An interdisciplinary comparison of master's thesis abstracts

Patricia Belle Chance

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AN INTERDISCIPLINARY COMPARISON OF
MASTER’S THESIS ABSTRACTS

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
English Composition:
Teaching English as a Second Language

by
Patricia Belle Chance
March 2006
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March 2006

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ABSTRACT

One academic genre that can be especially challenging for graduate students is the research abstract, which is frequently found in thesis and dissertation writing. Although previous genre research has focused on published research article abstracts, very little research has analyzed student abstract writing in Master’s theses.

In this thesis, I hope to extend current research on abstracts by exploring different ways that organizational moves and other discourse elements such as hedging are reflected in graduate student research abstracts. My analysis focuses specifically on Master’s thesis abstracts from five disciplines at CSUSB and how the rhetorical conventions in these texts may reflect the epistemological and social expectations of the writers’ academic communities. By using models employed by previous researchers, I analyze the frequency and realization of each abstract move as well as hedging strategies to determine similarities and differences within and across disciplines. Perhaps these abstract patterns may reveal the beliefs and/or values within these particular disciplines.

This study’s results indicate that these abstracts use a variety of hedging patterns and many of the moves
that have been described for published research articles. In conclusion, I offer suggestions for additional areas of investigation as well as further studies which might be done on a larger scale in order to replicate the findings of this study.
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CHAPTER ONE
THEORETICAL BACKGROUND

Introduction

For graduate students, one academic genre that can be especially challenging is the research abstract - a text required of Master’s theses, dissertations, and research articles (RAs). Within this genre, writers must be selective about how much background information to offer to their audience, the degree of directness with which to present the results of their studies, and the type of rhetorical strategies needed to make their abstract and larger research text acceptable by their peers. The writer’s task becomes essential when writing an abstract for a published RA or a Master’s thesis as it will shape the readers’ first impression of the work, provide a comprehensive overview of the whole text’s relevance, and affect the reader’s desire to read the entire text. Studying the genre of student abstract writing can reveal the writers’ positions towards their audiences, previous research, and the academic communities to which they belong as well as illuminate the values and practices of these communities. However, most, if not all of this research, has been centered on abstracts in published RAs,
a "larger" genre that has been widely studied for its various structural and linguistic components (Ahmad, 1997; Dahl, 2004; Holmes, 1997; Kanoksilapatham, 2005; Martín, 2003; Samraj, 2005; Swales, 1990, 2004; Swales & Feak, 2004; Weissberg & Buker, 1990, as cited in Kanoksilapatham, 2005). Very little research has analyzed student abstract writing in MA theses.

Recent work on abstracts has analyzed various rhetorical strategies in this genre and ways that these strategies are shaped by values and expectations in different disciplinary communities (Bhatia, 1993, 2001; Huckin, 2001; Hyland, 2000; Melander, Swales, & Fredrickson, 1997; Samraj, 2005; Swales, 2004; Swales & Feak, 2004). Both the discourse structures and lexicogrammatical features such as the use of hedging can promote disciplinary beliefs and social behaviors. Swales (1990) explains that "Discourse communities are sociorhetorical networks that form in order to work towards sets of common goals" (p. 9). It is these "communicative purposes" that determine the type of genre and language used by a particular discourse community (p. 10). Achieving a rhetorical awareness of the genre standards, including those for abstracts in a particular discourse community, enables writers to reposition
themselves from novices into professionals and to become accepted members of a specific community. Hyland (2000) finds that RA abstracts "replicate the field's organisational structures, beliefs and authorised institutional practices...and are worthy of study because they are significant carriers of a discipline's epistemological and social assumptions and, therefore a rich source of interactional features that allow us to see how individuals work to position themselves within their communities" (p. 63).

In this thesis, I hope to extend the current research on abstracts by exploring different ways that organizational moves and other discourse elements such as hedging are reflected in graduate student research abstracts, focusing specifically on Master's thesis abstracts from five disciplines at California State University at San Bernardino (CSUSB). My analysis can contribute to an understanding of the sociocultural environment of these five academic disciplines and how the rhetorical conventions of research writing can reflect the epistemological and social expectations of the writers' academic communities. This chapter will provide theoretical background for this work by reviewing prior scholarship on research article and thesis writing in
order to establish a foundation for understanding how research writing is shaped by various situational factors. Specifically, the chapter will highlight research related to central themes of this thesis, including the genre of the RA, interdisciplinary analyses of academic RA abstracts, discourse features of Master’s theses and Ph.D. dissertations, and hedging strategies.

Research Article Scholarship

A number of linguistic studies (e.g., Ahmad, 1997; Kanoksilapatham, 2005; Swales, 1990, 2004) have explored global discoursal moves in the genre of academic research articles. While various individual sections of the RA have been the subject of linguistic analysis, the most widely studied section has been that of the RA introduction. Swales (1990, 2004) offers the most comprehensive study of RA introductions and has developed a well-known model for investigating their rhetorical structure and RA writers’ motives for choosing certain rhetorical strategies. His textual analysis of RA introductions resulted in the CARS model (Create A Research Space) which, in his 1990 framework, consists of three moves: (1) establishing a territory, (2) establishing a niche, and (3) occupying the niche. These moves include steps that not only provide
organizational structure for the RA introduction but situate the author's work within the discourse community. First, "establishing a territory" is achieved by claiming centrality of the topic's importance, making topic generalizations, and/or reviewing previous research so that the author shows the importance of the new research within the field (p. 141). Secondly, the writer continues by "establishing a niche" for his/her research by counter-claiming, by indicating a gap in previous research, by raising a question, or by continuing the same direction of the current research in order to situate his/her own study within the disciplinary community (p. 142). Thirdly, by "occupying the niche" the writer provides the purpose of the present study, presents findings, and/or explains the RA structure so as to enhance and solidify his/her position within the research field (p. 142).

