



School of Education and Technology

Thesis Handbook

Master of Arts in Learning and Technology

This version of the handbook applies to MALAT learners
who began the program on 1 April 2017 or later.

Please watch the document revision dates.

October 13, 2017

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Introduction

In 2013, the University adopted a set of academic regulations standardizing the definition of a thesis, the composition of thesis committees, requiring an External Examiner and a public defence, and creating an institution-wide oversight process.

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 analyse 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, analyses the data and offers a conclusion or recommendation 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.

Unless an exemption has been granted by the Vice President Academic & Provost, all theses must be submitted for publication in RRU's Digital Archive, Pro-Quest and Library 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. Oversight by a Thesis Committee, including a supervisor normally qualified at the doctoral level and demonstrating relevant competencies of content and methodology, is required. A public defence and review by an external academic examiner are also required. The thesis should constitute approximately 400 hours of effort by the student resulting in the awarding of 12 credits.

(<https://student.myrru.royalroads.ca/academic-regulations/masters-program-requirements>)

The Office of the Vice Provost, Research and Interdisciplinary Studies oversees the Master's thesis process at Royal Roads University. All students, school/program thesis coordinators, supervisors, other thesis committee members, and External Examiners must use the SharePoint site maintained by the Office of the Vice Provost, Research and Interdisciplinary Studies to submit the required forms for committee nomination, proposals, progress reports and final thesis.

An overview of the university's process governing theses is available from the Office of the Vice Provost, Research and Interdisciplinary Studies.

This handbook provides supplemental information on the thesis process specific to the School of Education and Technology. Royal Roads University policies and regulations take precedence over the information contained in this document.

Theses in the School of Education and Technology

The MA in Learning and Technology is an academic program for individuals interested in the effective integration of technology and learning. It is designed to offer graduate students both rigorous academic development and applied skills. Given the dynamic natures of the disciplinary area, there are many opportunities to undertake research that is new, innovative and interesting. Writing a thesis means making a deep commitment to design and develop a substantial piece of independent research. The work must conform to the academic standards and conventions outlined by the RRU MA Thesis definition and the SET criteria below.

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;
- 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 School of Education and Technology Thesis Track

If you wish to undertake a thesis, you must complete the MALAT 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. You are required to have an A- average in the MALAT courses to date in order to apply to do a thesis. The MALAT Thesis Stream Application form will be sent out from the MALAT Program Office following the September MALAT Exit Pathways synchronous session. If you are interested in applying to the MALAT Thesis Stream, you will need to make an appointment to discuss your proposed topic with the MALAT Thesis Coordinator (MALAT Program Head) before completing the application form. General guidelines for completing the application form are below:

1. Ensure that you have included all 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.

There is also an opportunity to apply for funding through the Social Sciences and Humanities Research Council (SSHRC); if you choose to do this, please allow for sufficient time to request and gather your supporting letters. The deadline for this application is December 1st.

Please contact Gwen Campden, Coordinator of Financial Aid and Awards in Student Services, during August of your first year for more detail about the SSHRC application requirements. You can reach her at Gwen.Campden@RoyalRoads.ca

Submission Processes for Thesis Route

1. Ensure that you have included all the requested information on the MALAT Thesis Application form.
2. Submit your application to the MALAT Program Office by the deadline date.
3. Representatives of SET will adjudicate thesis track proposals.

Evaluation Process

Your thesis application will be reviewed by a faculty committee who 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, practical for the time allocated for the MALAT Thesis completion;
- is directly connected to the MALAT program learning outcomes; and,
- is written using a clear and concise academic writing style that adheres to APA guidelines.

