- Viva examination scheduled.

Appendix 2

Mini-Viva Report: Suggested Guidelines

The following contains a brief description of some of the components that might normally constitute a Mini-Viva Report. It is only applicable in those instances where a School, programme, or discipline requires a report of nature this as the written submission for a 'Mini-Viva'. Please note that the following should be regarded as guidelines only.

A Mini-Viva Report will typically comprise approximately 5,000 words (plus figures, with extra information included in appendices).

Title: Should be exact, concise and clear to attract the intended readers. It should identify the general area of research and contain no secondary details.

Abstract: This is a short summary of research. It should briefly:

- (i) state the research problem and objectives
- (ii) describe the methodology and techniques used in the solution

An abstract should:

- be limited in length (normally 100-200 words)
- be self-contained (since it may be used for databases and summaries)
- not include unnecessary detail (the place for this is elsewhere)
- be drawn completely from the report

A person reading the abstract should be able to quickly identify the area of research covered by the report and decide whether the work is relevant to their own research/problem.

Introduction: This introduces the research by briefly:

- (i) Giving the context of the research problem (background)
- (ii) Establishing the relevance of the research (rationale) by:
 - reviewing relevant previous research (literature review)
 - emphasising the importance of the research area
 - specifying the potential benefits of the research
- (iii) Defining the research problem (problem statement) by one or more of the following:
 - highlighting a gap in the research area
 - posing a new research problem whose solution is unknown
 - continuing, by generalising, relaxing assumptions, or furthering, previously developed research
 - proposing alternative, perhaps simpler, solutions to current research problems
- (iv) Proposing a solution by:
 - outlining the steps taken to develop the solution (objectives)
 - setting out clearly the assumptions used to obtain the solution
 - outlining the aspects of the research area that will not be covered (scope)
 - presenting the research methodology
 - outlining the structure of the report

A person reading the introduction should be able to situate the research problem, be convinced of its importance, be aware of the problem statement - including any assumptions - and the techniques used in the solution, and should understand the contribution of the report.

Literature Review: This is an evaluation of relevant and significant existing research. It shows the relationships between different work and how it relates to the research problem at hand. It may include a few key publications and survey papers and should:

- demonstrate the importance of the author's research area
- place the author's research in the context of other ongoing research
- emphasise the author's contribution by highlight the shortcomings, unrealistic assumptions or other limitations of existing research
- be organised by ideas and not by authors or publication dates

Sources may include journal articles, books, conference proceedings, corporate reports, internal reports, correspondence, theses, Internet, CD-ROM, newspapers and magazines. Library staff can help you find the relevant material. They are experts in how to do a literature search.

Current Research: This forms the bulk of the report and carries out in detail points 3 and 4 mentioned in the introduction. It should include initial research directions and findings, simulation and experimental results and evaluation of existing techniques. The main purpose is to convince the examiner that the student is capable of doing original and significant research work at PhD level.

Research Plan: GRC members understand that the bulk of the student's research contribution occurs in the latter stages of a PhD programme. This section of the report should include a clear statement of the task that remains and give target dates by which specific milestones will be achieved.

Conclusions: This section should include

- Short and concise statements about the main findings of the research (conclusions)
- A summary of the specific contributions of the report, including any shortcomings, work which remains to be completed or issues which remain unresolved (contribution)

References: These are closely tied to the literature review and must all be referred to in the report. They are normally organised alphabetically by author surname, or, less frequently, by order of citation in the report. Library staff can show you how to cite your references.

Appendices: These include any necessary material that may impede the smooth presentation of the report. Examples include computer codes, large tables or figures, tedious or lengthy mathematical proofs, etc.

Appendix 3
College-Approved Local Guidelines
for Practice-Based PhD Theses with Non-Traditional Outputs

[INFORMATION TO FOLLOW]