School of Education and Technology

Digital Learning Research Consulting Project (DLRCP) Handbook

Master of Arts in Learning and Technology

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Applies to Intake 2024 and onward MALAT DLRCP Completion Pathway

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SECTION 1: General Information on Graduate Research in the School of Education and Technology

The MA in Learning and Technology is an innovative academic program that is designed to offer its graduate students both rigorous academic training and applied skills in the fields of learning and technology. Given the dynamic nature of this intersection, there are many opportunities to undertake research that is new, innovative and interesting.

There are three research exit pathways in this program: (1) thesis, (2) applied research project (ARP), or (3) a digital learning research consulting project (DLRCP). Each pathway provides graduate students with an opportunity to engage in rigorous research that will contribute to the field while contributing to the skills and knowledge of the researcher.

Conducting research in any of the three exit pathways means making a commitment to design and conduct of a substantial piece of independent work. The work must conform to the academic standards and conventions outlined below.

Purpose of Handbook

This document is designed to offer guidance for graduate students who have chosen to complete a DLRCP rather than a thesis or an applied research project. It provides comprehensive guidelines for MALAT students as well as provides guidance to the academic supervisor overseeing DLRCP work and the DLRCP sponsor.

Requirements for Degree Completion

To graduate with an MA in Learning and Technology, graduate students must complete a minimum of 33 course credits. Course credits will normally consist of on-campus residency course work (blended program) or online equivalent (fully online program), course work taken at a distance, and the successful completion of the independent research component. The allocation of credits will depend on whether the graduate student is writing a thesis or an applied research project or a digital learning research consulting project.

Applied Research Project (ARP)	**Digital Learning Research Consulting Project (DLRCP)**	**Thesis**
6 credits with option of blended or online offerings	6 credits with option of blended or online offerings	6 credits with option of blended or online offerings
21 credits online courses	21 credits online courses	15 credits online courses
6 credit project	6 credit project	12 credit thesis

DLRCP Timelines

NOTE: the table below represents general timelines and tasks associated with the MALAT DLRCP (LRNT 692).

DLRCP Track Timelines	Suggested Timeline
Complete LRNT 622 NOTE: LRNT 622 is a pre-requisite for LRNT 692 in which you will develop and receive feedback on your proposal for your digital learning research consulting project.	Prior to beginning LRNT 692
Begin LRNT 692 – establish ongoing meeting schedule with academic supervisor.	Jan 2025
Refine research question, proposal, and obtain sponsor agreement.	Jan 2025
Submit draft of final paper for Peer and Academic Supervisor Feedback	Mid-March 2025
Create and submit Virtual Symposium presentation	Mid-April 2025
Submit Final DLRCP Final Project Report	end May 2025
Address revisions and edits	By end of course*

*Students not successfully completing all course requirements by the end of course date will be required to apply to the MALAT program office for a program extension.

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 DLRCP.

- 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 your DLRCP. Consult the document in the Appendix when planning the project in order to identify the learning outcomes your DLRCP 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.

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.

DLRCP Goals

The DLRCP exit pathway includes designing and conducting the DLRCP itself as well as creating the DLRCP Final Project Report. A DLRCP requires a sponsor within an organization (see detail in handbook below re: role of sponsor).

Types of projects need not be original contributions to knowledge, but may include application of knowledge to the field, development of instructional practices or resources, evaluations of practices or resources, conduct of a project evaluation or impact assessment project or pilot of digital learning environments and/or associated media and resources.

The DLRCP and the related DLRCP Final Project Report should constitute approximately 200 hours of effort by the graduate student resulting in the awarding of 6 credit hours. It is anticipated that students will consult with between 6 – 10 stakeholders in the sponsor organization as part of the consulting aspect of the project. This course is not taught, but students are supported by the academic supervisor on a 1:1 basis. LRNT 692 has a course blanket ethics for data collection according to the research ethics guidelines outlined in the course and included for reference in Appendix 2. If your project falls outside of what is described in these guidelines, consult with your course instructor before going forward as you will need to receive approval for an additional ethical review. Standards of validity and academic rigor apply as appropriate to the nature of the DLRCP project.

The DLRCP Final Project Report constitutes a substantial written investigation of the issue(s) examined in the project and the rationale for the overall project direction relevant to the study of learning in technology-mediated environments. Some, but not all, research-related learning outcomes of the program will be demonstrated in the DLRCP final report; a demonstration of research skills, critical thinking and effective writing will be especially important. The DLRCP final project report will be assessed by the academic supervisor who is the instructor of record for LRNT 692 and who holds a doctoral degree.

