

# Check in

Questions about the SSHRC process

Questions about the course

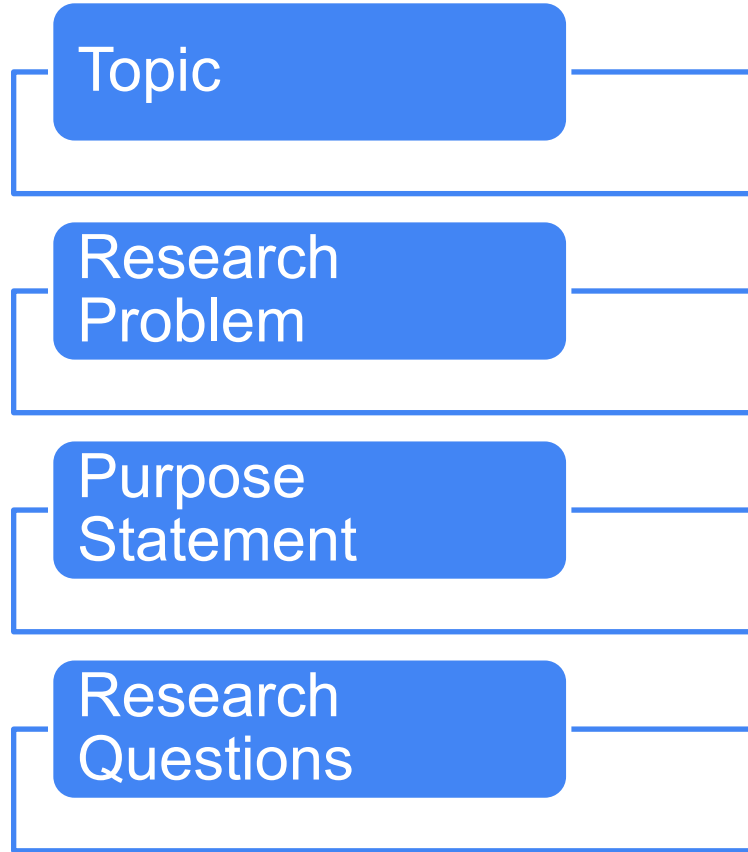
Research portfolio setup and how to begin

What to expect in the coming weeks

# Week 4: Topic, Problem, Purpose, and Questions (TPPQ)



Photo by [Pixabay](#)



# Week 4: Topic, Problem, Purpose, and Questions (TPPQ)

Topic

Research  
Problem

Purpose  
Statement

Research  
Questions

- **Research Topic:** Broadly, this is the subject area your study will investigate.
- **Research Problem:** A specific issue, deficiency, or gap in current knowledge within the topic that your study aims to address.
- **Purpose Statement:** A crucial statement that clearly and logically outlines the intent of your study.
- **Research Questions:** Specific questions that narrow the purpose statement into manageable objectives, guiding the inquiry.



General

This framework seeks to help clarify the study's intent, scope, and key elements, enabling a well-defined research path.

Doing this early will help set your direction and prepare you for the literature review assignment.

Specific

Some examples

## Topic

- Possession of weapons by students in schools

## Research Problem

- Escalating violence in schools due, in part, to students possessing weapons.

## Purpose Statement

- To identify factors that influence the extent to which students carry weapons in high schools

## Research Questions

- Do peers influence students to carry weapons?

## Topic

- Distance learning

## Research Problem

- Lack of students in distance education classes

## Purpose Statement

- To study why students do not attend distance education classes at a community college

## Research Questions

- Does the use of web site technology in the classroom deter students from enrolling in a distance education class?

Creswell, 2012, p. 60

### Topic

- Attrition among elementary school teachers.

### Research Problem

- Low teacher morale and high attrition rates have been observed in elementary schools. The current understanding of this issue focuses primarily on administrative and systemic factors, but there is a lack of research examining the lived, day-to-day experiences of teachers related to their feelings of burnout.

### Purpose Statement

- The purpose of this qualitative, phenomenological study is to understand the lived experiences of burnout among elementary school teachers at [Specific School District or local context].

### Research Questions

- What is the lived experience of burnout among elementary school teachers?

### Topic

- The impact of different instructional methods on student achievement.

### Research Problem

- There is ongoing debate among educational policymakers about the most effective instructional methods to improve student test scores in mathematics. Previous studies show conflicting results, and a comprehensive analysis controlling for student demographics is needed.

### Purpose Statement

- The purpose of this quantitative, experimental study is to test the theory of constructivism by comparing the math test scores of students in the [Instructional Method A] group versus the [Instructional Method B] group, controlling for grade level, for fifth-grade students at [Specific School District or local context].