Thesis Track Timelines

NOTE: the table below represents general timelines and tasks associated with the MALAT 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 Timelines	Suggested Timeline
Complete LRNT 600 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.	Prior to beginning LRNT 690
Begin LRNT 690	Fall of second year of MALAT
Submit thesis supervisory committee (supervisor and second committee member) to SharePoint for approval	End of week 1 of LRNT 690
Submit proposal to SharePoint for supervisor and second committee member review	By Oct 14, 2018
Receive approval from thesis supervisor and second committee member to submit the RRU Research Ethics Board Application (REB) and submit REB application 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.	By Nov 18, 2018
First complete draft submitted by email for supervisor to review	March 17, 2019
All required edits complete; resubmit by email for second committee member to review	April 14, 2019
Thesis committee to submit proposal for External Examiner to thesis	April 14, 2019

coordinator	
All required edits completed and final draft submitted to supervisor for approval	May 5, 2019
After approval by supervisor, submit to SharePoint for oral defence	May 19, 2019
Oral Defence	June 2019
Final thesis submitted to SharePoint with signed title page	July 14, 2019

MALAT Program Learning Outcomes to be demonstrated

The MA in Learning and Technology program has foundational program learning outcomes (Appendix 1). The following program learning outcomes are directly associated with the MALAT Thesis Stream.

- PLO 1 Communicate and synthesize information and arguments at the graduate level.
- PLO 7 Contribute meaningfully to digital learning networks 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 process to improve professional practice.
- PLO 10 Critically evaluate and/or produce research.

The MALAT 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.

An MA qualification is awarded to those graduate students who have demonstrated an appropriate depth of knowledge in the above areas. All projects must be relevant to the field of learning and technology.

Ethical Review Process

In a MALAT thesis, you will be carrying out a research study that involves human participants. Such studies will be carried out under the approved guidelines of the RRU Office of Research Ethics and must conform to the RRU Research Ethics Policy. Students must submit a request for ethical review to the RRU Research Ethics Board (REB) for review and potential revision. All REB applications must first be approved by the thesis supervisor before they can be submitted to the Office of Research Ethics. For further information and the details of the REB submission process, contact Gina Armellino, Office of Research Ethics, via telephone (250) 391-2600, extension 4425, or via e-mail at gina.armellino@royalroads.ca or researchethics@royalroads.ca.

The Research Ethics Policy and the Request for Ethical Review Forms are available on the RRU website at <http://www.royalroads.ca/research/ethical-reviews>

Human Participants

Examples of Human Participation:

- Interviews with individuals or groups.
- On-site job observations, which involve human participants who must provide personal data.
- Review of personnel files or assessment reports.

- Psychological testing.
- Evaluation or testing programs involving targeted participants.

Activities to Be Completed by the Researcher:

Graduate students who wish to use human participants during their research must:

- Complete the Interagency Advisory Panel on Research Ethics' Introductory Tutorial; and send evidence of completion to the program office.
- Complete the Royal Roads University Ethics Review application form.
- Have the Royal Roads Ethics Review approved by a committee of RRU faculty.
- Inform the participants they are part of a research project and what type of data is being collected.
- Describe to the participants how the data may be used and who will have access to it.
- Have participants sign a release form that acknowledges they are willing research participants and that they authorize the researcher to employ the collected data in support of the research project.
- Protect the confidentiality of all participants in all phases of the research.

Confidentiality in Research

In some cases, students will undertake research with the support of an organization, such as their employer. In such instances, if graduate students are conducting their research to serve the needs of a particular organization, whether corporate, government, or not-for-profit, they are required to adhere to the confidentiality guidelines and ethical review processes of the organization. They should familiarize themselves with the content of these guidelines before producing their proposal.

Non-disclosure agreements: In cases where research is conducted within an organization, researchers may be required to sign non-disclosure forms. This obligates the individual to confidentially restrict the use of specific information that may provide outside organizations an insight into a company's competitive advantage or corporate strategies.

Restrictive Practices: Issues of confidentiality and non-disclosure must be thoroughly explored with the Thesis Supervisor. Non-disclosure agreements or restrictive practices that curb the ability of the researcher to fulfil their research requirements should be avoided.

Examples would be if an organization:

- reserves the right to restrict the types of data reported in the final report;
- limits distribution of the final report and therefore the ability of other researchers to use the report are restricted; or
- does not permit the graduate student to describe productivity data or financial information in the final report.

Intellectual Property and Research

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 often 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 RRU student). Students who may create intellectual property as part of their thesis should inform themselves of the current Intellectual Property guidelines adopted by RRU.

