



A Case for Modernizing Capstone/Senior Seminar Courses

Capstone or senior seminar courses offer undergraduate students the opportunity to have a culminating experience during their senior year that will help them integrate, evaluate, and summarize their experiences during their college career. These courses are also used to give some added value and encourage students to polish their image, résumés and interviewing skills. The debate is ongoing as to what topics should be covered in these courses.

AGR 412 (Senior Seminar) has been a required course for all departmental majors for over 15 years and the topics continuously change and evolve. An effort to identify topics for a revision of the course led to acquiring input from recent graduates, faculty, and graduate students. This effort led to the addition of topics dealing with credit, job benefits, retirement, and insurance after they were determined to be the most desired additions.

The newly updated course now includes the following elements: e-mail & phone etiquette (especially cell phones), résumé composition, career search, dressing for success, interviewing & application techniques, business etiquette, dealing with dysfunctional people and problematic co-workers, dealing with credit cards & debt, benefits & retirement, insurance, networking, and career portfolio development. Attention is also given to personal decisions and activities that may adversely affect the opportunity to gain employment, such as Facebook and MySpace postings, as well as e-mail addresses. Some students further fail to recognize the implications of a personal e-mail address such as “sexyeyes@provider.com” or “partyanimal@provider.com”.

A main focus of class discussion has become the course's required reading, “The Money Book for the Young, Fabulous & Broke”, by Suze Orman. This easy-to-read book is used to assist students with personal financial decisions. Thus far this text appears to be readily accepted by the students and several have given positive comments regarding the content.

Assignments include: developing a cover letter, one-page résumé, two-page résumé, and a references page; completing the State of Texas Application for Employment; participating in a mock interview with the University's career services office; attending three career fairs or awareness activities; researching three careers/jobs or graduate programs; and, organizing a career portfolio.

Each spring, two sections are offered for the 120-140 students enrolled, and each fall includes one

section for 55-75 students. This capstone course is required for all students majoring in Animal Science, Agricultural Business, Horticulture/Crop Science, Agricultural Mechanization and General Agriculture. Students receive one hour credit and class evaluations indicate that some students feel too much work and effort is required for the amount of credit awarded. Regardless, an increasing number of students give the course high scores and positive comments each semester.

The department's thoughts are that this class helps students begin the transition of thought and attitude from being a student to becoming a young professional in their chosen career. Recently, the Industrial Sciences program has been approved for a similar capstone course and other departments have visited with faculty regarding implementing similar classes in their departments. The largest issue is the continuous necessary change to meet current business and industry expectations.

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TIPS for Writing Introduction (Chapter One) of Thesis/Dissertation Using the Cone Analogy

Abstract

Writing introduction to a research study or writing chapter one of thesis/dissertation is a very challenging task. A well-written introduction is important in attracting and sustaining readers' interest in the study. The saying: “first impression is the best impression” holds good for writing introduction or writing chapter one thesis/dissertation. This article describes how to write a clear, well-articulated, and convincing introduction using a cone analogy. The cone analogy describes the importance of the problem, followed by documenting the evidence pertaining to the problem, and identifying gaps that provides a rationale for conducting the study. Finally, the tip of the cone tells the reader how you will carry out the study.

Background

Each year hundreds of theses/dissertations/

research papers/capstone projects and culminating experiences are written by graduate students and faculty. Each one has gone through a process which reflects the challenges of writing chapter one or the introduction chapter. These processes and challenges surface during proposal meetings committee meetings, oral defenses, and reviewing and critiquing papers and/or articles. Frequently asked questions include: what is the rationale for doing the study? What to include? How long chapter one should be? And how chapter one should be organized to capture readers' attention and understanding of the topic or study?

Chapter one introduces the problem or topic under investigation to the readers. The chapter discusses the importance of the problem and sets forth the context and rationale supported with facts and figures, the theoretical/conceptual underpinnings of the study, significance/need of the study, objectives, and research questions and/or hypothesis to be tested. In essence, chapter one prepares the reader for what is coming in the next chapters of a thesis or dissertation. Therefore, careful attention to detail is a must for writing introduction/chapter one of your thesis/dissertation. In the following paragraph, an attempt is made to highlight key points to writing introduction or chapter one of thesis/dissertation using a cone analogy.

This article provides guidelines for writing the introduction or chapter one of a thesis/dissertation. Specifically, this article compares writing the introduction/chapter one to a cone (Figure 1) wherein the top part represents a broad topic or a problem, while the tip of the cone represents the specific problem based on filtering of information into a logical sequence.