### Research Questions

- What is the relationship between instructional method and student mathematics test scores among fifth-grade students, after controlling for grade level?

## Topic

- The use of technology by first-generation college students.

## Research Problem

- While universities provide numerous digital resources, there is evidence that first-generation college students underutilize them compared to their peers. The reasons for this disparity are not well understood from a cultural perspective. This is a problem because if these students are not engaging with key academic technologies, they may be at a disadvantage, widening the achievement gap.

## Purpose Statement

- The purpose of this ethnographic study is to describe the shared patterns of behavior and beliefs (i.e., the culture) related to technology use among a group of first-generation college students living in a specific university dormitory.

## Research Questions

- What are the shared patterns of technology use within the culture of a group of first-generation college students?

### **Research sub questions:**

- In what ways does this student group use university-provided technology for academic purposes?
- What are the shared beliefs within the group about seeking tech support from the university?
- How does the group's social use of technology influence their academic technology habits?

As you develop a TPPQ for your study, know that it may adapt over time.

Consider carefully your ability to access research participants, the time required for you and participants, available resources, and the skills needed to conduct the research.

By narrowing scope and getting more specific you also focus your literature search.

Consider a literature search for:

Attrition among elementary school teachers.  
[93 journal article results in UVic Library Search]

versus

What is the lived experience of burnout among elementary school teachers?  
[23 journal article results in UVic Library Search]

## **For next week**

I am going to ask you to articulate your topic, problem, purpose, question for sharing next week. Please come prepared to do so and reach out if you want to discuss.

# Typology of Research Papers

- 1. Original Research Papers:** These papers present new findings and contribute to the existing body of knowledge in a particular field. They typically include an introduction, methodology, results, discussion, and conclusion sections.
- 2. Review Papers:** Also known as literature reviews, these papers summarize and evaluate existing research on a specific topic. They aim to provide a comprehensive overview of the current state of knowledge in a field.
- 3. Case Studies:** Case studies involve in-depth analysis of a particular individual, group, or situation. They often include detailed descriptions of the subject, analysis of relevant data, and discussion of key findings.
- 4. Methodology Papers:** Methodology papers focus on the development and evaluation of research methods and techniques. They describe the procedures, tools, and approaches used in a study and may provide insights into best practices for future researchers.
- 5. Position Papers:** Position papers present an argument or opinion on a particular issue. They require a clear thesis statement and supporting evidence to persuade readers of the validity of the author's position.
- 6. Comparative Papers:** Comparative papers compare and contrast two or more subjects, theories, or approaches. They highlight similarities, differences, and potential implications of the comparisons made.
- 7. Conceptual Papers:** Conceptual papers explore theoretical concepts, frameworks, or models. They aim to provide new perspectives or insights into a particular topic by proposing new theories or refining existing ones.

# Research papers that are most likely to help with your literature review and presentation assignment

1. **Original Research Papers:** These papers present new findings and contribute to the existing body of knowledge in a particular field. They typically **include an introduction, methodology, results, discussion, and conclusion sections.**
2. **Review Papers:** Also known as literature reviews, these papers summarize and evaluate existing research on a specific topic. They aim to provide a comprehensive overview of the current state of knowledge in a field. **These can be useful as they summarize a research area and you can trace the citations back to original research papers.**
3. **Case Studies:** Case studies involve in-depth analysis of a particular individual, group, or situation. They often include **detailed descriptions of the subject, analysis of relevant data, and discussion of key findings.**

# Common Components of a Research Article

- Abstract
- Introduction
- Literature review
  - Theoretical framework
- Methods
- Results
- Discussion
- Conclusion

# Abstract

- A concise summary of the entire paper, the abstract provides **a brief overview of the research question, methods, key findings, and implications**. It is typically a single paragraph of around 150-250 words.

# Introduction

- This section sets the stage for the research. It **introduces the topic, provides relevant background information, and establishes the significance of the research problem**. A well-written introduction narrows down to a clear statement of the research questions or hypotheses.

# Literature review

- While sometimes integrated into the introduction, the literature review is often a distinct section. It provides a **critical synthesis of existing scholarly work** related to the research topic, identifying gaps in the current knowledge that the present study aims to address

# Theoretical framework

- A crucial element, the theoretical framework is most often woven into the literature review or placed as a dedicated section immediately following it. It is the **underlying theory or conceptual model that supports and informs your research**. It's the **"lens"** through which you examine your research problem that provides a foundation and structure for the study.

# Methods

- often referred to as "Methodology," details **how the research was conducted**. This section is crucial for the replicability and validity of the study. It is typically divided into subsections, which may include:
  - Participants or Sample: Describes the individuals or groups who were the focus of the study.
  - Materials or Instruments: Details the tools used for data collection, such as surveys, tests, or interview protocols.
  - Procedure: Provides a step-by-step account of how the data was collected.
  - Data Analysis: Explains the statistical or qualitative techniques used to analyze the collected data.

