Abstract Primer for Capstone Documents

The abstract is a window for others into your research.

Developed by the
Center for Research Quality

In Conjunction With the
Walden University Writing Center
ABSTRACT PRIMER
This document is intended to assist you in drafting a concise and informative abstract to accurately and comprehensively represent your research. It describes the purpose the abstract serves for the larger community of scholars and its additional importance within the Walden research process. Also presented are more detailed explanations regarding the Abstract Guidelines and before-and-after examples of abstracts that were edited to better meet university requirements.

What is an abstract?
As described in the Abstract Guidelines for Capstone Documents and included at the end of this primer, the abstract “is a window for others into your research.” First, consider that the title of your research will provide the first clue about your study to those who are searching various databases for studies that contain information relevant to their own scholarly interests. Next, the abstract is intended as a means for you to extend the limited information found in your title by presenting a concise portrait of your study, including research design, data analysis, results, conclusions, and implications for social change. Accordingly, the abstract should tell the story of your research from beginning to end and help the reader determine the applicability of your work to their own.

Why is the abstract so important?
The abstract is an especially important component of research conducted at Walden University because each abstract is reviewed by the Chief Academic Officer (CAO), or a designee of the CAO, as the final stage in the University Research Review process. Therefore, the abstract needs to indicate that you have a thorough understanding of your study by presenting a concise and logically connected explanation of the research from presenting the focus of the study through the implications for social change it informs.

What information do the Walden Abstract Guidelines for Capstone Documents provide?
Think of the elements in the Abstract Guidelines as sequential points of a storyline describing your study from start to finish. Thus, the reader should be able to track the purpose and focus of the research across the story from what is known to the gap in what is known, to purpose/questions, to design, to analyses, to results, which lead to conclusions and a logical potential for social change.

It is important to emphasize that there should be a logical connection linking later elements of the abstract with previous statements. While this sounds like basic advice, you and your chair and committee members tend to be so intimately familiar with the study that they see organization within the abstract that the first-time reader might not. This seems to be especially true for more ambitious and complex studies. For example, if a study employs a design that includes treatment and control groups to assess the efficacy of a new method, treatment, or curriculum, the later description of the data analyses should logically describe how the differences between the groups were measured and tested.

Why shouldn’t you write your capstone abstract in first person when current APA guidelines allow for use of first person in the body of the document?
First person should generally be avoided in capstone abstracts because it is assumed that the research was conducted as an independent project by the author of the study (hence, the “I” is not needed). Moreover, avoiding first person use in the abstract is not unique to Walden capstones. Third person is generally used in publishing scholarly research. The practice remains common across the editorial guides of many publications.
What are the differences between the abstract for the proposal and the abstract for the final doctoral capstone?

By the time you are ready for the oral defense of your proposal, you should be able to clearly describe the purpose and focus of the research. You should be able to inform the reader about what is known and relate it to the gap in what is known. Let the reader know the purpose/questions that you will include to address this gap. Describe the research design you will use and the specific measures and/or analyses you will employ. Explain how these are the best approach(es) to answer/address the question/problem. You should be able to express the logical potential for positive social change if the results follow what you expect. In the final abstract, you are ready to also present the key findings, conclusions, and recommendations, and the implications for positive social change based on your results.

Later in this primer, you will be advised to think of two Cs in reviewing your abstract before submitting it: content and continuity. Using these themes to refine your abstract so that it specifically describes your planned study is an excellent way to see that you have covered all the areas of planning necessary for a successful study and IRB review. In fact, refining your writing of these elements of the abstract is an excellent way to prepare for your oral defense. Once your research is complete, the abstract for the final study would add the results, which lead to conclusions and introduce the implications for social change.

What about a thesis?

Theses can be divided into two groups: those that report a proposal for a research study and those that report a completed study in which data were collected and analyzed. Thus, the abstract for the proposal thesis should include the elements for the proposal stage as described above, whereas the abstract for the completed study thesis should include all the elements described for the final study.

Elements of the Abstract Guidelines

The abstract contents are drawn directly from the current version of the Abstract Guidelines for Capstone Documents. Additional information below each is included to assist your writing.

Each area usually needs one sentence, except for Methodology and Results, which may take a few.

1-Background/General Introduction of the Issue (optional)—abstract may begin with research problem.

2-Research Problem and Why It’s Important—be clear; who cares if the problem is solved?