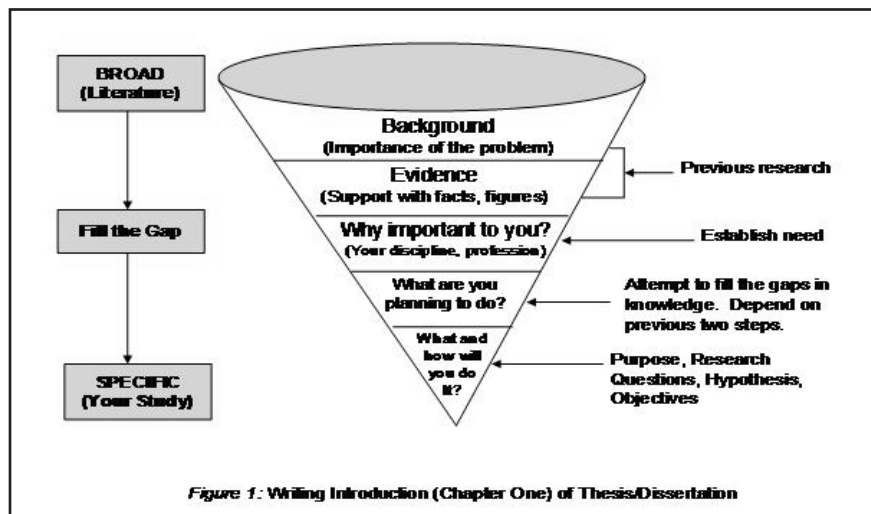


Figure 1: Writing Introduction (Chapter One) of Thesis/Dissertation

Steps

As Figure 1 illustrates, begin the introduction chapter by establishing the importance of the problem or study. Briefly discuss the nature and extent of the problem to the discipline, profession, and society, if applicable. For example, if you are conducting an agriculture teacher shortage study,

highlight the supply and demand for agriculture teachers in the United States and its impact on schools, colleges, and universities. Second, document with evidence (facts and figures) supporting the need for addressing the problem. Discuss the scope of the problem by citing previous work. Synthesis of up-to-date literature relevant to the topic is critical to establish the problem's importance. The first two slices of the cone (background and evidence) help identify the gaps (slice three) relative to the problem providing opportunities and/or justification for conducting the proposed study.

The need for a thorough review and synthesis of literature pertinent to the problem is critical in order to provide a solid rationale for the study (slice four). Slice four, in essence, is basically a reflection of how you arrived at the problem or topic for the study. After completing slices one through four of the cone, you are now ready to tell the reader how you will carry out the study (slice 5) by specifying the purpose/goals, research type, and objectives/research questions and/or hypothesis to be tested. Finally, conclude chapter one by stating operational definitions, limitations, and assumptions.

Conclusions

Writing a clear, well-articulated, and convincing introduction chapter for a thesis or dissertation is very important to attracting and sustaining readers' interest in topic or study. The saying, "First impression" is the "Best impression" holds good here as well. You must sell the document to your readers by providing all the information they need to understand your topic/study. Remember you can not study everything. That is why your study will fill the gap where other studies left off. Using the cone analogy

will help graduate students and faculty alike to develop an outline for writing introduction chapter. Extension professionals, faculty and graduate students will find this article useful in writing introduction or chapter one. In addition to the cone analogy, Bowen (1997) and Radhakrishna (2006) offer additional TIPS on writing the introduction/chapter one:

- Information synthesis vs. information transfer: Mere transfer of information from original sources or paraphrasing is not enough. You must synthesize literature from multiple sources relevant to your study.

- Avoid using too many quotations. Doing so reflects an inability to synthesize. When synthesizing information, do not misconstrue an author's thoughts. Use terminology that accurately reflects what the author found, stated, concluded, or recommended.

Teaching Tips

- Review high quality journals, theses and dissertations to gain a flavor for the desired type of writing and academic rigor.

- Become an avid reader of research journals.
- Avoid slang. Use complete terminology.
- Avoid personal pronouns (I, we, our, us, me)

that inject bias.

- Limit your introduction chapter to 8-10 pages maximum.

- At the end of chapter one, include a brief note on how you have organized the remaining chapters of your thesis or dissertation.

References

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Contributions of science education journals are enhanced by categorizing (journal) impact factors

In a follow-up to an article whereby one of us suggested that NACTA Journal become pro-active in establishing a viable impact factor for the journal (Dodson, submitted), we now offer more rationale for the need for such a measure of our impact. The listings for science education journals in the Citation Reports (science and humanities) of the 2006 ISI Web of Science reveals problems with how science education journals are categorized. For example Science Education (impact factor: 1.36) is lumped into the 2006 JCR Social Science Edition which has 100 total

entries, and not in the 2006 JCR Science Edition. Further, of the 20 entries in the 2006 JCR Science Edition, American Biology Teacher (impact factor: .171) and Journal of Biology Education, (impact factor: .267) have a broad spectrum, science-teaching focus.

So, what does this mean? We suggest that journals such as American Biology Teacher and Journal of Biology Education, should be placed into their own category along with other journals with a similar focus. These journals with a science-teaching focus should not be lumped in with other journals such as those listed in either of the 2006 JCE Editions. Moreover, we suggest that journals that presently do not possess an established impact factor, but that could be classified as 'science-teaching' should establish an impact factor. The NACTA Journal falls within this category. For all of the reasons specified earlier (Dodson, submitted), the NACTA Journal can be a prime force for unifying science education journals. In order to solicit the establishment of an impact factor, the ISI must be provided previous journal issues, and certain journal statistics. Considering the citations articles in NACTA Journal receive, it would be in a strong position to help categorize science education (journal) impact.

References Cited

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