

ROYAL ROADS UNIVERSITY

Thesis Handbook

School of Education and Technology

Office of the Vice-Provost, Graduate and Interdisciplinary Studies

*This handbook is in effect for MALAT and MAHEAL students
beginning their programs of study on or after 1 April 2019*

Updated 16 January 2020

This handbook provides standardized Royal Roads graduate studies guidelines as well as supplemental information on the thesis process specific to a degree program. Royal Roads policies and regulations take precedence over program guidelines. Individual program may adopt requirements that are stricter, but not less strict, than the university's requirements governing the thesis process.

Table of Contents

Royal Roads Theses	2
Thesis Oversight	2
SharePoint.....	3
Thesis Assessment	3
Thesis Defence	4
Defence Recommendations	5
Publication Requirement	6
Ethical Review Process.....	6
Intellectual Property	6
Copyright.....	7
Copyright Permission Form Letter	8
Privacy.....	9
Role and Responsibilities	9
Role of the Thesis Coordinator	9
Role of the Thesis Supervisor.....	9
Role of the Second/Third Committee Member(s)	10
Role of the Student.....	10
School of Education and Technology Thesis Requirements	11
Applying to the SET Thesis Track.....	11
SET Thesis Track Adjudication.....	12
Program Learning Outcomes Demonstration	12
Thesis Proposal	12
Thesis Proposal Components.....	13
The Thesis	13
Length & Style	13
Organization.....	13
SET Thesis Assessment Criteria.....	16
Appendix 1 MAHEAL Learning Outcomes	18
Appendix 2 MALAT Learning Outcomes	19
Appendix 3 SET Thesis Track Timelines	20

Royal Roads Theses

Royal Roads University defines a thesis as follows:

A thesis is a systematic study of a significant problem, issue, or phenomenon. The thesis demonstrates the ability to analyze existing research, collate or collect data and apply it in the context of an existing problem, issue, or opportunity. The result is a synthesis of theoretical and empirical information and/or recommendations for further action. The thesis identifies a problem or issue, states the research question, identifies major assumptions, explains the significance for the undertaking, grounds the research in relevant literature, sets forth the methods of gathering information, analyzes the data and offers a conclusion or recommendations based on the data and theoretical framing. Appropriate quality standards such as validity, reliability, or authenticity must be consistent with the selected research tradition and evident in tool development and data collection. The finished thesis evidences critical and independent thinking, subject expertise, appropriate organization and format, and thorough documentation. The thesis should constitute approximately 400 hours of effort by the student resulting in the awarding of 12 credits.

A Royal Roads thesis will be evaluated on the characteristics articulated above.

Thesis Oversight

Oversight by a Thesis Supervisory Committee, including a supervisor normally qualified at the doctoral level and demonstrating relevant competencies of content and methodology, is required. A written review by an external academic examiner and a public defence are also required.

Each Thesis Supervisory Committee must be approved by the Vice-Provost, Graduate and Interdisciplinary Studies in consultation with the School Director, Dean, and the Vice President Academic and Provost as required. Each Thesis Supervisory Committee must be comprised of a minimum of two and a maximum of three committee members; the Thesis Supervisor counts as one of these members. Normally, all Thesis Supervisory Committee members would hold a doctorate, but in exceptional circumstances, individuals with extensive practitioner experience who are recognized as an expert in the field would be eligible to serve as a supervisor or committee member. At a minimum, one of the Thesis Supervisory Committee members must hold a doctorate. Nominations for supervisors and committee members who are not full-time Royal Roads faculty will be reviewed and approved by the program's thesis coordinator and the Vice-Provost, Graduate and Interdisciplinary Studies; at least one of the Thesis Supervisory Committee members must be an adjunct, associate or full-time faculty member at Royal Roads. Once approved, supervisors and committee members will retain active status with the university unless performance feedback warrants review or termination of such status.

Depending upon the program, students recruit, select from a pre-screened list of faculty, or are assigned a thesis supervisor and second committee member.

The Office of the Vice-Provost, Graduate and Interdisciplinary Studies, oversees the master's thesis process at Royal Roads. All students, staff, thesis coordinators, supervisors, and other committee members must use the university's SharePoint site maintained by the Office of the Vice-Provost, Graduate and Interdisciplinary Studies to submit forms and documents for committee nomination, proposals, progress reports, and final manuscripts.

SharePoint

All milestones of a thesis are submitted to and processed for review and approval via the SharePoint site managed by the Office of the Vice-Provost, Graduate and Interdisciplinary Studies. It is the students' responsibility to familiarize themselves with the navigation of SharePoint and consult the guidance that is provided. The SharePoint site contains user guides, the programs' thesis handbooks, the defence scheduling request form, and the required template for the thesis title page. SharePoint is accessible via the Master's Thesis website: <http://research.royalroads.ca/masters-thesis-process>.

Thesis Assessment

A full draft of the thesis must be submitted to the Thesis Supervisor by the agreed upon date. Once the Thesis Supervisor has approved the full draft, the student or the supervisor will submit the full draft to the other Thesis Supervisory Committee member(s). Once all revisions have been addressed, the student will submit the final full draft via SharePoint to the Thesis Supervisory Committee for formal approval. Students are required to revise a thesis until it meets the Thesis Supervisory Committee's standards; this process may delay graduation.