Examples of intellectual property may include a:

- completed CD-ROM or DVD or digital media forms;
- written report and its supporting data;
- set of evaluation instruments produced to gather data;
- database used to collate and analyze data.

Note: Ideas are not considered intellectual property until they have been recorded in some medium that others can read, review, touch and/or see.

Copyright

As a condition for the award of the degree, the student is required to publish the thesis under a Creative Commons Attribution Non-Commercial ShareAlike 2.5 Canada licence with ProQuest, Library and Archives Canada, and DSpace@RRU. The student should include the Creative Commons symbol on the title page of the thesis (see sample title page provided on the Thesis Sharepoint site). Any requested delay in publication is subject to the Dean's approval.

The author of an RRU thesis retains the rights to his/her product and has the right to reproduce, publish, adapt, translate, perform (in the case of an audio-visual work), and telecommunicate the work, and has the right to control the circumstances in which others may do any of these things, subject to certain exceptions under the Copyright Act which allow use of works for purposes such as education and research, and uses allowed under the Creative Commons license.

The author of an RRU thesis must obtain clearance for any third party materials reproduced in the thesis (including, but not limited to, maps, figures, and diagrams not created and owned by the author) prior to final submission. These third-party materials remain the copyright of the original owner, and may not be used without written permission of that copyright owner. Information about copyright and a downloadable copy of the Royal Roads Copyright Permission letter is available at <http://library.royalroads.ca/copyright-office/copyright-information-thesis-publication>.

Roles and Responsibilities

Thesis Supervision

Overview

Every student completing a thesis will be supervised by a Thesis Supervisor and a Thesis Committee. Nomination and approval of supervisors and committees occurs via the Office of the Vice Provost, Research and Interdisciplinary Studies. **Students** are responsible for initiating this process.

Each Supervisory Committee must be approved by the Office of the Vice Provost, Research and Interdisciplinary Studies in consultation with the School Director, Dean of the Faculty and the Vice President Academic & Provost as required. Each 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. One of the Supervisory Committee members must be an adjunct, associate or full-time faculty member at Royal Roads University. Normally, all 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 Supervisor or Committee Member. At

least one of the members of the Thesis Supervisory Committee must hold a doctorate. Nominations for supervisors and committee members who are not full-time RRU faculty will be reviewed and approved by the respective Faculty Dean and the Vice Provost, Research and Interdisciplinary Studies. Once approved, supervisor/committee member will retain active status with the university unless performance feedback warrants review or termination of such status.

Thesis supervisors who are not full-time faculty receive a contract for supervision; the second mandatory committee member receives an honorarium if not a full-time faculty member. All communication about remuneration and honoraria is executed by university staff, not the student.

Role of the Thesis Coordinator

The Thesis Coordinator is expected to complete the following tasks:

- advise students on all academic aspects of writing or creating a thesis in learning and technology;
- facilitate selection of applications for admission to thesis track;
- liaise with the Office of the Vice Provost, Research and Interdisciplinary Studies to endorse faculty for supervision and committee service involving SET theses;
- approve each student's Thesis Committee nomination;
- familiarize themselves with SharePoint and ensure that Thesis Supervisors and Committee Members familiarize themselves with the SharePoint process;
- liaise with the Office of the Vice Provost, Research and Interdisciplinary Studies to endorse External Examiners for theses.

Role of the Faculty Supervisor

The Faculty Supervisor is expected to complete the following tasks:

- facilitate and approve the formal thesis proposal following the process overseen by the Office of the Vice Provost, Research and Interdisciplinary Studies;
- ensure that the student follows all processes required by the University's Research Ethics Policy;
- complete the Interagency Advisory Panel on Research Ethics' Introductory Tutorial;
- maintain contact with the student during the period of supervision to review and discuss issues arising from the thesis;
- familiarize themselves with SharePoint, the program handbook, and the university's academic regulations;
- file progress reports every 6 months;
- negotiate a mutually agreed upon schedule of due dates (to be drafted by the student) for the submission of draft chapters or sections of the thesis;
- provide advice on the material submitted and discuss required changes;
- advise the student on preparation for the public defence of the thesis;
- ensure that the student's final thesis does not violate privacy, intellectual property, or copyright regulations and that all required permissions for all third-party works, including but not limited to images, lyrics, illustrations, and substantial portions of text, have been obtained **before** the thesis is submitted to the Supervisory Committee.

