

Indicators for Success in Higher Degree Research

The Indicators for Success in Higher Degree Research have been developed for the information and use of Higher Degree Research (HDR) candidates at James Cook University. Each HDR candidate needs to develop the skills, knowledge and attitudes to prepare and submit a body of work that complies with the standards of their College and the University. In order for this development to occur, candidates need to be independent learners, who take responsibility for their work.

These Indicators will help the HDR candidate to prepare for and work towards the submission of their thesis. Each of the Indicators is activity-based. However, each of these activities presupposes underlying knowledge and skills that will help the candidate complete their thesis successfully.

It should be noted that not every candidate will, or should, choose to complete every activity. It should be stressed that each HDR candidate should review these indicators in light of their own circumstances, and in conjunction with their advisors, to ascertain exactly what personal development is needed to promote the successful completion of their thesis. It should also be noted that the order of each Indicator does not necessarily indicate chronological order, or relative importance of the activity.

1. Develop research proposal

- 1.1 Identify research topic
- 1.2 Generate specific research questions.
- 1.3 Work with your Advisory Panel to develop a research design that is consistent with your research questions and achievable within specified timeframes and that will produce robust conclusions.
- 1.4 Discover sources of research funding, resources and other opportunities that may enhance your research.
- 1.5 Identify, evaluate and master sources of information for your literature review which is normally your substantive piece of written work for RD/RM7002.
- 1.6 Specify and select sources of data/evidence.
- 1.7 Select appropriate methods of treating data/evidence and/or theoretical approaches to provide a framework for interpretation.
- 1.8 Indicate possible or likely conclusions that may be drawn from the analysis, if appropriate to research method selected.
- 1.9 Evaluate your research plan according to criteria that are ethical, coherent and meaningful
- 1.10 Prepare an argument that discusses the significance of your research and the contribution to knowledge that should occur.
- 1.11 Develop a research proposal in consultation with your advisors.
- 1.12 Present your research proposal to an Expert Reviewer for assessment prior to confirmation.
- 1.13 Revise your proposal in the light of the comments received.
- 1.14 Present your proposal at your Confirmation of Candidature seminar (see COC-FORM-01 HDR Confirmation of Candidature Form for RD7001 'Planning the Research' which can be found at: <https://www.jcu.edu.au/graduate-research-school/formstemplates>)
- 1.15 Revise your proposal in the light of the comments received.

2. Collect, organize and analyse information

- 2.1 Search library catalogues and electronic databases for journals, topics, and authors for general and specific time periods.
- 2.2 Use search engines on the internet to identify sources of information.
- 2.3 Maintain records of information sources.

- 2.4 Cite and reference all information sources in text.
- 2.5 Use references to support arguments.
- 2.6 Evaluate literature critically to guide and enrich argument.
- 2.7 Collect data adopting sound ethical procedures.
- 2.8 Collect data using sound sampling procedures that are appropriate for your research questions, theoretical approach, and/or methodology.
- 2.9 Analyse data in a way that generates or tests theory or hypotheses.
- 2.10 Draw conclusions that add to the body of existing knowledge in area of research questions.
- 2.11 Maintain all research data in a secure and readily accessible form according to University and College requirements.
- 2.12 Maintain records of analyses of data that include all the features of the analyses, and the relationship of analyses to overall research.
- 2.13 Draw robust, coherent and reasonable conclusions from the data analysis.

3. Communicate ideas and information

- 3.1 Generate a credible grant/scholarship application suitable to procure funding as required.
- 3.2 Present seminars to disseminate research to academic audiences.
- 3.3 Discover, attend and present at conferences and other public forums
- 3.4 Listen to and evaluate objectively other people's feedback and suggestions.
- 3.5 Explain research methods succinctly to others as needed.
- 3.6 Provide constructive feedback and questions at other people's presentations or after reading other people's written work.
- 3.7 Participate in university and College committees to enrich the academic environment while learning in a university setting.
- 3.8 Prepare papers describing research for academic and other journals in appropriate style.

4. Use appropriate technology

- 4.1 Use an appropriate word processing package to take advantage of features that facilitate the production of thesis or dissertation.
- 4.2 Use appropriate applications and devices to capture, store, retrieve, sort, classify, and analyse data.
- 4.3 Use a bibliographic package to store, sort, and manipulate records of reference sources.
- 4.4 Use email and bulletin boards to network with colleagues in your own and related research areas.
- 4.5 Use the Internet to locate additional reference sources, appropriate academic forums, and to publicise own research.
- 4.6 Use presentation software to produce visual and multimedia aids to present research findings in academic and other forums.
- 4.7 Develop and adopt appropriate backup routines to protect research files.
- 4.8 Establish and maintain virus protection procedures.

5. Plan and organise research and other activities

- 5.1 Identify and plan milestones during progress of thesis.
- 5.2 Revise these milestones at regular intervals.
- 5.3 Plan daily, weekly and monthly activities.

- 5.4 Stay current regarding literature in the area of research activity.
- 5.5 Keep up to date with regard to resources available in university and community related to research.
- 5.6 Organise, prepare for and attend regular meetings with advisor(s).
- 5.7 Learn and comply with University policy on Higher Degree Research candidates e.g. [Handbook for Commencing Higher Degree by Research \(HDR\) Candidates and their Advisors](#) , [Research Ethics and Integrity](#).
- 5.8 Submit required applications for ethics and other approvals in an accurate and timely manner.
- 5.9 Obtain, complete and submit relevant forms for annual review of progress, funding and any other documentation required for enrolment or to progress thesis.
- 5.10 Organise required resources for research activities, eg equipment.
- 5.11 Review thesis/dissertation progress regularly
- 5.12 Undertake safety training appropriate to your research.
- 5.13 Develop a program of generic skills training and / or formal coursework relevant to the demands of your project and career aspirations with your advisors and implement this plan. (See HDR Skills Audit and Plan <http://www.jcu.edu.au/grs/forms/>)

6. Interact with others

- 6.1 Negotiate and manage your relationship with your Advisory Panel.
- 6.2 Attend research seminars and other research training activities regularly.
- 6.3 Participate in College, research-related activities.
- 6.4 Network with liaison librarian, Associate Dean, Research Education, the HDR Administrator in your college, and other relevant University personnel to ascertain their roles and functions as relevant to need.
- 6.5 Seek out external agencies and individuals to elicit their involvement where needed.
- 6.6 Seek and utilise opportunities to learn about general academic and specific university contexts.
- 6.7 Discuss research with other HDR candidates, academic staff and fellow researchers.

7. Prepare thesis / dissertation

- 7.1 Plan the layout and content of thesis.
- 7.2 Adopt academic conventions of report writing.
- 7.3 Apply criteria to evaluate your thesis writing.
- 7.4 Produce a thesis related to research questions in an appropriate academic style and within the word limits required by the University.
- 7.5 Read the instruction given to examiners in your discipline and make consequential changes to your thesis.
- 7.6 Ensure that your thesis is of a high editorial standard and appropriately referenced.
- 7.7 Ask a person other than your advisors to check the final thesis before submission.
- 7.8 Discuss a pool of potential examiners with your advisors.
- 7.9 Advise your advisors and the Graduate Research School in writing of the name of any person you do not wish to be approached to examine your thesis.
- 7.10 Discuss the option of an oral examination with your advisors.
- 7.11 Prepare and present your thesis in electronic format.
- 7.12 Ensure that all of your thesis carries the central hypothesis or hypotheses.

“The indicators are based on those developed by Paddy O’Toole of the School of Education at Flinders University.”