A program's thesis coordinator will nominate an external examiner to the Vice-Provost, Graduate and Interdisciplinary Studies after consultation with the student and the Thesis Supervisory Committee. External examiners must have an arm's length relationship with the student and members of the Thesis Supervisory Committee, meaning that the examiner should not have had a personal or collaborative professional relationship with the student or the Thesis Supervisory Committee members in the last five years. The examiner must have a doctorate in a related area of study. Current Royal Roads associate and adjunct faculty do not meet the arm's length criterion.

To ensure the integrity of the examiner process, students, Thesis Supervisory Committee members, thesis coordinators and the Faculty deans should not directly contact potential or confirmed external examiners. All communication with potential or confirmed examiners is executed by the Office of the Vice-Provost, Graduate and Interdisciplinary Studies. Nominations are submitted via SharePoint and contain the suggested examiner's name, email address, and link to an online profile or institutional website. Nominations can occur at any time during the student's thesis process but the student, Thesis Supervisory Committee and thesis coordinator should keep in mind that the external review process usually takes 3-4 weeks.

The Office of the Vice-Provost, Graduate and Interdisciplinary Studies retains the authority to reject a recommended external examiner based upon a real or perceived conflict of interest which has not been anticipated in the existing criteria.

The external examiner submits a written recommendation and report to the Office of the Vice-Provost, Graduate and Interdisciplinary Studies, who will review the report and recommendation and circulate it to the student, the Thesis Supervisory Committee, and the thesis coordinator prior to the defence. The external examiner does not participate in the public defence.

Thesis Defence

At the oral defence, the student must successfully defend the contents of the thesis, demonstrate a comprehensive understanding of research methods appropriate to the topic and fields of study, and demonstrate relevant knowledge of the literature in the field(s).

Once the student has obtained formal final approval for the thesis from the Thesis Supervisory Committee in SharePoint, the student needs to complete the Thesis Defence Request form available on SharePoint and submit it to the Theses and Dissertations Coordinator. Students should schedule their defence one month in advance. It is the student's responsibility to determine the availability of the Thesis Supervisory Committee members. Defences are only scheduled during regular working hours. The Theses and Dissertations Coordinator will schedule the room and teleconferencing equipment in consultation with the student. The defence date and time will be announced on the university's website.

The Office of the Vice-Provost, Graduate and Interdisciplinary Studies, assigns a faculty member to chair the defence. The chair cannot be a member of the Thesis Supervisory Committee. The role of the chair is limited to chairing the defence, introducing the process and the participants, ensuring that all aspects of the academic regulation governing the defence are observed, and confirming the post-defence process steps for those present at the defence. The chair does not ask subject-specific questions. The chair reports the results of the defence to the Office of the Vice-Provost, Graduate and Interdisciplinary Studies, which records the defence outcome in SharePoint. Defences may not be video- or audio-recorded by participants.

Defences are scheduled for a 90-minute period. Each defence normally begins with a land acknowledgement and introduction by the chair, followed by a 15- to 20-minute presentation by the student summarizing the major findings. The defence takes place in two rounds of questioning. In the first round (20-25 minutes), Thesis Supervisory Committee members ask questions of the student in a one-on-one basis, with the Thesis Supervisor going last. In the second round (20-25 minutes), all members of the Thesis Supervisory Committee may participate in the questions. When all questions by Thesis Supervisory Committee members are exhausted, and if there is sufficient time in the second round, members of the public may ask questions, as moderated by the defence chair.

When both rounds of questions have been completed, the student and any guests or members of the public will leave the room or log out of conferencing while the Thesis Supervisory Committee

determines whether the thesis and the defence are acceptable. At that time, the Thesis Supervisory Committee decides by majority vote on one of the five recommendations. The examiner's recommendation counts as one of the votes. In the event that the Thesis Supervisory Committee's decision is not unanimous, the majority (50% + 1) will prevail, including the examiner's recommendation. After the Thesis Supervisory Committee has reached a decision, the defence chair will invite the student to return to the room or log back in to conferencing. The Thesis Supervisor, with only the Thesis Supervisory Committee members and the defence chair present, will inform the student of the adjudication results.

Defences are public but given space limitations and video/audio-conferencing quality considerations, the following restrictions apply:

- (1) Members of the public and guests are restricted to virtual attendance; exceptions require prior consultation with the Dean's office scheduling the event;
- (2) Members of the public and guests may participate in the questioning only in the second round, if time permits, and upon permission of the chair;
- (3) Members of the public and guests must set their microphones to mute to avoid audio disruption unless they are speaking;
- (4) Members of the public and guests must enter the defence session/proceeding 5 minutes in advance of its scheduled start time and cannot exit and re-enter;
- (5) Members of the public and guests may be asked to leave/log out by the chair if their presence becomes disruptive to the defence proceedings;
- (6) Members of the public and guests must leave/log off before the Thesis Supervisory Committee deliberates on the outcome of the student's defence.

Defence Recommendations

Recommendation 1: *Thesis Acceptable, Oral Defence Acceptable.* Outright pass; minor copy-editing revisions to be reviewed and approved by the Supervisor post-defence.

Recommendation 2: *Thesis Requires Minor Revisions, Oral Defence Acceptable.* The thesis requires changes such as including additional data and literature and rewriting or editing of sections. The Thesis Supervisor and the student work together to ensure that the recommended changes are executed satisfactorily. Such changes should not require more than 3 months.