Role of the Thesis Committee

The role of the committee is to provide advice on the material submitted, discuss required changes, approve the thesis proposal and participate in the formal assessment of the thesis, including the public defence.

Role of the Student

The student is responsible for planning, implementing and completing the thesis. This entails that the student:

- reviews and understands this Handbook;
- files progress reports every six months;
- reviews and understands the university's master's thesis process overseen by the Office of the Vice Provost, Research and Interdisciplinary Studies;
- uses the university's SharePoint site for each step of the thesis process;
- develops a proposal adopting the required format;
- ensures rigor and high quality of work, with appropriate attributions throughout his/her research;
- adheres to a mutually agreed-upon schedule including deadlines for completion for all stages;
- completes the thesis in accordance with the proposal and in accordance with the RRU Research Ethics Policy and the RRU Integrity and Misconduct in Research and Scholarship Policy;
- produces both a draft and final thesis that conform to RRU policies and guidelines.

Thesis Proposal

Purpose

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.

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.

Proposal Content

A typical research proposal will have the following sections:

1. Introduction
2. Research question and objectives
3. Literature review
4. Research methods
5. Timeline for project activities
6. Resource requirements and how they will be provided.

Upon approval by your thesis committee, this revised proposal will be submitted as part of your application for ethics review.

The Thesis

Layout Guidelines

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”.

Alternate Formats

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.

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 he or she has 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 had his or her idea published in a peer-reviewed journal, and use that source instead.

Thesis Assessment

Submission of Thesis

You will work with your Thesis Supervisor until you arrive at the final thesis draft. You should follow the Thesis Track Timelines laid out earlier in this document and ensure you make the appropriate submissions to the University's SharePoint site.

Within 10 working days of the final draft submission, the Thesis Supervisor will approve or reject the final thesis and allow the student to submit the thesis to the Thesis Committee. Should the Thesis Supervisor deem the final thesis not of sufficient quality to go forth to the Thesis Committee, the student will have to revise the thesis until it meets the supervisor's standards. This process may incur fees and delay graduation.

The student and the Thesis Supervisor are responsible for ensuring that the thesis does not violate privacy, intellectual property, or copyright regulations, and that all required permissions for all third-party works, including but not limited to images, lyrics, illustrations, and substantial portions of text, have been obtained **before** the thesis can be submitted to the Thesis Committee. The University Library provides links to the **required** forms for requesting permissions to use copyrighted material within theses.

The Office of the Vice Provost, Research and Interdisciplinary Studies oversees the assessment process, which includes review and approval of the project by the Thesis Committee, a public defence, review by

an External Examiner, and review and approval by the Office of the Vice Provost, Research and Interdisciplinary Studies.

MALAT Assessment Criteria

A MALAT 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 and those required by the RRU for student research.
- 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.

External Examiner

An External Examiner participates in the examination of the thesis to provide an independent assessment of the quality of the candidate's research. The External Examiner should have an "arms-length" relationship with the student, the supervisor and members of the Thesis Supervisory Committee.

The Thesis Coordinator nominates an External Examiner to the Office of the Vice Provost, Research and Interdisciplinary Studies via SharePoint by submitting the nominee's name, email address, institutional affiliation, and link to an online profile or website. The Thesis Coordinator will consult with the Thesis Supervisor and the student on the examiner nomination. The External Examiner should have an "arm's length" relationship, meaning the Examiner should not have had a personal or collaborative professional relationship with the student or the supervisor within the last five years. The Examiner must have a doctorate in a related area of study. Current RRU associate faculty are not eligible to serve as External Examiners since they do not meet the arm's length requirement.