Time to Complete Master's Degree

Graduate students who do not complete their DLRCP by the specified end date will be required to apply for and receive a program extension.

Extensions:

From time to time, unavoidable circumstances will arise that prevent the graduate student from completing the research component of the program. An extension is required if the research is not completed by the scheduled end date of LRNT 692. A program extension of up to 90 days can be applied for; approval of the extension request is required from the academic supervisor and the MALAT Program Head. Extensions require the approval of the dean, or authorized designate of the Faculty of Social and Applied Sciences.

SECTION 2: Policies Governing Graduate Research

Compliance with RRU Policies

The information described in the handbook is consistent with the policies and procedures governing the academic operation of Royal Roads University. **RRU Policy Precedence:** Formal university policies and regulations take precedence over the information contained in the research handbook.

Ethical Review Process

LRNT 692 has obtained ethics approval on behalf of students in LRNT 692 to conduct a human- centred needs assessment. The blanket ethics approval for this course must be reviewed and discussed with your academic supervisor to ensure that you and your intentions for your DLRCP are conforming. You are required to have completed the Tri-Council ethics tutorial before starting any research involving humans. DLRCP's need to comply with the following:

- The data collection methods will be limited to observation, interview or questionnaire
- Participants will be asked to contribute under one hour each.
- You will be obtaining free and informed consent from all participants*
- Between six and ten participants will be involved to provide insights on the need for research that addresses your research question/s. No participants will be under 18 or part of a vulnerable population.
- The organization involved does not require its own ethical review.
- You are not in a position of power over any participants.
- You are not in a conflict of interest.
- You will store any data collected locally or on secure internal servers (not in the cloud or in servers located outside Canada).
- Stored data will be deleted permanently after 6 months.
- You do not have a perceived conflict of interest

http://www.pre.ethics.gc.ca/eng/policy- politique/initiatives/tcps2-eptc2/chapter7-chapitre7/. If you are an employee of the organization, you are researching you will need to make this transparent and explicit on your informed consent form.

- The data collected will be used to produce the final digital learning research consulting project for LRNT 692 and inform a brief (e.g. briefing note; briefing presentation etc.) to be shared with the organization.
- Participants can withdraw at any time.
- Participants views and opinions will be collected and reported back in the DLRCP final report, but no personally identifiable information will be used.
- If your work is going to involve Indigenous peoples as defined here http://www.ger.ethique.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/chapter9- chapitre9/#toc09-1, you will need to consult the Royal Roads Office of Research

If your project falls outside of what is described above, consult with your academic supervisor before going forward with your DLRCP project as you will need to receive approval for an additional ethical review.

Confidentiality in Research

In the DLRCP, graduate students undertake research with the support of an organization, such as their employer. When graduate students are conducting their research to serve the needs of an organization, they are required to adhere to the confidentiality guidelines of the organization. They should familiarize themselves with the content of the organizations guidelines before producing their proposal. Potential projects that require graduate students to restrict their investigative or reporting methods should be avoided.

Restrictive Practices: Issues of confidentiality and non-disclosure must be thoroughly explored with your academic supervisor. Non-disclosure agreements or restrictive practices that curb the ability of the researcher to fulfill their research requirements should be avoided because it obligates the individual to confidentiality and restricts the use of specific information.

Examples are:

- an organization reserves the right to restrict the types of data reported in the final report;
- an organization limits distribution of the final report and therefore the ability of other researchers to use the report are restricted; or

- an organization does not permit the graduate student to describe relevant productivity data or financial information in the final report.

Intellectual Property and Research

The completion of the DLRCP 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 outcomes 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 digital learning research consulting project should familiarize themselves with the current intellectual property guidelines adopted by the university and speak with their academic supervisor and the Office of Research researchservices@royalroads.ca

Examples of intellectual property may include written reports, supporting data, DVD's 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.

Ownership of Intellectual Property:

The issue of intellectual ownership becomes difficult when the person conducting a research project is either a paid employee or a paid contractor of the firm for whom the research project is being conducted. In these cases, ownership of any intellectual property should be clarified before the research is undertaken.

The method of clarifying ownership could be as simple as a statement in the Letter of Agreement or as complicated as a legally binding research contract. Research contracts often stipulate that intellectual property (which could be copyrighted) may be jointly owned and the agency or company participating in the research effort has the authority to exploit the knowledge, process, or tool for commercial gain.

RRU and Intellectual Property:

Royal Roads University holds no claim on the intellectual property produced as a result of the research project.