Recommendation 3: *Thesis Requires Major Revisions, Oral Defence Acceptable.* Major revisions entail a substantial rewriting of parts of the thesis and are expected to take more than 3 months to complete. In general, the Thesis Supervisory Committee finds that the thesis does not meet the minimum standards for publication but agrees that the student can achieve the desired major revisions without requiring a second oral defence. The thesis should be resubmitted to the entire Thesis

Supervisory Committee for approval within a 6-month period. This recommendation can only be issued at the student's first defence.

Recommendation 4: *Thesis Acceptable, Oral Defence Unacceptable*. The second oral defence should be scheduled within three months of the first defence.

Recommendation 5: *Thesis Unacceptable, Oral Defence Unacceptable*. The thesis and the defence do not meet the minimum standards; no reasonable amount of revision and preparation will raise them to the level of acceptability. Students receiving this recommendation will be required to withdraw from the master's program.

A recommendation can be appealed to the Vice-Provost, Graduate and Interdisciplinary Studies, and, ultimately, the Vice-President Academic and Provost. A successful defence leads to a course grade of "CR" (Pass) for the thesis credits. A student is not approved for graduation until the post-defence approved thesis has been submitted to the Library for publication.

Publication Requirement

Unless an exemption has been granted by the Vice-Provost, Graduate and Interdisciplinary Studies and the Vice-President Academic and Provost, all theses must be submitted for publication in RRU's Digital Archive, Pro-Quest and Library and Archives Canada to meet final graduation requirements. Theses in non-traditional formats must be accompanied by a PDF summary (minimum 2,500 words), which is the only component that is electronically submitted and archived.

Ethical Review Process

Studies involving human or animal participants must be carried out under the approved guidelines of the Royal Roads Office of Research Ethics and must conform to the Royal Roads Research Ethics Policy. Students must submit a request for ethical review to the Royal Roads Research Ethics Board (REB) for review and approval prior to any data gathering. All REB applications must first be reviewed and approved by the student's supervisor. For further information, students should contact Gina Armellino, Office of Research Ethics, via telephone (250) 391-2600 extension 4425 or via email at ethicalreview@royalroads.ca. The Research Ethics Policy and REB review forms are available at www.royalroads.ca/research/ethical-reviews.

Intellectual Property

The completion of a thesis may result in the creation of new knowledge, processes or tools. Ownership of this new knowledge, process or tool can be complicated, especially if the outcome of the research has potential commercial applications. In most cases, the owner of the new knowledge, process or tool is the originator of the idea (i.e., the Royal Roads student). Students who may create intellectual property as part of their thesis should familiarize themselves with the current intellectual

property guidelines adopted by the university and contact the Office of Research Services for more information via email at researchservices@royalroads.ca

Examples of intellectual property may include written reports, supporting data, DVDs or digital media, sets of evaluation instruments produced to gather data, or databases used to collate and analyze data. Ideas are not considered intellectual property until they have been recorded in some medium that others can read, review, touch, and/or see.

Copyright

All Royal Roads students writing a thesis or dissertation are required to submit a copy of their thesis for publication in Royal Roads University's open access repository (DSpace@RRU), Library and Archives Canada, and ProQuest. Students are **personally responsible** for ensuring that their thesis complies with Canadian Copyright Laws by obtaining permission for any third-party materials reproduced or adapted for use in the thesis prior to final submission. These third-party materials remain the copyright of the original owner and may not be used without written permission of the copyright owner.

What are 'third-party' works?

Third-party works include anything that a student did not create themselves, and for which they do not own the copyright. However, work that one has created for one's employer as a regular employee is owned by that employer. Similarly, if one has a contract agreement to create work for someone, the ownership of the work will be determined by the contract.

What are some examples of third-party works commonly used in theses?

Figures

Tables

Diagrams

Drawings

- Although these may be small, they are **always** protected by copyright and students are required to obtain permission from the publisher or copyright owner to copy them into their work.
- Redrawing or adapting any of these also requires copyright permission.

Maps

- Those created by students using a cartography program – no permission is required for use in the thesis.
- A purchased map or aerial photograph – students need to make sure that the purchase agreement is for **commercial use** of the image.
- A map created by someone else – permission from the copyright owner is required to reproduce or to adapt and use it in the thesis.
- Maps that belong to a student's sponsoring organization - copyright permission is required from the organization.

- Maps from Google Maps and Google Earth - do not require copyright permission as long as the student adheres to Google's stipulations regarding attribution and use.

Photographs

- Any photographs not taken by the student will require copyright permission.
- Photographs of human research participants may not be used unless participants have given documented prior permission for such use as part of the Research Ethics Board-approved formal consent process.
- Images and photographs found through Google Images or on websites such as flickr.com may not necessarily be used without permission. Students will need to determine who owns the copyright to the images they wish to use, and if the site has not indicated that permission is granted to use them for **commercial use**, students will need copyright permission to publish them in their thesis.

Logos

- Students will need to obtain copyright permission to publish logos in their thesis. Students may want to consider removing logos from their thesis if they are not absolutely necessary.

Lyrics, poems

- Although song lyrics and poems may be very short, they are **always** protected by copyright and require permission for use in a thesis.

Substantial portions of text

- Students need to consider the proportion of the text they want to reproduce in their thesis to the whole of the document from which it came. A few paragraphs from a book may be 'unsubstantial' and therefore available to use without permission, while the same number of paragraphs from a short paper may require copyright permission
- Reproducing entire documents in the appendix to one's thesis is not permitted; students must obtain permission from the copyright owner.