Swales (2004) presents a revised CARS model for Moves 1 and 2 which incorporates Samraj's (2005) findings that the Move 2 can include detailed justifications for the study within a problem-solution framework, as she found in the field of Wildlife Behavior. In addition, the new Swales model presents a cycling of Moves 1 and 2 for multiple topics and contains fewer steps for the first two
moves: Move 1 of "Establishing a territory" is achieved with a topic generalization; Move 2 of "Establishing a niche" is realized by indicating a gap (e.g., There has been relatively few investigations...) or providing new knowledge and positive justification (e.g., One reason to take such an approach is that...) [Swales, 2004, p. 230]. The revised and more complex Move 3 unit is "Presenting the Present Work" and can involve several steps, which include providing new findings, discussing the value of those results (e.g., One advantage of our algorithms is that they...), and outlining the structure of the paper (Swales, 2004, pp. 231-232). As a result of Samraj's study of the actual writings of RAs, the CARS model revision provides more flexibility in the moves framework to incorporate the evolutionary nature of genre analysis and the constant changes in professional and student writing.

A technique that is widely used in RAs throughout various disciplines is Swales' (1990) "Claiming Centrality" often found in Move 1, in which the writer begins the introduction with phrases (e.g., the increasing interest, Recently, has importance for, is a key issue) that indicate the writer's research topic is of interest or importance for the discourse community (pp. 144, 147). Swales (1990) relates that "Centrality claims are appeals
to the discourse community whereby members are asked to accept that the research about to be reported is part of a lively, significant, or well-established research area" (p. 144). However, he found that centrality claims are less frequently used in the physical sciences possibly because of disciplinary customs (e.g., journal publication requirements that continue accepted and well-established research patterns) or individual preference towards the rhetorical strategy of claiming centrality.

A number of researchers have used Swales' frameworks for analyzing introductions and other sections of RAs, sometimes revealing interesting deviations from Swales' CARS model. Drawing on Swales' move analysis for RA introductions, Kanoksilapatham (2005) finds a fifteen move structure (three moves for the Introduction and four moves each for Methods, Results, and Discussion sections) in biochemistry RAs. The introduction moves can occur several times in a cyclical mode, depending on the articles complexity, to explain particular features and purposes within a certain study. There is also infrequent use of Move 2 possibly due to the scientific reader's familiarity with accepted research norms of the scientific community and, therefore, making it possible for the writer not to explicitly establish a niche. Similarly, Ahmad (1997)
finds that 35% of the Malaysian science and technology RA introductions did not contain Move 2. The infrequency of Move 2 as a hedging strategy is to avoid finding fault with or a gap in previous research (as cited in Kanoksilapatham, 2005, p. 287). However, in the rare usage of Move 3 to occupy a niche, the study's purpose occurs as a brief statement to entice the reader to continue to the Results section (p. 287). The lack of research traditions in this small research community might possibly affect the writing conventions of Malaysian scientific writers who have no need to compete with each other.

Swales' (2004) analysis of the move structure in RA introductions has also provided a basis for researchers to study moves in other sections of the RA and offer comparisons in several academic disciplines (Dahl, 2004; Holmes, 1997; Weissberg & Buker, 1990, as cited in Kanoksilapatham, 2005). Holmes (1997), for example, finds similarities and differences in his study of discussion sections in social science RAs from the disciplines of history, sociology, and political science. Within the social sciences, history texts have long introductions and short, less complex discussion sections as compared to the natural or hard sciences which are more detailed in move structure. History texts also make few references to
previous research, which Holmes speculates as being the result of a limited development of research programs and the lack of a theoretical consensus within the discipline. He also hypothesizes that the frequency of "Statement of Result and Recommendation" in sociology texts may be due to external sponsorship of that discipline from grants, that is, this move may be responding to the sponsors' interest in research findings (p. 333). Thus, the writer's choice of rhetorical moves is impacted by several issues including internal (academic discipline) and external (sponsorship) factors.

Others have done cross-disciplinary analyses of method sections. An analysis of the method section from twelve different disciplines (hard sciences, applied sciences, social sciences, business, and humanities) by Weissberg and Buker (1990) reveals that there are nine rhetorical moves in Methods, including an "overview of the experiment, population/sample, location, restrictions/limiting conditions, sampling technique, procedures, materials, variables, and statistical treatment" (as cited in Kanoksilapatham, 2005, p. 287). Some biochemistry methods sections differ from the other sciences in that they describe the unique features of the
study that normally are not explained because scientific experimental procedures are familiar to scientists.