Copyright and the University

Copyright is the right to copy, distribute, publish and/or sell all or part of an academic, artistic or commercial product. The author of an RRU DLRCP final project report owns the rights to his or her product and should claim copyright on the title page of the final

research report. Note that the Creative Commons Attribution-Non-Commercial ShareAlike logo (cc) may be used instead of the copyright symbol used here. This would require a statement as the second page after the title: Creative Commons Statement

> *This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 2.5 Canada License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/2.5/ca/.*

All Royal Roads students are **personally responsible** for ensuring that their DLRCP final report 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 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: https://libguides.royalroads.ca/copyright4theses/obtainingpermission

Copyright Permission Form Letter

By submitting their DLRCP final project report for assessment, 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 DLRCP final report, the wording used is very

important. The person granting permission needs to be fully informed of how the material will be used and distributed. Information about copyright and a downloadable copy of the Royal Roads Copyright Permission letter is available at https://libguides.royalroads.ca/copyright4theses/obtainingpermission

and in Appendix 3.

SECTION 3: Roles and Responsibilities

The Role of the Graduate Student

The graduate student is responsible for planning, implementing and completing the DLRCP, and writing the DLRCP final project report.

The graduate student:

- reviews and adheres to the policies, regulations and guidelines governing the completion of a DLRCP and the DLRCP final project report as outlined in the DLRCP Handbook;
- develops the DLRCP proposal with as part of LRNT 622;
- prepares the DLRCP Letter of Agreement (Appendix 4) for approval by the Sponsor and Academic Supervisor.
- adheres to the requirements of LRNT 692 for submission of draft chapters or sections in accordance with the posted schedule;
- reviews the Research Ethics Guidelines for LRNT 692 (Appendix 2) before collecting any data, and if projects falls outside what is described within, consults with your academic supervisor before going forward with your DLRCP project as you will need to receive approval for an additional ethical review;
- completes the DLRCP in accordance with the DLRCP proposal and in full compliance with the humanistic obligations specified in the Royal Roads University Research Ethics Policy and the Royal Roads University Policy on Integrity and Misconduct in Research and Scholarship http://student.myrru.royalroads.ca/policies-guidelines/academic- regulations-policies;
- submits DLRCP Final Report drafts to their LRNT 692 academic supervisor as agreed in the milestones section of the DLRCP Proposal;
- participates in all meetings with LRNT 692 academic supervisor and Sponsor as outlined in LRNT 692 schedule and, if not more often, updates the LRNT 692 academic supervisor and Sponsor on the status of the project;
- meets with the Sponsor and selected representatives from the sponsor

organization to discuss findings and develop/confirm recommendations that will be incorporated in the DLRCP Final Report and have Sponsor complete the Completion of DLRCP Sponsor Form (Appendix 5);

- ensures that the DLRCP and DLRCP final project report meets appropriate quality standards of academic rigor in accordance with framework in the Draft DLRCP Assessment Form (Appendix 6); and
- adheres to the program-mandated schedule for submission of the final DLRCP final project report and any other related LRNT 692 activities.

The Role of the Academic Supervisor

Every graduate student completing an MA DLRCP in the School of Education and Technology will be supervised and assisted by an academic supervisor of record, approved by the MALAT program head. The academic supervisor will normally be the LRNT 692 instructor of record and possess a relevant PhD.

The primary role of the Academic Supervisor is to help the student meet the ethical and academic standards of Royal Roads University for the project, and to advise and support the student in developing, implementing, analyzing and writing the final report. The following details the role of the Academic Supervisor through various stages of the process.

The supervisor:

- supports and advises the student throughout the entire DLRCP process as outlined in the MALAT DLRCP Handbook and the LRNT 692 online course;
- develops and agrees on timelines with the student for DLRCP proposal package documents (DLRCP proposal, Letter of Agreement, and Ethical Review Application (if project scope is beyond the approved course blanket ethics as outlined in the Research Ethics Guidelines for LRNT 692);
- helps the graduate student to refine the research proposal, the research question, the methods to be used, and how to effectively proceed through the research process
- reviews and approves the DLRCP Proposal (student uploads to Moodle);
- reviews the DLRCP Letter of Agreement (student submits completed form to Moodle);
- if required - reviews, approves and submits the Request for Ethical Review Form to the Office of Research via email: ethicalreview@royalroads.ca
- undertakes regular check-ins and consultations with the student during the project as per LRNT 692 course schedule.
- reviews and provide comments to the student on the emerging data collection activities, inquiry implementation, and data analysis process;

- reviews and comments on drafts of the DLRCP Final report. This is to ensure steady progress and fewer surprises at the time of final submission. As findings, conclusions, and recommendations solidify, these should be discussed with the student. The consultations should provide a broader, academic perspective to the inquiry and help the student consider all possibilities that are presented by the evidence and to consider alternate explanations (academic supervisors add valuable insights that greatly assist the student in more fully exploring the issues, implications, and conclusions of their DLRCP);
- acts as the final reviewer of the DLRCP final project report by reviewing and approving the DLRCP Final Report as complete and fully meeting or exceeding the standards of quality and academic rigor in all sections and elements of the final report, as outlined in the MALAT DLRCP Handbook in alignment with those established by the university, such approval reflecting the best scholarly judgment of the academic supervisor; and,
- completes the assessment of the graduate student's work and achievement of the LRNT 692 course learning outcomes using the Final Research Assessment Form (Appendix 7).