Further information is available from the *Copyright Information for Thesis and Dissertation Publication* guide at: http://libguides.royalroads.ca/copyright_for_thesis_publication

Copyright Permission Form Letter

By submitting their thesis for publication, students are confirming that they have obtained the necessary copyright permissions using the Royal Roads copyright permission form letter. When students are asking for permission to use material in their thesis, the wording used is very important. The person granting permission needs to be fully informed of how the material will be used and distributed. To ensure that students obtain all of the needed permissions, they are required to use the Royal Roads permission letter, found either on the *Copyright Information for Thesis and Dissertation Publication* guide at: http://libguides.royalroads.ca/copyright_for_thesis_publication, or here: <http://library.royalroads.ca/sites/default/files/RRU%20Copyright%20Permission%20letter%20for%20Thesis%20and%20Dissertations.pdf>

Copyright is a challenging topic and the Royal Roads Copyright Office is happy to help. Please contact the Copyright Office at copyrightofficer@royalroads.ca for assistance.

Privacy

Personal contact information and signatures must be removed from a thesis prior to submission. This includes, for example, phone numbers, email addresses and signatures that might be found in consent forms. For questions about protecting privacy, students should contact the Office of Research Ethics via email at ethicalreview@royalroads.ca.

Roles and Responsibilities

Role of the Thesis Coordinator

The Thesis Coordinator is expected to complete the following tasks:

- field general student questions about the program's expectations and requirements for a thesis;
- familiarize themselves with the processes governing the Royal Roads thesis process and ensure that Thesis Supervisory Committee members understand their roles;
- liaise between students and the Thesis Supervisory Committee members as necessary;
- oversee overall academic quality of the program's theses;
- familiarize themselves with SharePoint and ensure that Thesis Supervisory Committee members familiarize themselves with SharePoint;
- review student nominations for Thesis Supervisory Committee members; approve such nominations in SharePoint and submit them for approval by the Office of the Vice-Provost, Graduate and Interdisciplinary Studies; and
- nominate external examiners in SharePoint and submit them for approval by the Office of the Vice-Provost, Graduate and Interdisciplinary Studies.

Role of the Thesis Supervisor

The Thesis Supervisor is expected to complete the following tasks:

- advise and supervise the student throughout the entire thesis process, from proposal to post-defence submission;
- ensure that student has formally approved thesis proposal and Research Ethics Board approval in place before data gathering starts;
- review, revise and approve thesis proposal, Research Ethics Board application and final thesis;
- complete the Interagency Advisory Panel on Research Ethics' Introductory Tutorial;
- familiarize themselves with the university and program thesis process and the SharePoint process;
- file progress reports every six months;
- provide feedback to the student in a timely manner;
- oversee student adherence to academic integrity and research ethics policies;

- ensure student has obtained proper permissions to meet copyright and privacy regulations; and
- advise the student on preparation for the public defence of the thesis.

Role of the Second/Third Committee Members

The second and third (if applicable) Thesis Supervisory Committee members are expected to complete the following tasks:

- provide subject matter expertise in review and approval of the thesis proposal;
- provide subject matter expertise in review and approval of the final thesis; and
- participate in the student's public defence.

Role of the Student

The student is expected to complete the following tasks:

- review and understand this handbook;
- file progress reports every six months;
- use the Royal Roads SharePoint site for all formal approval points of the thesis process;
- create and submit a formal thesis proposal for approval;
- create and submit a formal thesis for approval;
- complete the thesis in accordance with the approved proposal and in adherence to all Royal Roads academic integrity, misconduct in research, research ethics, privacy, and copyright regulations;
- be mindful of program and university timelines;
- allow 3-4 weeks for review and approval of the final thesis;
- allow 3-4 weeks for review of the approved thesis by the external examiner;
- work with the Thesis Supervisory Committee and the Dean's Office to schedule a defence date; and
- defend the final thesis in a public defence.

School of Education and Technology Thesis Requirements

Writing a thesis means making a deep commitment to designing and developing a substantial piece of independent research. In the School of Education and Technology, a thesis is expected to meet the following criteria:

- Enhances pre-existing knowledge or experience in a specific field;
- Constitutes a primary research study requiring Research Ethics Board approval;
- Has a greater scope than would be appropriate for a 6-credit Research Paper; and
- Is more theoretical in nature than a 6-credit Research Paper.

Applying to the SET Thesis Track

If you wish to undertake a thesis, you must complete the SET Thesis Stream Application form. The deadline for the thesis stream application is the middle of November in the calendar year of the program start date. The Thesis Stream Application form will be sent out from the SET Office in July. If you are interested in applying to the Thesis Stream, you will need to make an appointment to discuss your proposed topic with your program Thesis Coordinator (Program Head) before completing the application form.

General guidelines for completing the application form are below:

1. Ensure that you have included all of the requested information.
2. Do not exceed the space allocated for each section.
3. Keep it simple, but be thorough. Make sure that you answer those important questions: why, what, when, where, and how.
4. Establish a personal context. What do you want to do? Why do you want to do it, or why should it be done? In other words, why is it important?
5. Establish the research context. What does the literature say about this topic? How is this topic situated within the ongoing research conversation? How will your work build upon existing research? What do you expect to contribute? Remember to cite your sources in accordance with APA guidelines.
6. Describe the process. What do you plan to do? What methodological approach do you plan to take? How and where do you plan to collect your data? How do you plan to analyse it? Whom do you plan to involve in the process?
7. The application is not intended to replace the more complete proposal that you will develop in your research methods course.
8. Write in first person and engage the reader with your enthusiasm.