More recently, Dahl (2004) has looked at the language, culture and disciplinary requirements for the overall organization of RAs through an analysis of the linguistic features in English, French and Norwegian RAs from the fields of economics, linguistics, and medicine. He finds that academic writing styles develop according to the discipline’s guidelines as novice writers become socialized through their academic endeavors. Comparing the pattern of articles written in these disciplines, Dahl states that the economics and linguistics fields have a less predictable RA structure whereas the RAs in medicine follow the formal IMRD (Introduction, Method, Results, Discussion) structure in all three languages, allowing the reader to predict more easily what information will appear in specific article sections. However, he points out that the economics RA introduction is more structured and more frequently presents the article structure at the end of the introduction (e.g., *The rest of this paper is organized...*) than the linguistics RA, which might be an indication that “economists, more than linguists, are striving for a more fixed pattern of text structure” (p. 1820). Language and culture play a larger role in the
disciplinary structure of economics and linguistics RAs as opposed to the medical texts. That difference, Dahl feels, is partly due to medicine being a more stable, well-defined research field that interprets research data less subjectively than the less mature disciplines of economics and linguistics. The greater RA variation in economics and linguistics rather than in medicine across languages Dahl attributes to the formal teaching of writing skills to U.S. and Norwegian authors, leading them to use more locational metatext (i.e., language elements that refer to parts of the text, e.g., article, chapter, previously) and rhetorical metatext (e.g., conclude, discuss) to show author's stance in the linguistics and economics disciplines (p. 1817). The French RA authors, in contrast, may receive little instruction in such metatextual moves. He concludes that academic discipline guidelines are reflected frequently in medical texts, while on the other hand, language and national writing traditions are more influential in the economics and linguistics texts.

In sum, research article scholarship has analyzed various sections of the RA to demonstrate organizational changes that have occurred over the years. Swales incorporated these changes in the CARS model revision.
These researchers arrive at important conclusions about differences in RA structures which perpetuate well-established RA patterns and disciplinary customs. In addition, cultural and language influences upon RA organization indicate that move patterns in certain fields may reflect the discipline’s characteristics in it's values and beliefs.

Research on Research Article Abstracts

Although much work has been done on various components of the RA, particularly the introduction, RA abstracts have been a neglected area of prior research studies until recently when researchers have begun to look at published RA abstracts in terms of their rhetorical move structure, and language and culture to determine what factors influence the writing of these abstracts (Bhatia, 1993, 2001; Huckin, 2001; Melander, Swales & Fredrickson, 1997; Swales & Feak, 2004). In perhaps the earliest linguistic study of abstracts, Bhatia (1993) finds abstracts contain a description of the research in four moves: (1) “Introducing purpose”, (2) “Describing methodology”, (3) “Summarizing results”, (4) “Presenting conclusions” (pp. 78-79). According to Bhatia, the aim of “Introducing purpose” is to indicate the author’s intent
or goals, "Describing methodology" provides data and procedure information, "Summarizing results" presents the author's findings or problem solutions, and "Presenting conclusions" interprets results and offers future implications. It is these recognizable patterns in RA abstracts that identify the genre with a well-defined communicative purpose.

Drawing on Bhatia’s four moves, Huckin (2001) analyzes biomedical abstracts from international journals (basic science, clinical medicine, health care delivery) to see whether the abstracts offer an accurate description of the journal article’s content and what types of rhetorical moves are present. He notes that these articles begin with only a general Methods statement because certain diseases and research tools are so familiar to the field specialists. Often times, the Purpose move was excluded and the three-move structure, Methods, Results, and Conclusion, appeared more frequently (p. 102). Huckin finds that the abstracts did, in fact, refer to the article's main points and used linguistic markers for these moves: Methods statements used verbs such as evaluated, performed and Results used verbs (e.g., demonstrated, found) in the past tense while Conclusions shifted to present tense verbs (suggests, appears) with
some hedging (may) and explicit signal phrases like I conclude.

Also looking at RA abstracts, Swales and Peak (2004) report a four-move structure of approximately one paragraph in length (four to ten full sentences) and classifies abstracts as either "results-driven" or "RP [Research paper] summary" (p. 282). The "results-driven" abstract, as the name implies, focuses on the research findings whereas the "RP summary" provides the reader with a one to two sentence summary for each section: introduction, methods, results, and conclusion.

Recent studies (Hyland, 2000; Martín, 2003; Samraj, 2005) have also involved interdisciplinary analyses of abstract moves that provide information about the epistemic beliefs and values of the writers' academic discourse communities. Melander, Swales, and Fredrickson (1997), for example, analyze RA abstracts from three disciplines -- biology, medicine, and linguistics -- in two languages, English and Swedish -- and show that the organization of linguistics and biology abstracts written in English differ from that of those written in Swedish. For instance, in the overall organization of the linguistic abstracts, the abstracts have shown cultural differences with varying structures of Swedes writing in
Swedish; Methods-Results-Conclusion for Swedes writing in English; and the Introduction-Methods-Results-Conclusion pattern by Americans writing in English. In contrast, the biology abstract structure shows Methods-Results consistently used across both languages. The medical abstracts also have a varying framework of Problem-Recommendation for Swedes writing in Swedish; Methods-Results-Conclusion by Swedes writing in English; and Objective-Methods-Results-Conclusion by Americans writing in English (p. 267). The medical and biology abstracts in both languages do not show a clear pattern of national or multinational standards however, the linguistics abstracts do show a strong tendency towards national customs. Rhetorically, for example, American abstracts frame the research by claiming centrality, indicating a gap, announcing the present study and carefully positioning their work among other research works by citing previous studies.