The Role of the Organizational Sponsor

The primary role of the sponsor is to represent the sponsoring organization's interest as the 'client' of the project. The sponsor is there to assist the learner in identifying and articulating the opportunity, challenge, or problem to be addressed during the project, to promote the interests of the sponsoring organization and, most importantly, to ensure that changes recommended from the findings are actionable and could be implemented. The Sponsor should be:

- A key stakeholder/supervisor in the organization or an individual who has ownership of the workplace problem or opportunity of the inquiry.
- A representative of the Sponsoring organization and is a key stakeholder who needs assistance in reorganizing, problem solving, improving performance, or for any reason may benefit from the intervention of an outside consultant.
- Able to have the authority and responsibility to provide the learner access to the organization (e.g., organizational documents, administrative resources, access to employees that may participate in the project).
- Able to, upon project completion, champion the project recommendations.

A good Sponsor:

- has time to spend with the learner;
- has enthusiasm and the ability to support the inquiry;
- has control or authority over the issues that will be examined during the inquiry and is able to speak as the ‘client’ about the inquiry activities;
- is open to accepting and considering the findings and provides advice on ensuring that the recommendations are practical and could be actionable;
- is open to learning and willing to expect the unexpected (as there may be new or different findings that arise out of this inquiry than originally expected or anticipated); and,
- is in a position to act on the recommendations.

A sponsor is required, given that the DLRCP research is to be an applied research project undertaken within an organizational setting. Students who are working on a project for their employer are advised to develop a detailed addendum to the standard required Letter of Agreement (Appendix 4) that outlines the expectations of both parties concerning access to corporate data and resources, work planning, and other considerations. This agreement protects both parties in the event of questions or disagreements about the terms of support and involvement.

Students must fully understand the problems and issues important to the sponsor. Gathering sponsors feedback on the DLRCP proposal builds understanding and ensures that there are no surprises in any of these documents. All areas that involve sponsors, their subordinates or superiors, or processes that may potentially be out of the ordinary for the normal workflow should be reviewed with the sponsor before the DLRCP proposal is submitted for academic approval to the academic supervisor.

The Roles and Responsibilities of the Sponsor:

The sponsor:

- Assists the student in identifying and articulating the problem or opportunity to be examined during DLRCP research and the interests of the sponsoring organization as a key stakeholder within the inquiry;
- Agrees to provide the resources and support described in the Letter of Agreement (Appendix 4);
- Reviews and approves the DLRCP Proposal and signs the Letter of Agreement (Appendix 4);
- Reviews sample consent form and ethics procedures as outlined in the DLRCP Handbook;
- Where appropriate, provides the resources, facilities, funds and personnel needed to support the successful completion of the project as

described in the DLRCP Proposal;

- Where appropriate, facilitates the timely conduct of the research processes and collection of information;
- Reviews the DLRCP Final Report findings, conclusions and recommendations with the student and where appropriate, facilitates a debriefing session on the data findings, conclusions, and recommendations with key representatives within the organization;
- Reviews and sign off on the DLRCP Final Report by completing the Completion of DLRCP Sponsor Form (Appendix 5).

NOTE: While action may continue beyond the student's project, only a minority of projects results in recommendations implemented within the timeframe allocated to the student's project. Normally, the recommendations are handed on to the organizational sponsor for implementation.

SECTION 4: The DLRCP 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 academic supervisors. Graduate students are encouraged to form "learning networks" around their particular area of research, and to invite dialogue with other current and previous students.

In LRNT 692, the research proposal developed in LRNT 622 will be modified in response to academic supervisor and sponsor feedback. The academic supervisor, who is normally the instructor of record for LRNT 692, gives final approval of the DLRCP proposal.

The aim of a research 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, details the research methodology, and includes a comprehensive introductory literature review. It should also list the process deadlines that the graduate student expects to meet during preparation and completion of the DLRCP and the DLRCP final project report. The schedule of activities in LRNT 692 will need to be taken into account when creating the

proposal timeline.