Submit your application to the SET Office by the deadline.

If you would like to apply for funding through the Social Sciences and Humanities Research Council (SSHRC) please allow for sufficient time to request and gather your supporting letters. The deadline for this application is December 1. Please contact the Office of Financial Aid and Awards in Student Services during August of your first year for more detail about the SSHRC application requirements.

You can access the Financial Aid & Awards Office via the website <http://www.royalroads.ca/financial-aid-awards>.

SET Thesis Track Application Adjudication

Your thesis track application will be reviewed by a faculty adjudication committee, which will determine whether the application:

- has the potential to contribute original knowledge to the field;
- has a scope that is, in as much as is possible, acceptable for a master's thesis (neither too broad nor too narrow);
- is, in as much as is possible, practice for the time allocated for the thesis completion;
- is directly connected to the program learning outcomes; and
- is written using a clear and concise academic writing style that adheres to APA guidelines.

Program Learning Outcomes Demonstration

Each of the SET programs has foundational program learning outcomes and several are directly associated with the Thesis Stream. Please see the appendices for your specific program learning outcomes. The program learning outcomes applied to the research will be context-specific and will therefore be identified during the design process for the thesis. Consult the document in the appendix when planning the project in order to identify the learning outcomes the research will address. The learning outcomes identified during the design process will form an integral part of the research and will act as a guide as the work evolves. The learning outcomes to be demonstrated and the details of their evaluation during the conduct of the research will be discussed with and agreed upon by your thesis supervisor.

Thesis Proposal

Royal Roads University is committed to the production of useful knowledge. Course work and the research process are structured around the timely publication of your research. While RRU is committed to interdisciplinary, applied research, it is even more important to produce high-quality work that demonstrates the competency and literacy of our students and their thesis supervisors. Graduate students are encouraged to form "learning networks" around their particular area of research, and to invite dialogue with other students.

The aim of a thesis proposal is to provide a roadmap for your proposed research, describing the problems and/or issues to be examined during the research. The following list describes a "typical" proposal, but the contents may vary depending on the planned research question and methodology. The proposal identifies the research questions or hypothesis, details the research methodology, includes a comprehensive introductory literature review, and lists the potential participants. It should clearly indicate the resources, expenses and other support that will be required by the research project and who has the responsibility granting access to these resources. It should also list the process deadlines that the graduate student expects to meet during preparation and completion of the thesis.

Your first version of your research proposal is created as part of LRNT 600 coursework requirements and is critiqued by the instructor and by peers, as described in the course outline. In LRNT 690, you will be expected to make changes to this proposal and finalize it based on review and feedback from your thesis supervisor and second committee member.

Thesis Proposal Components

The thesis proposal should address the following components:

- **Introduction.** This should include a description of the problem or opportunity being investigated and potential causes, along with the potential impact or significance if the potential solution is not addressed. The introduction should also include a brief analysis of what is known about the area from the information and supporting documents from the organization under study (if applicable), as well as similar problems or issues described in the academic and professional literature. This information should amplify or support the description of the problem. This section should also contain an explicit research question, problem, or hypothesis, and research objectives.
- **Research Design and Method.** The research design and methods to be used to conduct the study should be described. Data-gathering instruments, methods of data collection and analysis strategies and techniques should be addressed. Students may apply any qualitative and quantitative methods appropriate for study of the identified problem(s). The selected research design should be expressed clearly in the proposal and is subject to approval by the Thesis Committee.
- **Reference List.** APA format for all articles, books, policies cited in the proposal.
- **Schedule.** A schedule should be included (timelines, project goals and due dates).
- **Citation Style.** American Psychological Association (6th Edition) citation style must be employed.

The Thesis

Length & Style

The length of a thesis will vary depending on the type of project and the amount of evidence collected. The maximum length of a thesis will be 100 pages (25,000 words) exclusive of abstract, references, appendices, etc. Excessive length is frequently an indicator of poor synthesis and weak analysis. To this end you should ensure that you a) clearly define the scope of the project; b) synthesize rather than survey the literature; c) succinctly detail the process; and d) place more emphasis on the analysis of the collected data than on its description. The ability to convey complex ideas in a concise manner is a skill that should be demonstrated in the thesis. Alternate formats for part of the thesis work will be considered. If there is an unusual, significant, methodologically based reason for a greater length, contact the Thesis Coordinator to discuss it.

Individual theses will vary in content and style based on the type of research being conducted. Care should be taken to cite referenced material thoroughly and appropriately. The work must be referenced and formatted in accordance with the Publication Manual of the American Psychological Association (6th Edition), commonly referred to as the "APA style guide."

Theses in non-traditional formats must be accompanied by a PDF summary (minimum 5,000 words), which is the only component that is electronically submitted and archived. Please note that this word count is higher than the university's minimum requirement.

Organization

Although the format and organization of a thesis is fairly standardized, there is scope for alternative structure. Nonetheless, all research submissions have certain elements in common. Graduate students who elect to

produce an alternative media project or develop other research artefacts must still produce a thesis-like document. The titles below are indicative of the content of each section although they may not be appropriate for all theses.

Beginning Section

The first 3 items in this list must appear on every thesis:

- Title Page
- Abstract (maximum of 150 words)
- Table of Contents
- List of Figures (if appropriate)
- List of Tables (if appropriate)

Other prefatory elements such as acknowledgements may also be included. Refer to the APA style guide for details about positioning. Place all page numbers in the top right-hand corner in the document header. Include your title page within the total page count; however, do not provide a number on the title page. Use Arabic numerals (1, 2, 3) throughout the document and continue the page numbers sequentially to the end of the report, including all appendices.