Also analyzing texts across disciplines and languages, Martín (2003) provides a genre analysis of research paper abstracts written in English and Spanish from the experimental sciences of phonetics and psychology. Abstracts written in English for international journals and abstracts written in Spanish for Spanish
journals were analyzed by their structural units and compared with the expectations of the scientific communities. Martín observes that although English and Spanish abstracts contain the basic units of I-M-R-C, in Spanish abstracts, there is a tendency to omit the Results section by discussing findings in the Conclusion section. Spanish abstracts also often omit Swales’ Move 2 (justification for the present research by indicating a gap) because the smaller Spanish scientific community tends not to criticize the work of prior scientific writers. Both Spanish and English abstracts show a preference for Swales’ Move 3 in the Introduction section when stating the main research objective. Martín’s findings emphasize the importance of language/culture and international journal expectations in scientific texts.

Looking at texts within two related academic disciplines, Samraj (2005) explores the genres of research article abstracts and introductions, which together she says may form a “genre set” (p. 141), in Wildlife Behavior and Conservation Biology. Her analysis of RA introductions reveals that Conservation Biology includes RA introduction moves, provides very detailed justifications such as the threat of species extinction and contains a problem-solution framework. Samraj shows that the
abstracts in the two fields share the moves of statement of purpose, results, and conclusions, which are also found in RA introductions, but the study's methodology is not often found in either discipline; therefore, abstracts cannot be solely characterized as a summary of the RA. In addition, the Wildlife Behavior abstracts tend to be less explicitly persuasive and more strictly informative in that they provide background descriptions of species or sites rather than directly justifying the importance of the study. Thus, the Wildlife Behavior abstracts mainly present only the purpose, result, and conclusions which indicate a clearer difference in organization and purpose than the more directly persuasive RA introductions. In contrast, the Conservation Biology texts involve more explicit "rhetorical" work like that found in RA introductions in claiming importance or "centrality" of the article's subject matter. Conservation Biology abstract writers claim centrality by explaining their topic's importance in the real world. Samraj offers several possible explanations for these patterns. She speculates that as a new, emerging field which lacks theoretical structure, members of Conservation Biology may not be as familiar with research from a variety of other fields and, thus, abstract writers may possibly have the
need to establish their research as worthwhile to the
discourse community (p. 152). In addition, as an applied
discipline connected with real world issues, Conservation
Biology may require justification in the form of practical
solutions for real-world problems. Samraj concludes that
disciplinary values as they relate to discursive practice
may be manifested in the relationship that genres have
with one another within a specific discipline. Her study
thus allows for a better understanding of how the abstract
genre relates to others in different disciplines and how
textual features can reveal characteristics about a
discipline’s culture and its members.

Perhaps the most comprehensive comparison of
abstracts across disciplines is that of Hyland (2000) who
studied a corpus of 800 RA abstracts from eight
disciplines. His classification of move structures
includes an Introduction (which establishes the paper’s
context and motivation for the research); a Purpose (which
relays the hypothesis or thesis for the study); Methods
(which offers information on data and procedures); a
Product (which states the results); and Conclusions (which
draws inferences from or suggests future applications of
the study’s findings). Yet, only 5% of his data contains
all of these steps in this order. Hyland found that a
pattern of Purpose-Method-Product (P-M-Pr) was realized in 25% of abstracts and, an Introduction-Purpose-Product (I-P-Pr) structure comprised 15% of the texts. There were also different variations of recycling moves in longer science abstracts or only two-moves of Purpose-Product (P-Pr) possibly because knowledgeable, informed community readers need less explanation of the study’s methodology in the abstract. Hyland (2000) states “an important dimension of disciplinary knowledge-making is the extent to which fields agree on a common set of outstanding problems and appropriate procedures for pursuing them” (p. 70). In relation to particular disciplines, Hyland suggests that the P-M-Pr pattern, preferred by 60% of physicists and engineers, contains the study’s description in the Methods section. However, the I-P-Pr sequence is prevalent in 75% of the humanities/social sciences where the Introduction fills in gaps in the readers’ topic knowledge.

Looking at the persuasive use of language to ‘market’ the writer’s professional image and promote social relationships within the field, Hyland (2000) has also explored how abstract writers claim significance and credibility for their studies. He states that “texts thus reveal how writers attempt to negotiate knowledge in ways
that are locally meaningful, employing rhetorical skills which establish their credibility through an orientation towards arguments, topics and readers" (p. 14). One way he found that abstract writers claim significance, or what Samraj (2005) and Swales (1990) might call "centrality" is by opening with a promotional statement (e.g., *The solid state diffusion is of great theoretical and practical importance*). Such promotional statements are found in 75% of hard sciences (science/engineering) and in only 60% of soft knowledge (humanities/social sciences) abstracts to show the value of their studies (p. 76).

Credibility strategies such as presenting a gap in current research, noting previous research in the field, and using insider jargon and acronyms aide in positioning the writer and the writer's research within the field. Hyland (2000) states that if the author's purpose is to persuade the reader, then the abstract should follow the field's recommended organizational structure for writing and exhibit a rhetoric that reflects community beliefs and values. He finds that rhetorical moves include 'membershipping' features such as jargon and acronyms (occurring in 45% of hard knowledge abstracts and 18% of the soft disciplines: applied linguistics holding 5% of the total corpus) that field insiders identify and
international conference and university biology
dissertations, finding recurring patterns of moves in a
cyclical pattern which identified the writer's purpose,
writing process, and the values within that writing
community. In dissertation introductions, Swales' RA Move
2 (presenting previous research) is realized in a somewhat
different way than that reflected in articles. It consists
of (1) a statement describing the variable, (2) a
description of previous research on that variable, and
(3, optional) an evaluation of the previous research. RAs
and dissertations are also different in their discussion
sections. The discussion sections of the articles follow a
three-cycle pattern with each cycle containing a statement
of result, a reference to previous research for
comparison, explanation, exemplification, deduction, and a
reference to previous research for support, hypothesis,
and recommendation. However, dissertation discussion
sections vary depending on the writer's stance towards the
study's results. Hopkins and Dudley-Evans state that the
cycling pattern's emphasis is "on the interpretation of
results and the discussion sections..." and is evaluated
"less on the actual results presented than on the way the
writer relates them to previous work in the field"
(p. 119). If the results are unsuccessful, there is a
short discussion section but if the results are positive, the sections are longer by adding deduction, hypothesis, support and recommendations. Hopkins and Dudley-Evans conclude that the concept of “cycles” better characterize the long, informing sections in articles and dissertations and are determined by the writer’s communicative purpose.