Your first version of your research proposal is created as part of LRNT 622 coursework requirements. It is critiqued by the course instructor and by peers, as described in the LRNT 622 course outline. In LRNT 692, you will be expected to make changes to this proposal and finalize it based on review and feedback from your DLRCP academic supervisor and your organizational sponsor.

Proposal Content

A typical research proposal will have the following sections:

1. Introduction
2. Research question and project objectives
3. Literature review
4. Research methods
5. Reference list: APA format for all articles, books, policies cited in the proposal.
6. Timeline for project activities
7. Resource requirements and how they will be provided.

Citation style: American Psychological Association (7th edition) citation style must be employed. Upon approval by the LRNT 692 academic supervisor and your project sponsor, you will be able to move forward with your DLRCP.

SECTION 5: DLRCP Final Project Report

Aims of Graduate Research

The aim of the DLRCP final project report is to write an academically rigorous document that clearly and concisely communicates the theoretical framework, methods, findings, conclusions and recommendations of the graduate student's project as consistent with the mission of the program, and that demonstrates the learning outcomes outlined in Section 1. Publication of the research in an appropriate journal, monograph, conference proceedings, or other format should be a consideration in the development of the work.

DLRCP Final Project Report

Optimal length of the final project report will vary in accordance with the type of work produced. The written report serves to provide the rationale, backing and argument for the direction taken in the project based on the research question underpinning

the work, the theoretical framework guiding it, and the best practices synthesized by the literature and research. The final project report documents the project deliverable(s) created to date or in progress and recommendations or lessons learned as appropriate. The optimum length of the written report will vary in accordance with the type of work produced as part of the project. A range of 3,500 - 5000 words, exclusive of references, appendices etc. would be appropriate.

Layout Guidelines

Individual DLRCP final project reports 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 should be referenced and formatted in accordance with the Publication Manual of the American Psychological Association (7th edition), commonly referred to as the "APA style guide". Refer to the Draft Research Assessment Form, Appendix 6, for additional information.

Organization:

Although the format and organization of a thesis is fairly standardized, the DLRCP final project report allows greater 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 summative report that will include the following components. These titles are indicative of the content of each section of the paper.

A successful MALAT DLRCP final project report will include the following:

Beginning Section:

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

- Title Page (Sample title page, Appendix 8).
- Abstract (maximum of 150 words), with key words.
- Table of Contents.
- List of Figures (if appropriate).
- List of Tables (if appropriate).

Other prefatory elements such as acknowledgements may also be included. You may wish to also include an indigenous acknowledgement to your document. 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.

Chapter 1 - Introduction:

This section should contain:

- The problem or opportunity.
- Introduction to the research question.
- Discussion that illustrates that 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 – organization charts, mission statements, job descriptions, key contributors or participants to the problem (as appropriate to the study).
- Introduction to the theoretical framework perspective and explanation of its relevance to the study.
- Definition of terms.
- Limitations & delimitations.

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.

Chapter 2 - Literature Review:

Every DLRCP final project report will include a review of the literature. An acceptable review of the literature should:

- Consider all appropriate sources of information.
- Describe similar problems or issues contained in peer review journals, books or other acceptable sources of information.
- Include an 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.

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.

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

Chapter 3 - Methodology:

This chapter should address all of the steps completed during the conduct of the research project—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. In the methodology chapter you should:

- Include the methodological framework, e.g., qualitative/quantitative, inductive/deductive, applied action research, and the relevant supporting theory and justification for this approach.
- Provide a step-by-step description of the research methods used during the study and justify their use, including a description of all options considered and attempted during the completion of the study.
- Describe data gathering tools or processes. The data gathering instruments should be described or attached to the paper in the appendix.
- Include a description of the reliability/validity/trustworthiness of all data gathering instruments or activities.
- Demonstrate the proper and effective use of statistical analysis or qualitative analysis tools or approaches.
- Discuss ethical considerations. See course blanket ethics for scope of data collection activities that are covered. If you intend to exceed that scope you are required to speak to your academic supervisor about an additional ethical review.
- Use past tense.

Chapters 4: Findings and Analysis:

Findings (results): Detailed description of the findings or observations made during study completion. Each group of findings must be supported by the evidence collected. After

the introductory paragraph, order your findings as follows:

- Needs analysis, based on your discussions with your stakeholder/s.
- The findings of your meta-synthesis.

Analysis (discussion): Can be a component of the findings section or can be written under a separate heading. The analysis must be supported by the study findings and other related literature.

