What is outlined in this document is guidance for the different “chapters” of your research project document. Some suggested subheadings may not be relevant for your particular project. Please use your own judgment around this and seek input from your research supervisor if required. Length? Long enough to do a good job. You need to demonstrate expertise in your subject area. It is unlikely a thesis (human research subject) can be completed in under 60 pages or so, when you consider the reference list and appendices in addition to the chapters. A capstone project would likely run between 40-60 pages, including reference list. Don’t get hung up worrying about length; rather, focus on doing a good job—then the length will take care of itself.

***Capstone Project or Research Thesis Document***

As a graduate students at City University, candidates are expected to format their research papers in APA format. All referencing, use of numbers, tables and appendices should be written in APA style, and candidates are referred to the APA manual for guidance in these issues.

A Microsoft Word template has been created for candidates to use for formatting their research project or thesis document. This document is available on the ASOE Canada Research Blackboard shell as well as on cohort Blackboard shells. The research project document will be presented using a preliminary pages plus four- or five-chapter format as follows:

**Preliminary Pages:**

1. Title Page: see template document for guidance.
2. Signature Page: the Undersigned Faculty Member Approves the Project of …
3. Acknowledgements or preface.
4. Abstract—350 – 500 word summary of your project.
5. Table of Contents.
6. List of Tables.
7. List of Figures.

**Chapter I: Introduction. The Problem (the following are suggested section headings). You may not need all of these but 2, 3, 4, 5, 6, and 10 are required; others are suggested:**

1. **Introduction** to the topic and an overview of the chapter. You can include a brief narrative if it might help describe the problem/issue.
2. **Background to the Problem:** e.g., educational trends related to the problem, unresolved issues, social concerns, historical issues, situation in the district that has led to this point.
3. **Statement of the Problem or Issue:** delineation of the basic difficulty or area of concern.
4. **Purpose of the Study:** practical outcomes or products or solution to the problem stated.
5. **Statement of Research Question**: conceptual rendition followed by operational statements in Chapter III: Methodology/Recommendations Chapter. The research question or hypothesis is the most important sentence in the entire document!
6. **Importance of the Study:** why this is an important topic to research.
7. **Definition of Terms:** define any terms that are specific to the topic area(s) and/or terms that have a specific meaning in context (for the capstone project, this can be part of chapter two).
8. **Scope of the Study:** identify the limits of your study.
9. **Summary:** a condensed or digested version of the chapter repeating the major information.
10. **Outline of the Remainder of the Paper:** overview of the titles of the chapters to follow.

**Chapter II: Review of Related Literature – this chapter is usually around 20 pages in length**

1. **Introduction** to the Chapter: organization of the chapter: conceptual overview. Suggest 25 to 30 references be reviewed and incorporated into the study.
2. **Definition of Terms:** For the capstone project only (for thesis, see point 7 of chapter one). This is your conceptual analysis: defining terms and concepts to provide clear meanings.
3. **Historical background** if necessary.
4. **Purposes to be served by Review of Research Literature**:
   1. Acquaint reader with existing studies relative to what has been found, who has done work, when and where latest research studies were completed, and what approaches involving research methodology, instrumentation, and statistical analyses were followed. Specific details on methodology is reserved for review in Chapter III.
   2. Demonstrate your expertise and familiarity with the scholarly and professional literature and with the scholars and professional who have contributed or are contributing to this subject area.
   3. Establish possible need for study and likelihood for obtaining meaningful, relevant, and significant results.
   4. Furnish from delineation of various theoretical positions a conceptual framework affording bases for generation of hypotheses and statement of their rationale.
5. **Sources for Literature Review**

General integrative reviews cited that relate to the problem situation or research problem such as those found in peer-reviewed journals through the various databases, education and psychology literature resources and books. Specific books, monographs, bulletins, reports, and research articles: preference shown in most instances for literature of the last few years. In some instance, important landmark articles or books form the basis for the particular topic and these should be included as well. Unpublished materials such as dissertations, theses, papers presented at conferences and symposia, and limited publications from school districts, governments, and school districts can be cited using APA guidelines. *Get help if necessary from CityU librarians—they are only too happy to help!*