Moving beyond macro rhetorical moves to the microrealization of those moves, Swales (1990) analyzes six dissertations from the University of Michigan and observes that dissertation writing is “writing about the evolving text” with “much signaling of where the authors are going, where precisely they have got to, and what they achieved so far” (p. 188). His study shows that dissertation writing involves taking a stance to present research within the parameters of the academic discourse community. In 2004, Swales revisits the structure of Ph.D. dissertations to provide insight into this student genre. He demonstrates that the five mathematics dissertations are of the traditional type (Introduction-Literature Review-Methods-Results-Discussion-Conclusion) of eighty-five pages average length; eight physics dissertations in his corpus contain either a consolidated bibliography or references at the end of each chapter; the five biology dissertations show the most variety in length
(twenty-eight to thirty-seven page chapters) and type (traditional, references at end of each chapter, co-authored projects). Swales notes that there has been an increasing number of "multiple-manuscript" or "anthology" dissertations, which are a series of publishable papers for the dissertation with added introductory and concluding chapters, due to the pressure put upon doctoral students to become published before graduation (p. 106). This newer dissertation format emphasizes the evolution in student and publication writing requirements.

Also looking at dissertations, Hyland (2004) discusses dissertation acknowledgement sections from six academic disciplines (Applied Linguistics, Biology, Business Studies, Computer Science, Electronic Engineering, Public Administration). He finds a three-tier structure with a thanking move and optional reflecting and announcing moves. This is a unique genre as it allows writers to express their gratitude (with references to God, friendships, and even their pets) for assistance received during their research. Acknowledgement sections, argues Hyland, are intended to enhance the writer's persona as a sympathetic individual and as a professional researcher within the disciplinary community "by displaying their immersion in scholarly networks, their
active disciplinary membership, and their observance of the valued academic ideals of modesty, gratitude, and appropriate self-effacement" (p. 303). He also notes that there are fewer acknowledgement sections in Master’s theses. Because Master’s theses are shorter in length and written faster than the abstract itself, students do not feel acknowledgements are of any significance especially in the case of more self-reliant MBA students. Swales reveals that Master’s texts in the fields of humanities and social sciences are written with more complex acknowledgements, including a reflection on their research experience, than in the hard sciences and engineering. In fact, Ph.D. acknowledgements in Applied Linguistics contain an average of 8.5 steps, while Master’s students in electronic engineering produce short acknowledgements of 2.3 steps (p. 311). This may indicate that Ph.D. students who are concerned with the publication of their dissertations are more aware of the benefit of name-dropping individuals who may only be marginally involved in their project.

Paltridge (2002) provides a "birds-eye" view, or taxonomy, of the rhetorical approaches found in M.A. and Ph.D. theses. He examines 30 Master’s and doctoral theses from various disciplines and categorizes them into four
groups: simple (17 M.A./Ph.D. theses), traditional-complex (six M.A./Ph.D. theses), topic-based (six M.A./Ph.D. theses), and compilations of research articles (one Ph.D.). A dissertation that is 'traditional: simple' (e.g., in Botany and Education) is a single-topic study with an introduction, literature review, methods, results, discussion, and conclusion sections, whereas a 'Traditional: complex' type (e.g., in Medicine) reports on more than one topic with an introduction, literature review, methods, explanation of studies, and conclusion. A 'topic-based' dissertation (e.g., in Engineering) begins with an introduction followed by subtopics and ends with a conclusion; and the 'compilation of research articles' type (e.g., in Dental science) consists of publishable articles with "experts writing for experts" (p. 132). Each academic discipline influences text form by its values and expectations. His results show, for example, that the disciplines of Architecture (traditional-simple, traditional-complex, topic-based) and Applied Linguistics (simple, topic-based) demonstrate a variety of thesis types. He observes that "The traditional: simple type thesis, then was more common at the master’s level than at the doctoral level where students either carried out more complex types of study, or ones which were more
appropriately reported on in a different kind of way" (p. 133). Paltridge emphasizes that teaching materials should provide students with various thesis types and the rationales for choosing certain types; such information is important as current thesis handbooks cover the topic selection and proposal in the research process but give little attention to the writing process or to the range of thesis options.

Whereas genre analysis began with the RA introduction section, researchers realize the importance of other sections such as acknowledgments when writing research papers. These studies emphasize how academic writers strive to achieve acceptance into a specific academic or research community by conforming to the writing requirements of that field. The writer's communicative purpose determines the format while the writer's culture and language will effect how the purpose is expressed in terms of the rhetorical move structure and hedging strategies.