Chapter 5: Recommendations:

The recommendations are unique and will flow from the findings and analysis documented in Chapter 4. They are distinct from the findings, and the analysis, and should be actionable. When writing the recommendations section, you should explore the following:

- Make a logical connection between the findings and the recommendations.
- Demonstrate an alignment between the specific strategies you are recommending and the issues you identified; in other words, your recommendations should address an identified need.
- Ensure each recommendation is feasible, starts with a verb, and is no more than one sentence.
- Include an explanation for each recommendation.
- Provide a timeframe for the implementation of the recommendations; they should be implementable within a reasonable timeframe (for example, three years).
- Consider unintended consequences of the recommendations.

Chapter 6: Research Implications:

Research implications should include discussions on the following:

- The organizational implementation process for your recommendations.
- A section on potential future research.
- The contribution of the research results on the body of knowledge being studied.
- The implications if the recommendations are not undertaken.
- A brief conclusion to the paper, noting the relevance of the research undertaken.

The final paper will stand up to rigorous academic scrutiny.

Referencing:

Referencing is fundamental to the graduate student's 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 r e a d e r 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. Dropping academic references is the scholarly equivalent of dropping names, and should be avoided; and
- Quote and cite strategically; use what is cited – do not just cite.

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.

SECTION 6: Quality Standards and Assessment

Quality Standards

The DLRCP and the DLRCP final project report should meet or exceed the content, layout and production standards set by the University and the program. A detailed description of the quality standards is provided in the Draft Research Assessment Form (Appendix 6). Only those sections relevant to the individual study will be used to assess DLRCP final project reports.

DLRCP final project reports will also be required to meet the quality standards as identified in the Final Research Assessment Form (Appendix 7).

Submitting the DLRCP Final Project Report for Assessment

Please note that while the course end date is aligned with the program end date, schedules for submitting the DLRCP final project report must take into consideration the time required for assessment, revisions, program review, grade submission deadlines, etc. As a result, it is important that you carefully monitor your progress and ensure that you have allocated sufficient time to meet these

deadlines.

The DLRCP final project report will be provided to the Sponsor for their review and feedback should they wish to provide it. In addition, they will need to complete the Completion of the DLRCP Sponsor Form (Appendix 5). The academic supervisor will complete a final written assessment of the graduate student's academic performance in relation to the completed research using the Final Research Assessment Form (Appendix 7). The supervisor may consult with colleagues if he or she believes that a second opinion would help them to provide a fair assessment.

While the academic supervisor will provide feedback to the graduate student on any changes required to ensure that the work receives an acceptable grade, the graduate student is responsible for revising his/her DLRCP final project report in accordance with the guidance provided.

Program Head Review

Graduate students may be required to submit to a review by the program head when the academic supervisor deems the paper not acceptable.

Graduate Student Appeal Procedures

Graduate students will have an opportunity to formally appeal their assessment if the DLRCP final project report is deemed to be not acceptable following an unfavourable decision through the program head review. In which case, the university formal appeal process must be adhered to https://www.royalroads.ca/grade-appeal-process

SECTION 7: Final Submission

Submission Package

Once the DLRCP final project report has been given an acceptable grade, students must ensure they have submitted all relevant items to the LRNT 692 course site and completed all of the LRNT 692 required course activities. The content of the final submission package will vary depending upon the nature of the DLRCP. Requirements for each DLRCP will be identified on a case-by-case basis.

Those elements that will be common to all packages include:

- The Copyright Compliance form (Appendix 3);
- One copy of the title page formatted in accordance with Appendix 8;
- A statement about whether the title or general topic can be shared for purposes

such as communication with prospects 1:1 or in venues such as conferences;
- The signed Letter of Agreement (Appendix 4); and,
- The signed Completion of DLRCP Sponsor Form (Appendix 5).

Graduation

The graduate student is eligible to have his or her name forwarded to Academic Council for graduation approval once all program requirements are met. The online graduation application form is located at http://www.royalroads.ca/news-events/convocation.

Students must apply to graduate if they plan to attend the convocation ceremony. Students who are unsure if all program requirements have been met are encouraged to contact the MALAT program office.

Appendix 1: MALAT Program 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 DLRCP and DLRCP final project report (LRNT 692) 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.