Introduction

This section should contain:

- Research topic, question or hypothesis to be examined;
- A compelling argument about why the issue is important;
- Introduction to the research question;
- Detailed description of the problem being investigated and how it relates to the research question;
- Discussion of the impact of not fixing or eliminating the problem;
- The organizational context – organizational charts, mission statements, key contributors or participants to the program (as appropriate to the study);
- Introduction to the theoretical framework and explanation of its relevance to the research;
- Definition of terms;
- Outline of the structure of the entire document (or alternative product); and
- Limitations and delimitations of the research.

The introduction is often the most difficult part, and many accomplished writers often go back to this section and re-write it after they have finished the entire document. The introduction is important for providing the context and the framework for the remainder of the document structure, and it is the reader's initial exposure to the writer's style.

Literature Review

Every thesis will include a review of the literature. In a typical literature review, the writer must demonstrate that they have a grasp of the relevant literature applicable to the field of study. The literature review and relevant references should be woven integrally into the text, wherever appropriate. Reference to the literature may:

- support the need to study this problem/issue and compare the situation with similar situations;
- provide a more in-depth discussion of the theoretical framework for the study;

- demonstrate the writer’s knowledge/understanding about the problem/issue under study; (including differing points of view where applicable); and
- situate this study in the existing body of research.

In addition to peer-reviewed journals and books, supporting documents may include, among others, website, newsletters, policy papers, strategic plans, and personal communication. The length of the literature review may vary depending on methodology and topic.

Methodology

This section should contain a description of the:

- research participants (where appropriate);
- methodological framework, e.g., qualitative/quantitative, inductive/deductive, and the relevant supporting theory;
- specific methods used to gather and analyse data (including rationale for why a specific method was selected e.g., for selecting articles, data gathering tools, analysis tools...);
- data gathering tools and process. The data gathering instruments should be attached to the document;
- reliability/validity/trustworthiness of all data gathering instruments and activities;
- proper and effective use of statistical analysis or qualitative analysis tools and approaches;
- discuss ethical considerations; and
- use past tense.

In short, this chapter, section or subsection, should address all of the steps completed during the conduct of the research—what you did, why you did it, and how you did it. This section should describe all options considered and attempted during the completion of the project in sufficient detail that someone else could replicate your process without having to guess.

Successive Sections

While each of the following items would be included in a thesis, they could be presented as individual sections or combined in a single concluding section. In some cases, the analysis may be integrated throughout the body of the work.

- Findings/results
 - a detailed description of the findings or observations made during study completion
 - each group of findings must be supported by the evidence collected.
- Analysis/ Discussion/Conclusions
 - should be supported by the study findings and other related literature; may include ideas for future research; and
 - should contain a discussion of the implications of the research on the body of knowledge being studied.
- Recommendations as appropriate based on and supported by the conclusions and the literature.
- The final thesis document will stand up to rigorous academic scrutiny.

Referencing

Referencing is fundamental to your scholarship and research integrity. The purpose of referencing is to give credit where credit is due—it acknowledges the source of ideas that are not our own. Referencing should be

complete to the level of detail that allows the reader to locate the original source in order to verify the information presented and meet APA requirements.

Guidelines:

- Do not use references selectively to give a false sense of authority.
- Look for literature that seems to contradict your ideas.
- Draw primarily on scholarly material, such as peer-reviewed journals, unless there are reasons to focus on other types of resources.
- Avoid using references as a substitute for explanation or argument. The integration of ideas happens spontaneously in the human mind, but in an academic setting, it also needs to take place on the page.
- Quote and cite strategically. Use what is cited – do not just cite. Indiscriminate use of academic references is the scholarly equivalent of name-dropping, and should be avoided.

Be careful with the use of web references. Many appear to be authoritative but really fall in the same category as other self-published work. Avoid those that are poorly researched and transitory. Look for evidence that the author has published in a peer-reviewed journal and use that source instead.

SET Thesis Assessment Criteria

A SET thesis will be assessed on the following criteria:

Chapter One: Study Background

- The Problem or Opportunity.
- Introduction to the research question.
- The researcher properly scoped the problem or opportunity identified in the proposal using valid problem identification tools or methods.
- Detailed description of the problem being investigated and how it relates to the research question.
- Discussion of the impact of not fixing or eliminating the problem.
- The organizational context is described and organization charts, mission statements, job descriptions, key contributors or participants to the problem are included (as appropriate to the study).
- Introduction to the theoretical framework and explanation of its relevance to the study.
- Definition of terms.
- Limitations & delimitations of the research.

Chapter Two: Literature Review

- The literature review considered all appropriate sources of information.
- Describe similar problems or issues contained in peer review journals, books or other acceptable sources of information.
- In-depth discussion of the theoretical framework introduced in Chapter One.
- Provide support for the need to study this problem/issue and compare the situation with similar situations.
- Demonstrate the writer's knowledge/understanding about the problem/issue under study (including differing points of view where applicable), and
- Situate this study in the existing body of research.