Hedging Strategies in Research Writing

In addition to research on organizational moves in published articles and student theses, there have been numerous studies (e.g., Harwood, 2005; Hyland, 1996, 2000;
Martín, 2003; Myers, 1989; Recski, 2005; Swales & Feak, 2004) on hedging in research writing to demonstrate how authors present themselves in their texts and moderate their stances toward their claims and their readers in a socially acceptable way in the community and to reduce the risk of negation by other researchers.

Hedging is another dimension with which writers promote and reflect disciplinary beliefs and social behaviors as seen particularly in research on hedging in scientific writing (Hyland, 1996; Myers, 1989). Since readers can refute results of a scientific study, mitigation through hedging becomes an important writing strategy for signaling the writer's anticipation of possible opposition to his findings; therefore, Hyland says hedges help writers "make the strongest claim for which they have epistemic authority" (1996, p. 435). He divides hedges into two large categories: content-oriented and reader-oriented. Hyland (1996) defines content-oriented as hedges that "mitigate the relationship between propositional content and a representation of reality; they hedge the correspondence between what the writer says about the world and what the world is thought to be like" (p. 439). The first subdivision of content-oriented hedges are accuracy-oriented hedges which
are used to describe propositional content precisely and specify the extent of the writer's knowledge rather than the writer's confidence or personal commitment to the research. For example, adverbs (e.g., *partially, quite*) exhibit the degree of strength of the modified term, style disjuncts (e.g., *generally, basically*) demonstrate the reliability of the claim, or a precise qualification (e.g., *Viewed in this way*) provide precision in the truth of a proposition (p. 441). These hedges are concerned with interpretations to support "the exactness of a claim, either by modifying the sense in which terms describe reality or by stating a more precise appraisal of certainty" (p. 443). The second subdivision of content-oriented hedges is writer-oriented hedges which "enable writers to refer to speculative possibilities while at the same time guard against possible criticism...to place results in a wider context and demonstrate a contribution to the scientific pool of knowledge rather than simply interpret findings" (p. 443). For example, these hedges allow the writer to avoid total responsibility for his/her claim with the use of qualifiers (e.g., *indicates, provided that*) through the absence of writer agency (e.g., through passive constructions), and emphasis on the research methodology
(e.g., under these conditions) to hedge personal commitment. According to Hyland (1996), writer-oriented hedges allow writers "to seek acceptance for the highest-level claim they can for their results while protecting them from the full effects of its eventual overthrow" (p. 445).

The second type of hedges, reader-oriented hedges, solicit the involvement of the reader through interpersonal indicators (personal pronouns) and epistemic verbs (judgmental e.g., propose, believe or deductive e.g. infer, interpret) to allow for reader interpretation. In addition, such hedges can involve indefinite articles or hypothetical conditionals that leave open alternative suggestions by the reader, or questions that encourage the reader to join the deductive process (e.g., We believe the findings suggest that a few are missing. Could this have any significance?). Posing questions and deferring to other researchers (e.g., earlier results, widely used method) can situate the author as a credible community member who pursues answers to research questions and makes the reader an active participant in the pursuit of those answers while adhering to community regulations to defer to other members (p. 448).
In summary, content-oriented hedges enable writers on the one hand "to present statements with appropriate accuracy, on the other, to make the strongest claim possible while limiting the damage of error" (Hyland, 1996, p. 445). Accuracy-oriented hedging shows the study's accuracy and writer-oriented hedging anticipates possible reader rejection. On the other hand, reader-oriented hedges seek "acceptance in accrediting knowledge and respond to the possibility of opposition to claims on inter-personal grounds" (p. 449). These hedge the writer's commitment but clearly indicate writer agency. Hyland's study emphasizes the need in scientific writing to know what to say and how express it in order to successfully present information and have it accepted by field members without seeming overconfident.

Looking at hedging in different languages, Martín's (2003) study discusses implications of hedging in English and Spanish RA abstracts. One finding he notes from his corpus is that English writers use epistemic verbs (e.g., suggest, seem) and modal verbs (e.g., may, can, could) in the conclusion sections in 63.3% of the abstracts as compared to Spanish writers who only use them in 17.2% of their conclusions. He hypothesizes that because of the wider audience for international English publications,
"the writers in English tend to generalise knowledge claims by using a greater number of hedging devices to...protect themselves against criticism from the international scientific community," while the smaller, less competitive Spanish scientific community, allows authors to be more confident and more assertive in their writing style (p. 40). This demonstrates how writers of this genre of abstracts must conform to disciplinary, national, and international requirements of their own scientific community.

Other studies (Harwood, 2005; Recski, 2005; Swales & Peak, 2004) find that hedging may co-occur with certain grammatical patterns. Swales and Peak (2004), for instance, show how research papers in the physical sciences (physics, chemistry, astrophysics) use the present tense to demonstrate a personal stance (e.g., We discuss, We conclude) more often than papers in the social sciences. Their study of the personal pronouns I and we in RAs from the fields of Business and Management, Computing Science, Economics and Physics illustrate that journal articles in both the hard and soft sciences exhibit these self-promotional (advancing the writer's position) characteristics to take a personal stance through the author's selection of personal pronouns. In addition,
Swales (2004) notes that dissertation writers at the University of Michigan are instructed in the *Michigan Dissertation Handbook* to use the plural *we* in recognition of the co-researched topic rather than a totally independent undertaking which would necessitate the use of the singular *I*. However, he found that physics dissertations generally preferred the use of first person *I* (pp. 105-106). Similarly, Harwood (2005) shows that promotional devices, such as personal pronouns, express "self-promotional tenor" in papers, foreground the research and encourage the reader to continue (e.g., *we shall see*), report findings to demonstrate the importance of the author's research, and demonstrate their position within that discourse community. Such a tenor may serve to hedge the discourse by suggesting that the statements are the writers' own opinions and not unqualified facts. Also examining hedges in research discourse, Myers (1989) states that writers use the pronoun *we* to show solidarity and use citations to acknowledge other scientists' contributions so as not to claim any order of significance as being first discovered through the use of singular *I*. The "*we*" establishes statements that are acknowledged by the field to enlist support from other community members. These texts often included a "statement of satisfaction"
with results that agree and support the communal effort in order to enlist support for this new research and achieve credibility within the scientific community (p. 12).