Appendix 2: Research Ethics Guidelines for DLRCP – blanket ethics

Your instructor has obtained ethics approval on behalf of students in LRNT 692 to conduct a human-centred needs assessment. Please review the blanket ethics approval for this course to ensure that you are conforming. You must have completed the Tri-Council ethics tutorial before starting any research involving humans. Your research needs to comply with the following:

- The data collection methods will be limited to observation, interview or questionnaire
- Participants will be asked to contribute under one hour each.
- You will be obtaining free and informed consent from all participants*
- Between six and ten participants will be involved to provide insights on the need for research that addresses your research question/s. No participants will be under 18 or part of a vulnerable population.
- The organization involved does not require its own ethical review.
- You are not in a position of power over any participants.
- You are not in a conflict of interest.
- You will store any data collected locally or on secure internal servers (not in the cloud or in servers located outside Canada).
- Stored data will be deleted permanently after 6 months.
- You do not have a perceived conflict of interest http://www.pre.ethics.gc.ca/eng/policy- politique/initiatives/tcps2-eptc2/chapter7-chapitre7/. If you are an employee of the organization you are researching you will need to make this transparent and explicit on your informed consent form.
- The data collected will be used to produce the final digital learning research consulting project for LRNT 692 and inform a brief (e.g. briefing note; briefing presentation etc.) to be shared with the organization.
- Participants can withdraw at any time.
- Participants views and opinions will be collected and reported back in the research report, but no personally identifiable information will be

used.

- If your work is going to involve Indigenous peoples as defined here http://www.ger.ethique.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/chapter9- chapitre9/#toc09-1, you will need to consult the Royal Roads Office of Research

If your particular project falls outside of what is described above, consult with your course instructor before going forward with your digital learning research consulting project. It is the responsibility of the student to read and become familiar with the parameters of the LRNT 691 course blanket ethics approval and to fill in the Research Consent form* and provide it to any participants in your research project

* Please see the informed consent form template.

Appendix 3: Copyright Compliance Form

Student's name:

Title (and brief description) of work:

_____

_____

_____

Authorization/Terms of use:

I certify that no other individual or parties hold copyright interest in the work(s) described above and that I hold all rights to the works listed. I understand that any third-party content within my work must be used with permission of the author(s) in compliance with the Canadian Copyright Act and I certify that I have received copyright clearance for any third-party content used.

Information about copyright and a downloadable copy of the Royal Roads Copyright Permission letter is available at https://libguides.royalroads.ca/copyright4theses/obtainingpermission

Course name:

Student's signature:

Date:

Appendix 4: Letter of Agreement - DLRCP

RRU School of Education and Technology: MA Learning and Technology Project
LRNT 692 Digital Learning Research Consulting Project (DLRCP)
Organizational Letter of Agreement

Organization Participating in the Study:
Name:
Address:

Organization Representative:
Name:
Address:
Phone:
FAX:
E-mail:

RRU Graduate Student:
Name:
Phone: (work)
E-mail:

RRU Course Instructor for LRNT 692:
Name:
Phone: (work)
E-mail:

Responsibilities and Organizational Commitment
The RRU MALAT graduate student, the Organization agree to participate in the successful completion of the proposed digital learning research consulting project (herein referred to as the DLRCP) and perform the roles and responsibilities identified in the DLRCP Handbook.

Project Description, Action Steps and Milestones
The project goals, process and anticipated outcomes are described in the project proposal. The project proposal highlights the activities to be completed, the study milestones and the involvement of the [Insert Name of the Organization} (herein referred to as the Organization) and its employees and other participants.

Confidentiality
The RRU MALAT graduate student agrees to honour individual and corporate confidentiality and non-disclosure guidelines. The Organization agrees to allow the Graduate Student full access to the resources identified in the proposal. The Organization agrees to allow the student every opportunity to canvas and collect data from individuals and groups identified in the project proposal.

The Organization's project participants will be asked to formally acknowledge that the information they provide to the researcher will be handled in a confidential and privileged manner, as described in the *Royal Roads University Research Ethics Policy* (2011), accessible on the RRU Web site at: http://www.royalroads.ca/research/ethical-reviews/

Specifically, as part of the data collection activities (surveys, interviews etc.) required, project participants will be asked to review and consent to participant in the research and acknowledge that the information they provide will be handled in a confidential and privileged manner, as described in the Research Ethics Guidelines for LRNT 692. Individual and group identity will not be disclosed to any other members of the Organization.

Intellectual Property

The completion of the DLRCP 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 outcomes 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 digital learning research consulting project should familiarize themselves with the current intellectual property guidelines adopted by the university and speak with their course instructor and the Office of Research researchservices@royalroads.ca

Examples of intellectual property may include written reports, supporting data, DVD's 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.

Deliverables

The MALAT graduate student will provide the Organization with a copy of the final DLRCP project report. In addition, the graduate student may agree to provide formal briefings to individuals or groups identified by the Organization.

Endorsement

We, the undersigned agree to abide by the arrangements and statements contained in this Letter of Agreement and have reviewed and approved the DLRCP proposal.