Two common approaches to introducing the research problem can be described as the direct and indirect methods.

The direct approach would begin straight off with a sentence that states the research problem. This direct description is then followed by a sentence or two that describe the rationale for the study, usually by illustrating the gap in what is known about the problem.

Here is an example of a direct approach. (Please note that the verbs in this example are past tense and would be appropriate for the abstract of a study that has been completed. Future tense verbs would be used in the proposal stage of the study or a research proposal thesis.)
This study was an investigation of the effectiveness of a 2-year mentoring program implemented to address the problem of retaining new teachers. Many investigators have documented a shortfall in the number of new teachers currently available in many school districts and project that these shortages will continue. Researchers in other studies have concluded that these shortages are further exacerbated by attrition among teachers during their first years in the profession. However, much less information is available regarding the efficacy of specific approaches to support new teachers and stem their leaving the profession.

On the other hand, the indirect approach first sets the context for the research problem by illustrating the gap in what is known in the first sentence(s). This is immediately followed by the statement of the research problem that follows as a logical means of resolving the gap in knowledge.

Many investigators have documented a shortfall in the number of new teachers currently available in many school districts and project that these shortages will continue. Researchers in other studies have concluded that these shortages are further exacerbated by attrition among teachers during their first years in the profession. However, much less information is available regarding the efficacy of specific approaches to support new teachers and stem their leaving the profession. Accordingly, this study was an investigation of the effectiveness of a 2-year mentoring program implemented to address the problem of retaining new teachers.

3-**Purpose or Rationale**—this is sometimes combined with research questions to avoid redundancy.

The purpose of the study is reflected in its general objective(s) for generating new knowledge to resolve a gap in the literature or applied problem. Often, the study purpose can be integrated into the introductory sentences described previously; if not, it should be described immediately afterward.

4-**Theoretical Foundations**—name the theory OR describe the conceptual framework, if appropriate.

The theoretical foundation of the research begins to introduce how the research questions were guided by current knowledge. It can be described in a stand-alone sentence or integrated into the sentence that identifies the research question. In some inductive approaches to research, the study will move toward a theoretical model versus from a theoretical base, as in deductive approaches. Therefore, there is no description of theoretical foundations in the abstracts for these research designs since the gap in the literature is the absence of a theory that is applicable to a certain area of interest, versus an unexplored test of a relevant theory.

5-**Research Questions (RQs)/Guiding Question**—present these as statements, not questions.

While the purpose of the study describes its general objectives, the research question(s) of the study describe the specific aspects of the problem that are being studied or tested. In qualitative studies, the research question describes the specific focus of the study, whereas in quantitative studies, the research
question represents the overarching question that is cumulatively tested by the hypotheses. In the abstract, the research question is not stated as a question but as a declarative statement (hint: statements of the questions will end in periods rather than question marks). For example, the correctly stated research question for the hypothetical mentoring study introduced previously could be something like this:

The research question for the study examined the effectiveness of a newly developed 2-year mentoring program in increasing job satisfaction and retention among teachers during their first years in the profession.

NOT like this

The research question for the study was a newly developed 2-year mentoring program increase job satisfaction and retention among teachers during their first years in the profession?

6-Methodology and Overall Design—be specific; include the sample size and inclusion criteria.

Adequately addressing this section of the abstract usually requires several sentences, so budget your use of space to allow for an adequate description. One of the most frequent reasons abstracts are returned for revision is the lack of specific information here. Therefore, be specific about your research design, methods, and analyses. Remember that these elements of your research serve and support one another; hence, several of the points mentioned later will flow into a single sentence (see examples).

Regarding research designs: Quantitative designs can be described as experimental, quasi-experimental, correlational, longitudinal, or cross-sectional, to list a few specific descriptors. Because these design types refer to quantitative research, simply stating that “a quantitative design” was used does not convey adequate information to the reader. Similarly, simply stating that “a qualitative design” was used is also too vague when more precise descriptions of ethnographic, case study, phenomenological, narrative, or grounded theory designs (for example) would provide more information. Also note that the use of quantitative or qualitative would be redundant when the more specific descriptions are used. In contrast, mixed-methods designs could be specified as concurrent mixed-methods or sequential mixed-methods. Next, discuss the specific methods that were used to apply the design in your study.