1. **Selection and arrangement of literature review** often in terms of questions to be considered, research question set forth, or objectives or specific purposes delineated in Chapter I. The use of subheadings according to such themes helps to improve readability and will support your proposed methodology and/or recommendations outlined in Chapter 3.
2. **Summary** of literature review: a condensed overview of the major themes/concepts presented in the review of the literature. Restate the research hypotheses (questions) at this point.

**Chapter III: Methodology and/or Recommendations—not *required* for capstone project**

Depending on whether you are doing a research thesis (with human subjects) or a capstone project (no human subjects), the third chapter may be the development of a research methodology through which the problem may be investigated including appropriate measurement tools and means of data analysis (thesis option); or the candidate may present a set of recommendations for change/implementing a project in their school or district (capstone project option; see choice 2 below)). Such recommendations would need to be supported by the literature reviewed in chapter 2. For the capstone chapter, a methodology chapter is not required, so any recommendations or models for research or application could come in the final chapter of conclusions, discussion, implications. This would then be chapter three.

Choice 1 (thesis): Creation of a methodology

1. **Introduction** to chapter.
2. **Description of Research Methodology** or approach: e.g., experimental, quasi-experimental, correlational, causal-comparative, descriptive, pretest/posttest, one-shot data collection, etc.
3. **Research Design:** spell out independent and dependent variables; formulate an operational statement of the research hypotheses to set the stage for an appropriate research design permitting statistical inferences.
4. **Selection of Subjects:** this is concerned with sample and population.
5. **Ethical considerations**: describe ethical considerations and limitations of research based on legal and ethical roles and responsibilities.
6. **Instrumentation:** tests, measures, observations, scales, and questionnaires. Note strengths and weaknesses of the proposed different data collection methods.
7. **Data Collection and Recording:** outline the procedures needed for valid data collection.
8. **Data Analyses:** statistical analyses – if conducted – what stat tests would be used and why.
9. **Methodological Assumptions:** what assumptions can be made about the proposed study’s subjects and/or data collection methods?
10. **Limitations:** what weaknesses or limits are there in the research design/scope?
11. **Summary** of chapter.

Choice 2 (Capstone project): Suggested Research Study (This is *optional* for the capstone project but is suggested. This material could appear in chapter 3 instead, if desired (see below)

1. **Introduction** to chapter.
2. **Summary** of problem identified in chapter 1 in light of the literature reviewed in chapter 2.
3. **Suggested research study:** You offer a possible qualitative, quantitative, or mixed-methods approach to doing research on the issue you are exploring. And/or you offer recommendations for a change project. Outline factors you have to consider in designing such a research project—ethical, logistical, practical—and suggest how one might address these. Describe ethical considerations and limitations of research based on legal and ethical roles and responsibilities.
4. **Logistical and practical** considerations identified for recommendations.
5. ***Instead of having this as a separate chapter, you can include this as a section in your chapter 3.***

**Chapter IV: Presentation and Discussion of Findings (*skip this chapter if you are doing a capstone project— i.e., are not doing human subject research*)**

1. **Introduction** to the chapter.
2. **Presentation of Descriptive Statistics:** framed around hypotheses – demographics and/or methodologies utilized; very clinical and sterile presentation of data – no editorial comments at this time. Note: refrain from use of pie charts or bar charts when simple numerical presentation in tables or simple sentences in paragraph format provide a clearer representation of the data.
3. **Discussion of Descriptive Statistics:** relate to literature (the ‘themes’ or ‘subheadings’ in the literature review may be repeated here for this purpose), interpret your findings, offer explanations for the findings
4. **Presentation of Comparative Statistics:** Presentation of comparative findings framed by hypothesis; tables include independent variable, mean, standard deviations, and probability statements.
5. **Discussion of Comparative Statistics:** Interpretation, inferences, and evaluation. In some instances, the writer may elect to discuss the findings of one major portion of the analysis before moving on to the next major part of the analysis. Discuss findings with respect to literature reviewed (the ‘themes’ or ‘subheadings’ in the literature review may be repeated here for this purpose); with respect to expected outcomes; and with respect to inferences from the findings. Offer explanations for the findings based on the context of the study.
6. **Practical Significance of the Study:** The “So what?” of the project. What does this study mean in the context of the organization or for the sample/population studied?
7. Summary of chapter.