To ensure the integrity of the examiner process, students, committee members, supervisors, thesis coordinators and the Faculty Dean should not directly contact External Examiners. Only the Office of the Vice Provost, Research and Interdisciplinary Studies should have direct contact with the Examiner. Though it is the responsibility of the student and all members of the Supervisory Committee to avoid

conflict of interest, the Office of the Vice Provost, Research and Interdisciplinary Studies is charged with ensuring that all members of the Supervisory Committee are aware of this responsibility.

The Office of the Vice Provost, Research 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. Prior to the defence, the External Examiner will submit to the Thesis Supervisor the External Examiner Report. All members of the Supervisory Committee and the student will receive copies of the External Examiner's report.

The earliest an External Examiner could be nominated would be after a student's Thesis Supervisory Committee has been approved, but a nomination can occur at any time prior to the submission of the final thesis to the Supervisor.

The External Examiner is invited to serve in this capacity via correspondence from the Office of the Vice Provost, Research and Interdisciplinary Studies. Once the Examiner has accepted the invitation, the Office of the Vice Provost, Research and Interdisciplinary Studies will engage in correspondence with the Examiner and submit the thesis for the Examiner's review (outside of SharePoint). The Examiner will review the final draft of the thesis as approved to go to the defence and submit a final report including a final recommendation to accept, accept with revisions, or not accept the thesis. The Examiner does not attend the defence.

The Examiner will submit their final report prior to the defence to the Vice Provost, Research and Interdisciplinary Studies, who will review the report and circulate it to the Thesis Committee and the student.

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 a comprehensive knowledge of the literature in the field(s) and the work of other scholars.

Once the student's thesis has been approved to move to the defence stage, the student schedules the defence by contacting the respective Dean's Office. In the case of the Faculty of Social and Applied Sciences, the student should email the defence scheduling request to @RRU-FSAS-dean-office. It is the student's responsibility to determine the participants' (Supervisor and Committee Members) availability (date and time) and to communicate potential dates to the respective Dean's Office. Defences are only scheduled during regular working hours.

It is the respective Dean's Office's responsibility to schedule the room and teleconferencing equipment, in consultation with the student. The respective Dean's Office will notify the participants and the Office of the AVP Research and Faculty Affairs of the final date, time, and location. The Office of the Vice Provost, Research and Interdisciplinary Studies will assign a faculty chair or other representative of the Office of the Vice Provost, Research and Interdisciplinary Studies to the defence.

The defence date and time are announced on the Office of Research website.

Students should plan to schedule their defence at least one month in advance of its occurrence.

The Office of the Vice Provost, Research and Interdisciplinary Studies designates a chair for the defence. The chair cannot be a member of the Thesis Supervisory Committee. The role of the chair will be limited to chairing the defence, introducing the process and the participants, ensuring that all aspects of the academic regulation governing the thesis defence will be observed, and confirming the post-defence process steps for those present at the defence.

The chair will not ask subject-specific questions. The chair will report the results of the defence to the Office of the Vice Provost, Research and Interdisciplinary Studies, which will record the defence outcome in SharePoint.

Defences will take place face to face or via video-conferencing unless exceptional circumstances apply. The defence may not be video- or audio-recorded.

The defence will be scheduled for a 90-minute time period. Each defence will begin with the Chair's introduction, followed by a 15 to 20 minute presentation by the student, summarizing the major findings of the thesis. The defence takes place in two rounds of questioning. The Committee members take turns asking questions, as moderated by the Chair.

When all questions by the Committee members are exhausted, the student leaves the room or logs out of conferencing while the committee determines whether the thesis and the defence are acceptable. At that time, the Committee decides by majority vote on one of the five recommendations. In the event that the Committee's decision is not unanimous, the majority (50% +1) shall prevail, including the External Examiner's recommendation. At the completion of the questioning period, the committee will deliberate in private. The supervisor, with only the Thesis Supervisory Committee members present, will inform the student of the adjudication results immediately after the deliberations.

Normally, the oral thesis examination will be considered an "open" session, at which faculty members and students from the student's academic unit may attend. Such guests, (a) may participate in the questioning only by permission of the chair; (b) are not permitted to participate in the discussion of the student's performance, (c) must enter the session 5 minutes in advance of its scheduled start time and cannot exit and re-enter during the oral examination, and (d) must withdraw before the committee deliberates on the outcome of the student's thesis and oral examination. Given space limitations, guests are restricted to virtual attendance. Exceptions require prior consultation with the respective Dean's office scheduling the event.