The description of the methods can include a mention of the sampling (e.g., random, convenience), briefly characterizing the participants that make up your sample (e.g., sample size and thumbnail demographics), grouping (e.g., experimental/control; treatment; comparison), procedures/treatments/interventions, instruments, or measures that you employed to conduct your research. For example, “Two freshman math classes in a suburban California high school formed the convenience sample that included 23 males and 27 females. One class served as the intervention group that received project-based assignments while the second class served as the control group and received traditional individual assignments.” If you use standardized research instruments as measures, name them first and then use acronyms as references later in the description of the analyses. For example, “Differences in levels of postpartum depression experienced by white-collar and blue-collar mothers were assessed using the Beck Depression Inventory (BDI), and repeated measures analyses of variance were used to assess within and between groups differences in BDI scores across baseline and 3 follow-up data collections.”
7-Data Analytic Procedures—explain how data were analyzed to address the research questions.

The description of your analyses should link this step to your research question and measures to afford the reader insight into your research process. Simply stating that “ANOVA was used to analyze the data” or “grounded theory methods were used” fails to provide this connection for the reader. For quantitative studies, link specific key measures and statistical analyses to illustrate how these generated the results used to address the research question/hypotheses. For qualitative studies, specifically state the coding and analysis approaches that were employed to serve the research questions. Mixed-methods studies should describe how findings from quantitative and qualitative data sources are integrated. Also, in reporting mixed-methods studies, it is useful to sequentially describe the analyses and results for each approach depending on how they occur in the mixed-methods design (describe the quantitative analyses and results followed by the qualitative analyses and results, or vice versa depending how one serves the other). This sequential description makes it easier for the first-time reader to connect the dots between the research question, data analyses, and results for the two components of your mixed-methods study. Note that you do not need to mention generic data analysis software (NVivo, SPSS, SAS, etc.) in your descriptions of methods or analyses.

8-Key Results/Conclusions/Recommendations (for final paper only)—ensure alignment with purpose/RQs.

Reporting results should highlight the most significant findings of your study, and ideally these results should support your conclusions. There’s no need to report all your results, just the most important ones. Keep in mind that your results must align with the earlier components of the abstract.

9-Implications for Positive Social Change—specify who benefits from research and in what ways.

You should sum up with how the results of your study can be applied. Simply stating that the study is “an important contribution to the literature” is inadequate. Instead, indicate how what you found could be used to assist planning or implementing change, improving the status quo, or guiding future research. Ask yourself the following questions: “Who benefits from my findings?” (Here you are considering what individuals or groups might benefit from the positive social change resulting from your findings.) “How specifically will they benefit from my results?” (Here you are suggesting how specific applications of your findings could lead to social change.) The answer to these questions will form the basis for your social change implications.

What are important considerations to keep in mind in self-assessing the abstract?
Think of two Cs in reviewing your abstract before submitting it: content and continuity. Your assessment of content should ensure that there are not any holes in information and that the information is not overly vague. Continuity checks ensure that the reader can see the logical connections between the elements of your abstract to understand and appreciate the sequential processes you performed in conducting your research. In other words, did you connect the dots for them? You should always keep in mind that you know everything about your study, and that the first-time reader (like the reviewers) will know nothing about it. Consider this as you assess the abstract to guard against reading into the information on the page and assuming connections that others might not find.
Can’t I just use stem sentences to cover everything?

Stem sentences begin with specific statements that directly link to the elements of the Abstract Guidelines. For example, “The purpose of this study...” “The research question addressed by the study...” “The research design...” “Data were analyzed...” And so on.

**Stem sentences can be very useful; however, they do not guarantee success.** Recall the two Cs described previously; thus, simply touching on each point in the Abstract Guidelines using stem sentences does not ensure that adequate and specific content is provided. Students sometimes are confused when they think that they have addressed all that is required for the abstract because they mentioned each of the points described in the Abstract Guidelines. Also, using stem sentences may reduce the continuity of the abstract to the point that the reader cannot connect the dots to appreciate how the study was conducted.

Using stem sentences is often an excellent approach to begin writing the abstract since they help you verify that you covered all the important topics and help you organize the sequence of information. Sometimes this approach can result in a successful abstract, and it is always useful in developing an initial draft to refine later for additional content and continuity.