Recski (2005) also analyzes hedges and stance in oral dissertation defenses. He examines two American dissertation defenses on fossil plants (in Biological and Health Sciences) and two in social psychology (in Social Sciences and Education) and shows that modality selections indicate the speakers’ purposes, stance on issues, and roles in this type of academic discourse. The “levels of modal certainty” through hedging techniques used to convey the speaker’s purpose, are extremely important since defenses are presented in order to obtain approval of the dissertation. Recski identifies how speakers’ modal choice can express lack of commitment (median value), weak commitment (low value) through modals such as might/could, or assertive commitment (high value) through the modals will/would and modal adverbs obvious, primarily, exactly (pp. 12-13). His study reveals how lexical verbs expressing weak commitment (e.g., think, seem, hope, felt) occur at a rate of 82% while the strong commitment verbs decided/predicts have only a 18% occurrence rate (pp. 14-15). Other findings include the fact that conditional clauses (if...) appear 80% of the time to
express modal certainty (p. 15), and the quantifier many is used to express a candidates’ positive point of view while very few quantified negative items (p. 17). Perhaps most interesting from Recski’s results is the fact that while defense candidates sometimes expressed “confident certainty” in order to convey a reliable, knowledgeable persona, when candidates were challenged, their modality changed to express a low degree of certainty. This analysis of interpersonal meanings in the written text can show how the author’s commitment level is affected by his/her interactions with audience members.

Although previous research has analyzed hedging in the genres of research articles and dissertation defenses, relatively little work (e.g., Martín, 2003) has analyzed hedging in abstracts and no study has yet considered hedges in M.A. thesis abstracts. In order to understand the dynamics of this specific genre, hedging strategies that are used to promote disciplinary social behaviors and epistemic beliefs must also be taken into consideration. One purpose of the present study, which I describe below, is to show that members of specific academic disciplines including novices such as thesis writers, use language, including hedges, to strengthen their professional and social associations within their communities so that their
thesis abstracts reflect the social world they strive to become a member of rather than a single, individual accomplishment.

Purpose for the Present Study

The purpose of my thesis is to investigate the discourse moves and hedging patterns of Master’s thesis abstracts from five academic disciplines at California State University at San Bernardino (CSUSB). This thesis will provide the opportunity to explore several questions, including the following:

1. What similarities and differences in move patterns exist within and across student abstracts from different fields?
2. How do students in each discipline use hedging strategies to establish their authorial identity within their academic communities?
3. Is it possible that these abstract patterns reflect the beliefs, ideologies, and/or values within these particular disciplines?

First, in the moves analyses, I will apply the organizational models for RA introductions presented in Swales (1990). In addition, I will incorporate Samraj (2005) to analyze centrality and credibility moves in
abstracts. Samraj uses Bhatia's four-move abstract framework (purpose, method, results and conclusion) as well as draws on steps, including claiming centrality and indicating a gap, from Swales' CARS model. Where relevant, I will also incorporate similar descriptions of moves and centrality and credibility claims discussed in Hyland (2000). Using frameworks that have been used for organizational move structures in published academic writing will also provide an opportunity to see how student writing of M.A. abstracts is the same or differs from professional academic text structure writing in the hard and soft disciplines.

Secondly, with respect to hedging, I will examine how students use hedges to convey the importance of their work to other community members and to present their claims in ways that attend to the interests of their readers and to the writers' own image (Bawarshi, 2003; Hyland, 1996, 2000). Bawarshi (2003) studies the teaching of writing as "a means of socialization into disciplinary values, assumptions, relations, and practices" (p. 154) so that "students learn how to access, interrogate, and (re)position themselves as writers within these disciplinary and professional contexts" (p. 155). For example, he notes that certain textual patterns (e.g.,
passive voice "Twelve samples were introduced") can serve a disciplinary function in scientific writing as scientists seek to record "objectively" as in a lab report and thus follow disciplinary practices of maintaining credibility and objectivity. He also provides guidelines for analyzing genres: (1) "Study the Situation of the Genre" by identifying who uses it and why, where it appears, who the readers are, and what topics are discussed; (2) "Identify and Describe Patterns in the Genre's Features" such as how it is structured and what types of words and phrases are used; and (3) "Analyze What These Patterns Reveal about the Situation" and the participants who use this genre (p. 159).