# Results

- This section presents the findings of the study in a clear and objective manner. It often includes tables, figures, and statistical analyses to summarize the data. The focus is on **reporting the outcomes of the data analysis without interpretation**.

# Discussion

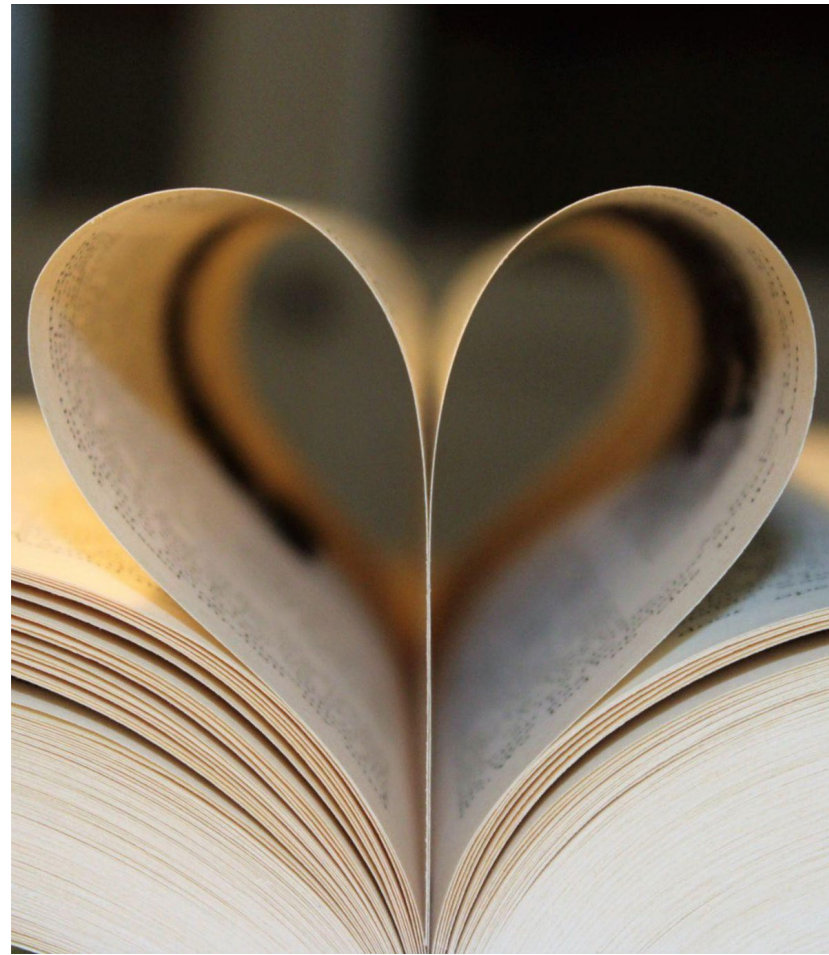
- The discussion section **interprets the findings presented in the results section**. It analyzes the implications of the results in relation to the initial research questions and the existing literature. This section may also address the **limitations of the study and suggest directions for future research**.

# Conclusion

- The conclusion provides a **concise summary of the key findings and their significance**. It reiterates the main arguments and offers final thoughts on the research. In some cases, the conclusion may be combined with the discussion section.

# Literature Reviews

- Searching
- Reading
- Sense making
- Identifying issues, gaps, & opportunities
- Recognizing context
- Organizing
- Synthesis
- Presentation



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## Some approaches I have used

- The print out method
- Annotated bibliography (Zotero highlights and notes)
- Write as you go, research as you write
- Spreadsheet synthesis

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# Spreadsheet Synthesis

## Setup Columns to Capture an Overview of your Literature

Publication - title

Pub type - journal, chapter, book

URL

Year - pub year

Brief/Thesis - short summary of research

Context - setting of the research

Country - geographical coverage

Theory - theoretical framework, if available

Methods - research design approach

Notes on method - anything that might be relevant for my own research design

Notes - any other notes to capture

RQ - research questions from the article, if available

Broadly - used to capture a theme relevant in my study

[Link to spreadsheet template](#)