Recommendation 1: Thesis acceptable, oral defence acceptable.

Outright pass; minor copy-editing revisions to be reviewed by Supervisor prior to submission to Library.

Recommendation 2: Thesis requires minor revisions, oral defence acceptable.

The thesis requires changes and additions including additional illustrative material, recasting of certain sections, additional data inclusion, and editing. The supervisor and the student work together to ensure that the recommended changes are executed satisfactorily

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 three months to implement. In general, the committee finds that the thesis does not meet the minimum standards but agrees that the candidate has the potential, with additional preparation, to successfully defend a revised thesis. The thesis, under normal circumstances, should be resubmitted to the

committee for approval within a six-month period. This recommendation can only be issued at a student's first defence.

Recommendation 4: Thesis acceptable, oral defence unacceptable.

The second oral defence should be rescheduled within three months of the first defence.

Recommendation 5: Thesis unacceptable, outright fail.

The thesis does not meet the minimum standards; no reasonable amount of research and rewriting will raise it to a level of acceptability. The committee judges that the candidate does not have the potential to be able to successfully defend the work. Students receiving this recommendation will be automatically required to withdraw from the master's program.

With Distinction

A thesis that is judged to be outstanding (in the top 1-3 percent) may be recommended to be awarded distinction.

A recommendation can be appealed to the respective Dean, the Office of the Vice Provost, Research and Interdisciplinary Studies, and, ultimately, the Vice President Academic and Provost.

A successful defence leads to a course grade of "CR" for the LRNT 690 course. Unless an exemption has been granted by the Vice President Academic & Provost, submission of the thesis for publication to RRU's Digital Archive, Pro-Question and Library and Archives Canada is a requirement for graduation approval.

Frequently Asked Questions

Q1. What topics are open to me? Does it have to be about formal education or e-learning?

A. Anything to do with learning and technology. We have had theses about formal education, training, informal learning and use of social media. The studies have taken place in many different settings. The learning content has varied greatly as have the technologies.

Q2. Are there restrictions on what methodologies I can use, as long as they are defended, approved by my supervisor and the study seems feasible?

A. There are no restrictions, although there are workload implications.

Q3. What do you mean by methodology and do I have to state it explicitly?

A. We mean the umbrella approach you use, such as action research, phenomenology, ethnography, hermeneutics, and so on. These choices guide the methods you use to collect data, analyze it and present it. Yes, you need to state this explicitly.

Q4. Could I combine methods?

A. Yes. You might use mixed methods if you need to (usually meaning a blend of qualitative and quantitative work) or you might have one methodology influencing another, such as ethnography influenced by action research.

Q5. How much is enough?

A. Scholars disagree about just what is needed to properly complete an action oriented or applied research study or a case study, and so on. You and your supervisor agree on such points and you defend them.

Q6. What if my supervisor and I agree on an approach where there is debate in the literature or among scholars at the university?

A. Make thoughtful choices to support your research question, explain them in the thesis and defend them if needed. Understand that some non-mainstream choices will require a more eloquent defence than others. Grow into being a confident scholar-practitioner. You and your supervisor should agree on the merit of your approach, however, and your supervisor should be confident that she or he has the methodological expertise to guide your study. Should this not be feasible, you may wish to recruit a different supervisor.

Appendix 1

Learning Outcomes

The School of Education and Technology works with a program learning outcomes framework that informs the course learning outcomes. Program learning outcomes 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 graduate of the MALAT program.

Graduates of the MALAT program 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. Graduates of the MA in Learning and Technology will have the knowledge, skills and ability to:

- 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 research.

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. Specifically, the MA Thesis (LRNT 690) is aligned the following MALAT program learning outcomes:

- PLO 1 Communicate and synthesize information and arguments at the graduate level.
- PLO 7 Contribute meaningfully to digital learning networks 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 process to improve professional practice
- PLO 10 Critically evaluate and/or produce research