Chapter Three: Conduct of Research Study/Method

- The thesis adequately describes how the candidate applied the research methodology and steps described in the original proposal, including the theoretical basis for the method chosen.
- Step-by-step description of the research methods used during the study & justification for their use.
- Describe data gathering tools or processes. The data gathering instruments are described or attached to the thesis.
- The reliability/validity/trustworthiness of all data gathering instruments or activities are described in the thesis.
- The thesis demonstrates the proper and effective use of statistical analysis or qualitative analysis tools or approaches.
- Detailed description of the steps completed during the conduct of the applied research study should be provided in this section. This section should describe all options considered and attempted during the completion of the study.
- Discuss ethical considerations.
- The thesis conforms to the guidelines for research using human participants.
- Written in past tense.

Chapters Four and Five: Analysis

- The findings, conclusions and recommendations are supported by collected evidence, the researcher's analysis and synthesis of the findings, and other information described in the literature review.
- Findings: Detailed description of the findings or observations made during study completion. Each group of findings must be supported by the evidence collected.
- Conclusions: should be supported by the study findings and other related literature.
- Study Recommendations: should be based on and supported by the conclusions and the literature.
- The final thesis will stand up to rigorous academic scrutiny.

Chapter Six: Research Implications

- Description of the implementation process and its implications if the changes are not undertaken.
- Future Research - implications of their research results on the body of knowledge being studied.
- A brief conclusion to the document, noting the relevance of the research undertaken.

Production Quality Considerations

- Document layout and format conform to the guidelines provided in this handbook
- Document formatted in accordance with the Publication Manual of the American Psychology Association (6th Edition) especially in-text citations and the reference list.
- Tables, figures, diagrams and graphs of sufficient quality that they can be reproduced clearly.
- Document is free of spelling and grammatical errors.

Appendix 1: MAHEAL Program Learning Outcomes

SET works with a program learning outcomes framework that informs the course learning outcomes. Program learning outcomes (PLOs) identify what the learner *will know and be able to do* by the end of the program. They are the essential and enduring knowledge, capabilities (attributes) and attitudes (values, dispositions) that constitute the integrated learning by a MAHEAL graduate. MAHEAL graduates will develop an understanding of educational improvement concepts and research and be able to apply practical tools and strategies to address issues, challenges, and opportunities related to supporting student achievement and institutional growth. Program learning outcomes that specifically apply to the MAHEAL thesis are listed in bold:

PLO 1. Communicate ideas, issues and conclusions clearly to students, faculty, staff, government and interest groups, to promote student learning and institution-wide improvement.

PLO 2. Engage in meaningful self-assessment and self-awareness to enhance leadership skills, positive relationships, and professional goals.

PLO 3. Demonstrate inclusive and ethical leadership practices that create a positive climate for learning and improvement.

PLO 4. Integrate evidence-based decision-making approaches into administrative leadership practices.

PLO 5. Apply systems thinking, change theories and organizational improvement strategies to support student learning and institutional growth.

PLO 6. Critically analyze own organizational context in light of provincial and national policies, international trends and global perspectives.

PLO 7. Propose innovative ways to promote institutional viability through the provision and integration of campus-wide services and functions.

PLO 8. Lead collaborative and systematic inquiry processes using research and evaluation processes that support institutional growth and improvement.

PLO 9. Implement meaningful strategies to support and enhance academic program quality and accountability systems.

PLO 10. Integrate technology-mediated learning into higher education programs and learning environments.

PLO 11. Analyze and enhance organizational structures, communication processes and leadership styles to improve intercultural understanding, global awareness and internationalization efforts. *(Aligned with Specialization in Business Development in International Education)*

PLO12. Apply key business skills to the effective development and sustainability of international education initiatives. *(Aligned with Specialization in Business Development in Intl. Education)*

Appendix 2: MALAT Program Learning Outcomes

Using learning outcomes helps to clarify a program's focus, helps students connect their program to their workplace, provides a focus for assessment and evaluation, allows for alignment across professional accreditation bodies of knowledge and helps employers understand the benefits of the program. MALAT graduates will be able to apply the principles of networked learning, open pedagogy and digital mindset as they work in the creation and evaluation of digital learning environments. They will apply theoretical and practical knowledge to critically analyze learning innovations and assess their impact on organizations and society. Program learning outcomes that specifically apply to the MALAT thesis are listed in bold:

PLO 1. Communicate and synthesize information and arguments at the graduate level.

PLO 2. Critically evaluate how learning occurs in a variety of contexts.

PLO 3. Design and create research-informed digital learning environments.

PLO 4. Demonstrate effective collaboration skills.

PLO 5. Develop and analyze support strategies to meet the needs of stakeholders in digital learning environments.

PLO 6. Select appropriate assessment and evaluation strategies for digital learning environments.

PLO 7. Contribute meaningfully to digital learning network(s) and communities.

PLO 8. Explain the interrelationship between innovation, change and digital learning environments and their impact on organizations and society.

PLO 9. Apply reflective processes to improve professional practice.

PLO 10. Critically evaluate and/or produce rese

Appendix 3: SET Thesis Track Timelines

NOTE: The table below represents general timelines and tasks associated with the thesis (LRNT 690). You will work with your thesis supervisor to review the tasks and subtasks below in LRNT 690 and adjust as necessary to meet the deadline for the oral defence and thesis completion.