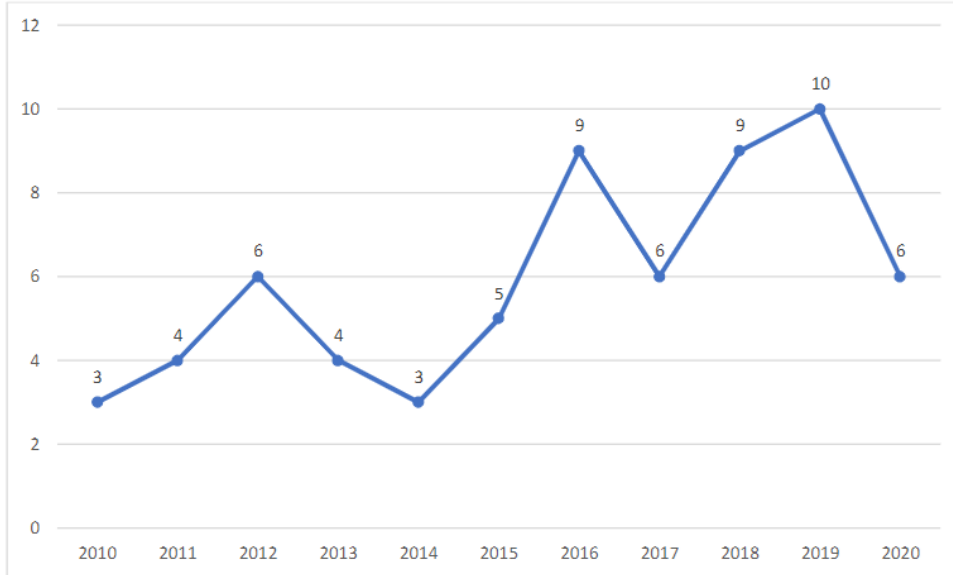
Select File -> Create copy to get started with this template.

Can be used in Google Sheets or downloaded to spreadsheet software.

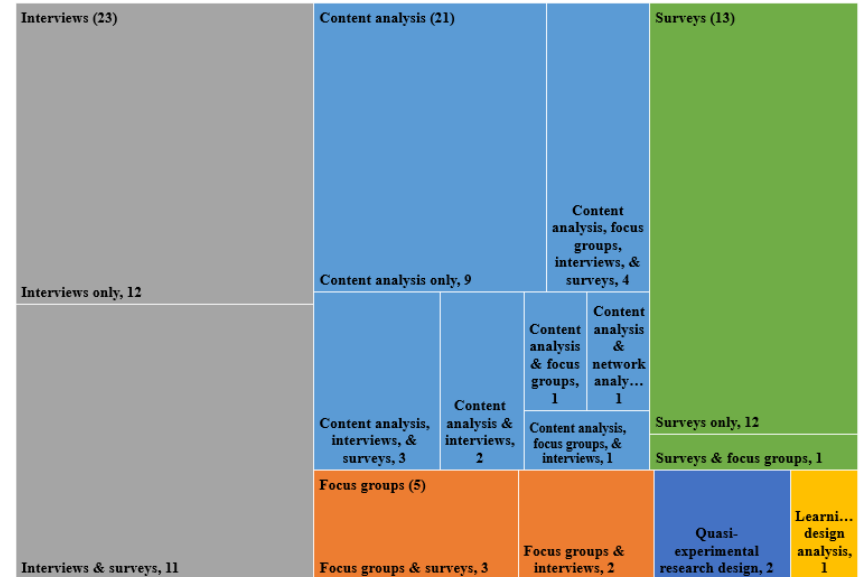
1	Citation	Publication	Pub type	URL	Year	Brief/Thesis	Context	Country	Theory
2	Blomgren, C., & M	Open Praxis	Journal	<a href="https://doi.org/10.1177/2155812518771111">https://doi.org/10.1177/2155812518771111</a>	2018	Awareness and use of C	K12	Global	Openn
3	Bossu, C., & Meie	Journal of Inter	Journal	<a href="https://doi.org/10.1177/0022057118771111">https://doi.org/10.1177/0022057118771111</a>	2018	This paper explores sor	Higher education	Australia and Brazil	Openn
4	Karunanayaka, S.	Distance Educat	Journal	<a href="https://doi.org/10.1177/0022057118771111">https://doi.org/10.1177/0022057118771111</a>	2018	Discusses design strate	Higher education	Sri Lanka	Scenar
5	Littlejohn, A., & M	Book	Book chapter		2016	A study of the ways kno	Workplace	Global	Learnir

With a synthesis of research data you can then create summary data, charts, etc. that can be useful both in your writing and used during presentations

Time Distribution of Studies



Countrywide Distribution of Sampled Publications



## **For next week**

I am going to ask you to articulate your topic, problem, purpose, question for sharing next week. Please come prepared to do so and reach out if you want to discuss.

Reading five articles a week in your area of interest should be your goal at this point. When reading:

- Try to identify the topic, problem, purpose, and question from each article
- Look for and try to understand the application of theoretical and conceptual frameworks present in the article. **More on this for next week.**