**Chapter V: Summary, Conclusions, and Recommendations. This would be chapter III for the capstone project**

1. **Summary:** Condensed version of everything covered in the first four chapters.
2. **Implications:** Answer the “So, what?” questions. What implications for schooling and education arise out of what you have discovered? What are the implications for all the various stakeholders involved—students, teachers, staff, administrators, parents, schools, suppliers, school districts, and the general, tax-paying public?
3. **Recommendations:** Practical suggestions for implementation of findings and suggestions for future research.
4. **Conclusions:** Often the hypotheses or research question revisited with some degree of definitive commitment and generalization.
5. **Final statements** Wrap up with your final, personal comments.

NOTE: summaries are not a repeat of the table of contents. The summary needs to be a comprehensive restatement of the major themes/concepts presented in the chapter.

**Section Headings:** Use APA guidelines for these, as follows:

|  |  |
| --- | --- |
| **APA Headings** | |
| Level | Format |
| 1 | **Centered, Boldface, Uppercase and Lowercase Headings** |
| 2 | **Left-aligned, Boldface, Uppercase and Lowercase Heading** |
| 3 | **Indented, boldface, lowercase heading with a period.** Begin body text after the period. |
| 4 | ***Indented, boldface, italicized, lowercase heading with a period.*** Begin body text after the period. |
| 5 | *Indented, italicized, lowercase heading with a period.* Begin body text after the period. |

**References: S**ee the APA Manual for correct structure and style; include *only* those materials cited in the text of your project. We recommend that you have reviewed 25 to 30 references for your study; you need to demonstrate expertise in your chosen subject area and a good familiarity with the scholarly and professional literature on the topic.

**Appendices:** The appendices contain pertinent materials that are not important enough to be included in the body of the report but may be of value to some readers. These should be numbered and presented in the same order they are referred to in the body of the document. Such materials may include complete (blank) copies of locally devised tests or questionnaires, together with the instructions and scoring keys for such instruments, item analysis data for measurements used, verbatim instructions to subjects, and tables that are very long or of only minor importance to the study.

***Grading Criteria for Research Thesis***

|  |  |
| --- | --- |
| Preliminary pages – title page, abstract, table of contents, and statement of the problem presented in appropriate format. | 10% |
| Literature review – scholarly literature - comprehensive and relevant to research (min. 20 scholarly articles/resources) | 25% |
| Methods – valid methodology used for the scope of the research | 15% |
| Findings – data is presented clearly and in appropriate format | 15% |
| Discussion – findings are critically analyzed in relation to literature reviewed | 15% |
| Summary/conclusion – reflective and demonstrates relevance and scope of the research undertaken | 10% |
| APA format (conventions, spelling, referencing) | 10% |
|  |  |
| **TOTAL** | **100%** |

***Grading Criteria for the Capstone Project (no human subject research)***

|  |  |
| --- | --- |
| Preliminary pages – title page, abstract, table of contents, and statement of the problem (introduction) presented in appropriate format. | 10% |
| Literature review – scholarly literature - comprehensive and relevant to research (min. 20 scholarly articles/resources) | 40% |
| Summary/Discussion/Conclusion – reflective and demonstrates relevance and scope of the research undertaken | 40% |
| APA format (conventions, spelling, referencing) | 10% |
|  |  |
| **TOTAL** | **100%** |