_____ _____

Organization Representative Dated

_____ _____

Graduate Student Dated

Appendix 5: Completion of the DLRCP Sponsor Form

Sponsor Organization: _____

Project Title: _____

Student's Name: _____

I verify that I have received the project document and associated presentation (if applicable) understanding that it is undergoing academic review and as such, is not in its final form.

_____ _____

Signature of Sponsor Date

Comments or Feedback (not required but appreciated):

Appendix 6: Draft DLRCP Final Project Report Assessment Form

Name:	
Beginning Section: □ Title Page (Sample title page, Appendix 8). □ Abstract (maximum of 150 words), with key words. □ Table of Contents. □ List of Figures (if appropriate). □ List of Tables (if appropriate).	
Chapter 1 - Introduction: □ 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 – organization charts, mission statements, job descriptions, key contributors or participants to the problem (as appropriate to the study). □ Introduction to the theoretical framework perspective and explanation of its relevance to the study. □ Definition of terms. □ Limitations & delimitations.	
Chapter 2 - Literature Review: □ Consider all appropriate sources of information. □ Describe similar problems or issues contained in peer review journals, books or other acceptable sources of information. □ Include an 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 3 - Methodology: □ Include the methodological framework, e.g., qualitative/quantitative, inductive/deductive, and the relevant supporting theory. □ Provide a step-by-step description of the research methods used during the study and justify their use, including a description of all options considered and attempted during the completion of the study. □ Describe data gathering tools or processes. The data gathering instruments should be described or attached to the DLRCP final project report. □ Include a description of the reliability/validity/trustworthiness of all data gathering instruments or activities. □ Demonstrate the proper and effective use of statistical analysis or qualitative analysis tools or approaches. □ Discuss ethical considerations. □ Use past tense.	
Chapters 4: Findings and Analysis Findings (results): Detailed description of the findings or observations made during study completion. Each group of findings must be supported by the evidence collected. After the introductory paragraph, order your findings as follows: • Needs analysis, based on your discussions with your stakeholder/s. • The findings of your meta-synthesis. Analysis (discussion): Can be a component of the findings section or can be written under a separate heading. The analysis must be supported by the study findings and other related literature.	

Chapters 5 Recommendations The recommendations are unique and will flow from the findings and analysis documented in Chapter 4. They are distinct from the findings, and the analysis, and should be actionable. The recommendations: • Make a logical connection between the findings and the recommendations. • Demonstrate an alignment between the specific strategies you are recommending and the issues you identified; in other words, your recommendations should address an identified need. • Ensure each recommendation is feasible, starts with a verb, and is no more than one sentence. • Include an explanation for each recommendation. • Provide a timeframe for the implementation of the recommendations; they should be implementable within a reasonable timeframe (for example, three years). • Consider unintended consequences of the recommendations.	
Chapter 6: Research Implications Research implications should include discussions on the following: • The organizational implementation process for your recommendations. • A section on potential future research. • The contribution of the research results on the body of knowledge being studied. • The implications if the recommendations are not undertaken. • A brief conclusion to the paper, noting the relevance of the research undertaken. • The final paper will stand up to rigorous academic scrutiny.	
Production Quality Considerations	
Project report layout and format conform to the guidelines provided in this handbook (or as negotiated).	
Document formatted in accordance with the Publication Manual of the American Psychology Association (7th edition) (especially in-text citations and the reference list).	
Tables, figures, diagrams and graphs of sufficient quality that they can be reproduced clearly	
Report free of spelling or grammatical errors.	

Appendix 7: Final DLRCP Final Project Report Assessment Form

DLRCP Final Project Report Title:	
Assessor:	Graduate Student:
Date:	Final Paper Grade (Pass/Fail):

1. Critical Reasoning Quality of argument (organization, logic, all sides effectively presented, depth/ adequacy of analysis, power of criticism, interpretation separated from evidence, assertions and conclusions substantiated).	
2. Communication Quality of presentation (structure and form, coherence, lucidity, grammar, style, freedom from typographical errors, effectiveness of illustrations, etc.).	
3. Knowledge and Skills Grasp of subject; adequacy in review and understanding of other work; authoritative sources; accuracy and depth; diligence, care, technical skill in research.	
4. Integrated Perspective Incorporation of the concepts of learning and technology; effectively integrating knowledge from both fields for a unified, balanced approach.	
5. Overall Evidence of originality and creativity, resourcefulness, and awareness of the significance of the findings and the significance of the contribution.	

Appendix 8: Sample Title Page

DLRCP Final Project Report
Title

by

Graduate student's name

A digital learning research project final project report submitted in partial fulfillment of the requirements of the degree of

MASTER OF ARTS

in

LEARNING AND
TECHNOLOGY

ROYAL ROADS
UNIVERSITY

Month Year

© Your name, Year