**Editing for Length**

The abstract for Walden University capstones is written as a single block paragraph with no indentation; it must be double spaced and fit on a single page. This last requirement often presents a challenge. Consider the following questions:

- Can the content be expressed in fewer and shorter words without significant loss in the meaning? Strive to be precise and concise.
- Is the introductory portion of the abstract too wordy? This is often the case and should be the first part of the abstract examined for potential edits.
- Do the readers need to know this information in the abstract, or is it something that is more appropriate for presentation later in the main document? The abstract should contain the key highpoints that provide the precise and concise description of the study. For example, while details about the study’s quantitative measures or qualitative coding and analyses help illustrate how the research question was resolved by the research, technical information regarding generic software programs (SPSS, NVivo, Excel, etc.) used in the analysis should not be included.
- Finally, can sentences written using stems be combined? If sentence stems were used to organize the content and flow within the abstract, it is often possible to combine related elements into fewer sentences containing fewer words.

**Also remember**

- The margins of the document must conform to the appropriate capstone template. Writing your document in the template will ensure correct margins.
- The various capstone guidebooks specify a serif font; Times, Times New Roman, Century Schoolbook, Book Antigua, or Palatino are the most common ones used. Again, writing your document in the appropriate capstone template will ensure that a correct font is used. The font and point size for the text of the abstract must be the same as that used throughout the document.
Abstract Examples
The following pages contain two examples of abstracts that former students have graciously allowed us to provide as learning tools. These examples do not represent perfect abstracts but rather illustrate the differences between an approvable abstract and one that requires improvement. The first versions of the two abstracts were returned for revisions, whereas the second versions were approved as written. The original and approved versions of the abstracts are provided so you can use the Abstract Guidelines as a framework to assess the differences in content and continuity across the two drafts.
Abstract

Philadelphia is one of the earliest planned cities in the United States, yet, since the 1970s has experienced increased crime and blight, resulting in abandonment of many of its properties. The research problem addressed is to determine whether current perceptions of three specific concepts of the residential real estate market, the development efforts, value, and investment potential, can assist in enhancing the economic conditions in Philadelphia. The purpose of this study was to better understand the perceptions of investors in the residential real estate market of Philadelphia, Pennsylvania in order to enhance the city’s economic condition. The research questions focused on understanding the current perceptions of the Philadelphia residential real estate market by assessing the three concepts. A qualitative case study design was used that employed multiple sources of information including an interview questionnaire, a focus group, and existing literature.

The target population was homeowners and investors who have owned at least one property in Philadelphia for at least 1 year between the dates of August 13, 2007, and September 10, 2007. A purposive sampling procedure was used to select a sample of 20 participants for structured interviews and 5 participants for a focus group. The qualitative data were subjectively analyzed by using member checking and triangulation. Key findings indicate that while the majority of participants have an overall positive perception of the residential real estate market in Philadelphia County, they also believe that the city still must eliminate several major obstacles, like crime and unsafe schools, before achieving maximum economic progress. The study was socially significant because it may offer encouragement for investors to redevelop Philadelphia’s blighted areas, which may result in revitalization of its infrastructure and economy.
Abstract

Four decades of data document that 1 of the nation’s earliest planned cities in the northeastern United States has experienced increased urban blight and abandonment of many of its real estate properties. However, much less is known regarding specific investor perceptions that could assist with reversing this trend. Grounded in the smart growth framework, narrowing this knowledge gap was the purpose of this study. The research questions examined key perceptions of the city’s residential real estate investors that could be leveraged to increase investment and enhance the economic conditions of the city. A case study design was employed with a purposeful sample of 20 interview respondents and a 5-member focus group drawn from recent investors in both small and large-scale city market segments. Structured interviews queried 3 topical areas derived from the literature including development efforts, value, and investment potential. Emergent themes regarding the city’s perceived strengths and opportunities for improvement were extracted from the interview data through descriptive coding, validated via continuous member checking, and then triangulated with the themes that emerged from the focus group and initiatives described in the literature. A general confidence in the study city’s investment potential was identified as a common strength, whereas city crime rates, school safety, and infrastructure quality consistently emerged as areas to improve. The results from this study can be used by city planners and administrators to inform infrastructure planning and prioritize funding projects and programs that could most directly impact confidence in the city’s real estate investment potential. Such use of these data would positively impact social change by revitalizing this historic city’s economic based and thus contribute to an improved quality of life for its residents.
Abstract

