

# DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY & LEARNING SCIENCES



## **MS Plan A Thesis Handbook: A guide for writing the thesis proposal and thesis**

This departmental handbook explains the ITLS MS thesis requirements. This handbook supplements information and is superseded by the School of Graduate Studies section of the current Utah State University Catalog or online at <http://www.usu.edu/graduateschool/>. Students are responsible for knowing and meeting the requirements of both the Department and the University.

LOGAN, UT  
<http://itls.usu.edu>

LAST REVISED: Fall 2017

Once a student has selected a thesis chairperson, the student and the chairperson collaborate to identify other members of the supervisory committee. The supervisory committee suggests and approves course requirements for the degree, approves the thesis proposals, and assists students with their thesis research. The supervisory committee will also conduct the oral defense of the thesis proposal and final thesis. For master’s-level students, the supervisory committee includes a minimum of three faculty members: the chairperson, one faculty member that represents the student's area of specialization, and at least one faculty member from outside the area of specialization.

The MS degree requires a written formal thesis. The Chairperson and committee are responsible for helping, approving, monitoring, and signing off the work completed for the requirement.

All required School of Graduate forms are available for download via:

<http://rgs.usu.edu/graduateschool/forms/>

Once completed, save the form using the file name convention defined on the form and email it to the department’s **Graduate Program Coordinator** to submit for electronic signatures.

The following outlines the process.

<b>Step</b>	<b>School of Graduate Studies Form</b>
Select your thesis Chairperson (typically during the first or second semester)	
Select and formalize your Supervisory Committee (typically during the first or second semester)	<b>Supervisory Committee Approval</b>
Complete and file program of study form (typically second semester)	<b>Program of Study</b>
Working with your Chairperson, prepare a thesis proposal that meets the requirement outlined in this handbook	
Submit the thesis proposal for approval to your chair and thesis committee, allowing for a two-week review.	
Schedule a proposal defense meeting with your MS committee for discussion and approval of the proposal. Meetings can be face to face or using conferencing technology.	
Revise proposal as necessary. You must have an approved proposal before proceeding with your thesis project.	
Gather committee signatures using the Masters Thesis Approval Form.	<b>Masters Thesis Approval Form</b>
Complete, if necessary, IRB approval requirements (see IRB section below). Submit signed MS thesis approval form to IRB along with required IRB documents.	<b>IRB Approval (if required)</b>

When both the proposal and IRB are approved, IRB will forward its approval with the RGS thesis approval form (at least 3 months before final defense).	<b>Masters Thesis Approval Form</b> <b>Copyright Ownership</b> <b>Authorship form</b>
Carry out the approved research project with the highest level of professionalism. During the process, consult with your Chairperson and thesis committee as needed.	
Attend Graduate School Thesis formatting workshop: <a href="https://rgs.usu.edu/graduateschool/thesis-dissertation-information-session/">https://rgs.usu.edu/graduateschool/thesis-dissertation-information-session/</a> Review degree completion deadlines: <a href="https://rgs.usu.edu/graduateschool/degree-completion/">https://rgs.usu.edu/graduateschool/degree-completion/</a>	
Upon completion of the research project and working with your committee, prepare a thesis (see the suggested outline provided in this handbook). Submit to committee for review at least 4 weeks prior to thesis final defense.	
Schedule a thesis defense meeting with your MS committee for discussion and approval of the proposal. Meetings can be face to face or using conferencing technology.	<b>Appointment for Examination</b> <b>(at least 10 working days prior to the date of the defense)</b>
Conduct public thesis defense with committee. Advertise the defense to the ITLS department. Your committee may suggest editorial changes; however, if the oral examination indicates weaknesses that require major revisions, your defense may be rescheduled. A range of options is available to committees, including: 1) clear pass 2) re-examination 3) failure. For your defense to be considered satisfactory, all committee members must concur.	<b>Record of Examination</b>
Approved thesis is submitted to Departmental reviewer	<b>Thesis Format and Style Format</b>
Departmental reviewer approves thesis and sends thesis to the School of Graduate Studies. The thesis must be approved by the Vice President for Research and Dean of the School of Graduate Studies. Complete the Plan A Thesis/Dissertation form and submit it to Digital Commons at the USU Library.	<b>IRB Closeout Form</b> <b>Plan A Thesis/Dissertation Form</b> <b>Electronic Thesis</b>

## WRITING THE THESIS PROPOSAL

The proposal is developed in cooperation and consultation with the Chairperson and committee. A written proposal for the thesis is necessary to avoid misunderstandings and to protect the best interests of the student, the ITLS department, and the University. The proposal should specify in adequate detail all of the important facets to be completed. The proposal provides a record for both you and the Chairperson and committee of the specific nature and extent of the research agreed upon.