Thesis Track Tasks	Process	Expected Timeline
<p>Complete LRNT 600</p> <p>NOTE: LRNT 600 is a pre-requisite course for LRNT 690 in which you will develop and receive feedback on the first draft of your thesis proposal from the LRNT 600 course instructor.</p>		Prior to beginning LRNT 690
<p>Review Master’s Thesis Process on the RRU Research site at: http://research.royalroads.ca/masters-thesis-process.</p>		
Begin LRNT 690	Access Thesis Manager SharePoint system, click on Thesis Handbooks	Upon completion of LRNT 600
<p>Access Thesis Manager SharePoint system, click on Thesis Handbooks and carefully review each of the documents listed here:</p> <ul style="list-style-type: none"> • SET Thesis handbook • Copyright Information for Thesis and Dissertation Publication • SharePoint Guide for Students • Thesis Oral Defense Request Form 		End of week 1 of LRNT 690
<p>Nominate thesis supervisory committee (supervisor and second committee member) to Thesis Manager SharePoint for approval after discussing with your Thesis Supervisor.</p>	<p>In the Thesis Manager SharePoint system, complete the <i>Supervisor and Committee Nomination Form</i> for approval.</p> <p>ONLY FILL OUT AND SAVE THIS FORM IN SHAREPOINT ONCE YOU HAVE YOUR FULL COMMITTEE READY TO NOMINATE AND CAN COMPLETE THE FORM IN FULL. SAVING THE FORM WILL SUBMIT IT FOR APPROVAL.</p> <p><i>See SharePoint Guide for Students if you need assistance.</i></p>	End of week 1 of LRNT 690
<p>Submit proposal to SharePoint for supervisor and second committee member review</p> <p>Complete any revisions required before uploading it to SharePoint for formal approval.</p>	<p>Once proposal is “approval ready” upload to Thesis Manager SharePoint under <i>Proposal Acceptance Form</i>.</p>	By mid October

<p>Work with your Supervisor to complete Request for Ethical Review form.</p> <p>Receive approval via email from thesis supervisor and second committee member to submit the RRU Research Ethics Board Application (REB).</p>	<p>Supervisor submits form on behalf of student to Research Ethics Board</p> <p>NOTE: the RRU REB review process can take 4 – 6 weeks. You are not able to collect any data until you have received RRU REB approval to conduct your research. If your research site requires its own REB approval, you will need to apply for, and receive that as well prior to commencing data collection.</p>	<p>By mid November</p>
<p>Submit Student Progress Report in Thesis Manager SharePoint.</p>	<p>Access Thesis Manager SharePoint system, click on Student Progress Report</p>	<p>By late February</p>
<p>First complete draft submitted to thesis supervisor for supervisor to review</p>	<p>By email</p>	<p>By mid-March</p>
<p>All required edits complete; resubmit to second committee member to review</p>	<p>By email</p>	<p>By mid-April</p>
<p>Thesis committee to submit nomination for External Examiner to thesis coordinator</p>		<p>By mid-April</p>
<p>Complete any revisions required before uploading it to Thesis Manager SharePoint for formal approval.</p> <p>All required edits completed and Pre-Defence Thesis submitted to supervisor for approval.</p>	<p>Once Pre-Defence Thesis is “approval ready” upload to Thesis Manager SharePoint under <i>Pre-Defence Final Thesis</i>.</p> <p>Ensure all copyright clearances have been obtained. See here</p> <p>Also at this time confirm with Supervisor that an External Examiner has been nominated.</p> <p><i>See SharePoint Guide for Students if you need assistance.</i></p>	<p>By early May</p>
<p>Allow 3-4 weeks for external examiner review</p>		
<p>Once Pre-Defence Thesis is approved by full supervisory committee in SharePoint you will be notified that you can begin to organize your oral defence.</p> <p>After approval by supervisor, submit to Thesis Manager SharePoint for oral defence.</p>	<p>Complete & submit the <i>Thesis Oral Defence Request Form</i> to thesedissertationscoordinator@royalroads.ca</p> <p>ONLY SUBMIT THIS FORM ONCE YOU HAVE RECEIVED CONFIRMATION FROM THE THESES DISSERTATION COORDINATOR THAT YOUR EXTERNAL EXAMINER HAS BEEN CONFIRMED.</p> <p>Students are advised to allow approximately 4 weeks between the time their approved Pre-Defence Thesis is sent to the External Examiner and their oral defence date.</p>	<p>By mid May</p>

	Student are advised to discuss possible dates with supervisory committee prior to submitting a date in Thesis Manager SharePoint.	
<p>Oral Defence.</p> <p>Depending upon the outcome of the oral defence, complete any revisions as required in consultation with your Thesis Supervisor.</p> <p>Depending on type and amount of revisions necessary, a program extension may be required.</p>		June
Final Thesis submitted.	<p>Upload Post-Defence Thesis to Thesis Manager SharePoint under <i>Post-Defence Final Thesis</i> for approval by Supervisor. (If major revisions are required, approval by <i>full Supervisory Committee</i> will be required).</p> <p>ALL STUDENTS ARE REQUIRED TO UPLOAD A POST-DEFENCE THESIS TO SHAREPOINT.</p>	mid July
<p>Once your Post-Defence Thesis has been approved by your Supervisor, it will be automatically submitted to the Library for review for publication.</p> <p>You will receive an email from Thesishelp@royalroads.ca with some questions that you will need to respond to ensure timely processing of your final document. Please watch for their email.</p> <p>Once it has been accepted by the Library and you are notified that your Post-Defence Thesis has been approved, you have completed the process.</p>	<p>Please see: http://library.royalroads.ca/library-policies/thesis-office and contact Thesishelp@royalroads.ca if you have any questions.</p>	