This qualitative case study implemented different instructional strategies for gifted and talented students attending a Title I school. This study addressed the problem that identified gifted students at Title I schools were not receiving gifted and talented services. Acceleration and enrichment are the most common ways to challenge these special students. A Northwestern school district challenged some students in an accelerated setting, but not in an enrichment setting, which left many identified gifted students not served. Five strategies were implemented to determine if identified gifted students can be challenged in a regular classroom setting. Clustering, Multiple Intelligences, Habits of Mind, Multicultural Approach, and the Dixon-Hegelian Strategy were implemented, documented, and analyzed in a regular education classroom setting. These approaches were expected to show success as the students applied these strategies to their lessons. Through collaboration and lesson studies, teachers learned and implemented the strategies to enhance gifted learners. Through open-ended questionnaires, observations, and conversations, the researcher was able to create an understanding of the phenomenon of challenging gifted students. Social change will be evident as gifted students in Title I schools feel they are being challenged in a regular classroom setting with their teachers as a guide. The social change shown here is that Title I schools can service identified gifted learners in a regular education classroom through enrichment strategies. This research is significant for educators, administrators, and parents who want Title I, identified gifted students to participate in a gifted program.
Abstract

Government reports document that the number of Title I schools appears to be growing in the Northwestern United States. At the same time, other data suggest that gifted and talented services for students who attend Title I school are not well deployed or documented. Accordingly, this qualitative case study assessed different instructional strategies for gifted and talented students attending a Title I school in a Northwestern school district. Five grounding strategies including clustering, multiple intelligences, habits of mind, multicultural approaches, and the Dixon-Hegelian strategy were implemented, documented, and outcomes analyzed in a regular education classroom setting. The research questions examined participants’ perceptions of the gifted program pilots, their expectations for the programs, and thus, how to define effective program practices. Notes from direct observation, focus group data, and journal data from 15 gifted student participants and their teachers, along with parent questionnaire data were coded using a grid of a priori strategy themes. Results indicated that the student participants freely engaged with each of the aforementioned strategies to challenge their learning. Also, these data helped identify developmentally-appropriate practices across the 5 strategies piloted in the study, thus contributing to a better understanding of the phenomenon of challenging gifted students. The results point to evident social change in that gifted students in Title I schools feel they are being challenged in a regular classroom setting with their teachers as a guide. Moreover, results reinforce the fact that Title I schools can service identified gifted learners in a regular education classroom through enrichment strategies. This research is significant for educators, administrators, and parents who want Title I, identified gifted students to participate in a gifted program.
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Elements of the Abstract Guidelines

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3. Purpose or Rationale—this is sometimes combined with research questions to avoid redundancy.
4. Theoretical Foundations—name the theory OR describe the conceptual framework, if appropriate.
5. Research Questions (RQs)/Guiding Question—present these as statements, not questions.
6. Methodology and Overall Design—be specific; include the sample size and inclusion criteria.
7. Data Analytic Procedures—explain how data were analyzed to address the research questions.
8. Key Results/Conclusions/Recommendations (for final paper only)—ensure alignment with purpose/RQs.
9. Implications for Positive Social Change—specify who benefits from the research and in what ways.

OVERALL—Alignment (along the logical progression from problem→ research questions→ method→ results)

Form and Style Tips

- Limit the abstract to one typed page.
- Maintain the scholarly language used throughout the capstone document.
- Keep the abstract concise, accurate, and readable. Use correct English grammar.
- Ensure each sentence adds value to the reader’s understanding of the research.
- Use the full name of any acronym/abbreviation and include the acronym/abbreviation in parentheses; you can thereafter refer to the acronym/abbreviation.
- Abstracts do not have paragraphs; keep the text to one long paragraph with no indentation.
- Do not include references or citations in the abstract.
- Per APA style, use numerals in the abstract, not written-out numbers, unless at the start of a sentence.

What could delay the approval of an abstract?

- Grammar, punctuation, and spelling errors.
- Lack of definitions of terms (important enough to be in your title, e.g., WiFi, PTSD, UN, etc.).
- Inadequate or missing social change implications.
- An unclear or absence of research problem, research question, or purpose of the study.
- No answer to the question “so what?” You must indicate why the research is important. Who will care that the issue was studied?
- A length of more than one typed page.
- Identification of participants, partner site, organization, or location.