### Proposal Sections

A proposal should include the following sections:

- Cover Sheet (see below for example)
- Introduction
  - Statement of problem
  - Definitions (when appropriate)
  - Needs Assessment or results from pilot studies (when appropriate)
- Purpose and/or Objectives and/or Research Questions
- Theoretical Foundation(s) and/or Review of Literature
- Procedures and/or Methodology
- Timeline with milestones
- Conclusions, Significance, Ethical Considerations, and Contributions
- References

### Problem Statement, Purpose, Objectives, Research Questions, Hypotheses

A problem statement is where you introduce a compelling problem that needs solving. The purpose of the research is to address some aspect of the stated problem. You can include a statement on the research project's *purpose, goals, and/or objectives*. Each of these builds on the previous in a more focused way.

You can also consider including specific *research questions* and/or *hypotheses* that your research project will address. When crafting a problem statement, stay focused on the scope and aim of the project. This means formulating a problem statement for a project that can be completed within a reasonable time frame. The project needs to be interesting, substantive, and meaningful – but it must also be feasible within your time and budget constraints.

A well-crafted problem statement is the heart of your project. It helps you stay focused and aligned with the purpose of your project, provides the rationale for the project in the first place, and frames the literature review. Your problem statement should lead to the conclusion that your research should be conducted to address that problem.

### Theoretical Foundation(s) and Literature Review

A literature review serves several purposes. First, it provides support for the core of your problem statement and purpose, and any additional details about why this is an important research project. It should give a broad overview of the related research, and specific details and findings from major empirical research studies. It is important to acknowledge and resolve

competing or contradictory ideas and then engage in synthesis.

You must make a case for a particular theoretical framing and why you feel it is particularly appropriate for the kinds of work you want to do in your research. This will include a definition of the theoretical foundation and can include a review of empirical work

Begin the literature review by explaining your search process, including the keywords, any date ranges, and the databases you searched. Covering existing (and recent) review work can be a good starting point but you have to cover primary (meaning original) research studies too.

There are a few mistakes often found in a review of the literature. One is the "laundry list" approach. Don't list a study, describe its outcomes, then move onto the next study. Instead focus your review around key ideas, define the ideas, summarize different interpretations and results, and then be clear about where you stand.

Another mistake is not being clear about the kind of work you are citing. Reviews and conceptual papers might involve scholars who are claiming or asserting or arguing for (these are all great key words to use). Whereas a primary research study involves researchers who found or discovered (at least for the portions that describe their results).

### **Review of Literature Sections:**

**Introduction:** Review your problem statement and the objectives of this literature review to inform your research.

**Keyword Search:** What database was used to do a preliminary search? What search terms and search term combinations are used? Where additional articles found in the reference sections of articles identified in the database? How many articles were initially returned in your search?

**Inclusion/Exclusion Criteria:** What types of information are you looking for that will cause you to include an article? What types of information will you exclude? Will you restrict your search to a certain date range (e.g., studies published in the last 10 years)? Will you restrict yourself to peer reviewed articles? Will you restrict your studies to a certain age group or geographic region? Will you exclude studies conducted in foreign countries?

**Summary of the Literature:** Major themes, trends, subtopics or conclusions in literature reviewed

**Conclusion:** Pros/strengths and cons/weaknesses of this body of literature. Discussion of what is missing from this body of literature. Discussion how this review of literature has informed your research project.

### **Methods sections:**

- Overall study research approach
- Site or Participants: describe research site and/or participants in study and methods to recruit (or sample)

- Materials: describe materials used in study
- Instruments or data sources: describe research instruments and/or data sources used in study, and how collected
- Procedures and/or design: What will participants do? What is the research design?
- Planned methods of analysis for each data source
- Methods for establishing reliability, validity, trustworthiness, credibility, etc.
- Study (de)limitations
- Timeline with milestones

Including a table like the following is often a helpful way to describe the planned research:

<b>Research Questions</b>	<b>Data Sources</b>	<b>Planned Analyses</b>
Research Question 1	Data Source 1 Data Source 2	Analysis 1 Analysis 2
Research Question 2	...	...
...	...	...

### **References**

There should be “one-to-one correspondence” between the articles cited in the body of the proposal and those listed in the reference section.

### **Appendices**

Appendices may be used to include instruments (e.g., surveys, interview protocols) used in the study.

### **Format**

The proposal should follow the writing standards outlined in the current *Publication Manual of the American Psychological Association* (APA). The APA manual describes and provides examples of current forms for citing references in text, listing references, headings, etc.

Margins, pagination, and typing standards should follow those outlined by the Utah State University School of Graduate Studies Publication Guide. It is available online at:

<http://rgs.usu.edu/graduateschool/thesis-dissertation-requirements/>

## EXAMPLE OUTLINE FORMS Plan A THESIS

Cover Sheet (Title Page)	See example page below
Abstract	
Public Abstract	
Acknowledgements	
Contents	
List of Tables	
List of Figures	
Chapter 1. Introduction, Problem Statement, Purpose and Objectives, Research Questions	Drawn from proposal
Chapter 2. Theoretical Foundation(s) and Review of Literature	Drawn from proposal
Chapter 3. Methods and Procedures	Drawn from proposal
6.1. Research Design	
6.2. Procedures/Methodology/Participants	
6.2. Data sources and analyses	
Chapter 4. Findings	
Chapter 5. Discussion, Implications, (de)Limitations, Suggestions for Future Research, Conclusion	
References	
Appendices	
Curriculum Vitae	

For more information on reporting findings from educational research, see: Duran, R.P. et al. (2006). Standards for Reporting on Empirical Social Science Research in AERA Publications- American Educational Research Association. *Educational Researcher*, 35(6):33-40.

(Sample **THESIS PROPOSAL** Cover Sheet/Title Page)

A STUDY OF COMPUTER LITERACY

by

Jane Q. Student

A thesis proposal submitted in partial fulfillment of the requirements for the degree

of

MASTER OF SCIENCE

in

Instructional Technology and Learning Sciences

Approved:

\_\_\_\_\_  
Name, degree  
Major Professor

\_\_\_\_\_  
Name, degree  
Committee Member

\_\_\_\_\_  
Name, degree  
Committee Member

UTAH STATE UNIVERSITY  
Logan, Utah

2017

(Sample **THESIS** Cover Sheet/Title Page)

A STUDY OF COMPUTER LITERACY

by

Jane Q. Student

A project summary submitted in partial fulfillment of the requirements for the degree

of

MASTER OF SCIENCE

in

Instructional Technology & Learning Sciences

A thesis proposal submitted in partial fulfillment of the requirements for the degree

of

MASTER OF SCIENCE

in

Instructional Technology and Learning Sciences

Approved:

\_\_\_\_\_  
Name, Degree  
Major Professor

\_\_\_\_\_  
Name, Degree  
Committee Member

\_\_\_\_\_  
Name, degree  
Committee Member

\_\_\_\_\_  
Name, Ph.D.  
Vice President for Research and  
Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY  
Logan, Utah

2017

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## MULTIPLE-PAPER FORMAT FOR THESIS

A thesis using a multiple-paper format consists of at least two chapters, typically written as independent papers, preceded by an introductory chapter that sets the context for the research, and followed by a summary and conclusions chapter that integrates all of the studies.

One article or article-manuscript may *not* be submitted as a thesis.

For a document in the multiple-paper format, the style may differ for chapters that are targeted for publication in different journals, however the style should be consistent within each chapter.

The Publication Guide from the Graduate School provides more details on the multiple-paper format. See:

<http://rgs.usu.edu/graduateschool/thesis-dissertation-requirements/>

## OBTAINING APPROVAL FOR CONDUCTING RESEARCH WITH HUMAN PARTICIPANTS FROM THE INSTITUTIONAL REVIEW BOARD (IRB) FOR MS THESIS RESEARCH

### Introduction

The Institutional Review Board (IRB) is a committee designated to review and approve research involving human participants before the start of such research, and to conduct periodic reviews of such research.

For more information, see:

<http://irb.usu.edu>

Research with human participants is governed by [Policy 584](#). The purpose of this policy is to govern the involvement of human participants in the conduct of research at Utah State University.

### Certification

USU and federal regulations require that Principal Investigators, Co-Investigators and any research personnel who will be in contact with participants or performing data analyses must receive training in the ethical protection of human participants. USU uses CITI online training to fulfill this requirement. To obtain certification, see:

<https://citiprogram.org/>

When students access the link and then register an account with CITI, they will have the opportunity to sign up for the required course, Human Research Curriculum – Basic Course

### Is IRB approval required?

A good place to start for general information is

<http://rgs.usu.edu/irb/guidelines/>

If students are unsure if IRB approval is needed, students can file a Request for Determination. It's short and is turned around in 24 hours. IRB will use this information to determine whether the IRB needs to review the project. See:

<https://help-protis.usu.edu/request-determination>

Chapter 2 of the [Investigator Handbook](#) outlines the definitions used to determine if a project requires IRB review.

The [pre-review rubric](#) may be particularly helpful as it outlines the information IRB looks for in a new submission.

### **Submitting the IRB application**

When students submit an IRB application for a thesis, IRB will need a copy of their proposal and signed committee approval form.

Currently, the PROTIS system is used to submit the application:

<http://protis.usu.edu>

Use the “MS Thesis approval form” to get the committee’s signature. Once signed, submit this to IRB along with necessary documents in order to seek IRB approval.

When a student joins an existing IRB approved project and wants to use data collected for the thesis, IRB will ask that the PI submit an amendment to the active protocol. This amendment should include the student’s proposal. Depending on how the student project fits into the existing protocol, IRB may require a new submission to specifically cover the student work.

If a student is using existing, de-identified data from a previous project that received IRB approval, IRB will require the submission of an exempt #4 application.

### **In sum:**

- Determine if the thesis project needs IRB approval
- If necessary, get CITI certification
- Submit IRB application for the thesis project. Note that committee approval of the proposal must be obtained prior to this step.