Thirdly, the move and hedging strategies of these abstract writers may reveal the beliefs and values of the five academic disciplines. Besides disciplinary variation, past research has shown that culture and language influence student writing strategies. Further research into the evolving nature of the M.A. abstract genre might possibly reveal the epistemic beliefs within this academic arena. Thus, in this thesis, I examine the rhetorical and linguistic patterns in Master's thesis abstracts as indicative of the genre and the disciplinary situations in which it is written.
CHAPTER TWO
DATA COLLECTION AND ANALYSIS

Thesis abstracts are important as they allow student writers to present a brief synopsis of their research, which can shape their readers' first impression of the theses. Since I am interested in an interdisciplinary comparison of moves and hedging strategies, this study focuses on student writing in Master's thesis abstracts from four different colleges on the CSUSB campus. This chapter presents a description of the data collected and the methodology for analyzing student abstracts.

Institutional Context: Thesis Abstract Writing Requirements at California State University, San Bernardino

California State University at San Bernardino (CSUSB) requires that students complete a "culminating activity" following completion of graduate coursework in order to obtain a Master’s degree (Office of the Dean of Graduate Studies, 2001, p. 27). One option that some CSUSB programs offer for the "culminating experience" is a Master's thesis. The CSUSB Graduate Studies handbook, A Guide to Graduate Studies, states that "a thesis usually describes the process and results of using a recognized research methodology to answer a significant question" (p. 46).
According to the handbook, thesis abstracts should follow these format guidelines:

The abstract should contain all the essential information about the thesis/project and provide the reader with an overview of the study. It should be written in complete sentences and include statements of the research problem, procedure, design or methods, results or major findings and conclusions. The abstract should include accomplishments, the most pertinent facts and implications of the study, and a brief explanation of the work, and should not exceed 250 words (approximately 1¼ pages in length).

(p. 100)

Yet, a preliminary analysis of a number of CSUSB thesis abstracts revealed that not all abstracts appear to follow the required research question-methodology-results-conclusion format found in the student handbook. Thus, the differences in move structure may be due to individual writer preference or requirements of that particular discourse community. A structural analysis of thesis abstracts may provide a better understanding the differences among abstracts in different disciplines and possible factors contributing to these differences, as
well as insight into particular academic discourse communities and the graduate students who strive to become community members.

Data Collection

Data were collected from completed CSUSB Master's thesis abstracts on file at the Pfau Library at CSUSB in four broad fields, each from a different college: English (College of Arts and Letters), Business (College of Business and Public Administration), Nursing (College of Natural Sciences), and Criminal Justice (College of Social and Behavioral Sciences). The four fields represented here were selected based on the fact that they offer an M.A. thesis option for the culminating experience. The corpus includes abstracts selected from each program from theses completed in the last seven years (a total of 30 abstracts). In English, five abstracts each were selected from two of the program's concentrations (English Literature and Teaching English as a Second Language) for a total of ten abstracts. Because Business offers students the option of a project, thesis, or a comprehensive examination, there were only five thesis abstracts in the College of Business from the college of Public Administration and Business Administration. Another ten
abstracts were selected from the Criminal Justice discipline. Similarly, the College of Natural Sciences offers a thesis or a clinical project, so only five thesis abstracts were available. Because the English abstracts represent two different disciplines, the total corpus for the study was drawn from five different disciplines. The abstracts were then photocopied, logged by title, date published, and discipline as shown in the Appendix.

Table 1. Corpus Contents

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Number of thesis abstracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>5</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>10</td>
</tr>
<tr>
<td>English Literature</td>
<td>5</td>
</tr>
<tr>
<td>Teaching English as a Second Language</td>
<td>5</td>
</tr>
<tr>
<td>Nursing</td>
<td>5</td>
</tr>
</tbody>
</table>

These abstracts are part of theses that have supposedly been approved by the community gatekeepers as representative of the quality of work expected in the program, research topics important to the field, and adherence to overall academic community goals. Thus, investigating the similarities and/or differences in move structure and hedging strategies in these abstracts might
offer insights about the epistemic beliefs of these disciplines.

Data Analysis

The analysis of the data was carried out in multiple stages. An analysis of the overall textual organization of each abstract was analyzed using models employed in previous research by Swales (1990) for RA introductions and Samraj (2005) for abstract moves (purpose, method, results and conclusion). Next, an analysis of the frequency of occurrence and realization of each move was completed to determine similarities and differences within and across each discipline. In addition, hedging strategies as discussed by Hyland (2000) and others was examined to include personal pronoun and modal usage and other hedging strategies. Finally, possible conclusions were presented about how interdisciplinary variations may reveal not only the writing conventions of community members but also their values and beliefs.
In this chapter, I report on the results of the move structure and hedging analyses of abstracts within the four colleges. The chapter begins with a comparison of moves found in Business, Criminal Justice, English Literature, Teaching English as a Second Language, and Nursing abstracts followed by an analysis of hedging strategies.

Moves for Claiming Centrality and Credibility

Similar to what both Samraj (2005) and Hyland (2000) found in their analyses of published RA abstracts, the present study revealed that M.A. thesis abstracts contained moves for claiming importance for the thesis research, or what Swales (1990) in his Move 1 for RA introductions calls “centrality." Claiming credibility is another move to enhance author credibility in the field so that readers recognize the author’s awareness of issues and relevant research within the field. In abstracts, both centrality and credibility claims do important “rhetorical work" in promoting authors’ research; however, there were some differences in ways that student writers from
different disciplines claimed centrality and achieved credibility.

Claiming Centrality

Centrality claims announce the importance and relevance of research topics and, as Samraj (2005) notes, centrality claims in abstracts can perform the persuasive function of convincing the reader of the topic’s importance in the real world, of its presence in active research efforts in the field, or of the topic’s intrinsic importance. Table 2 indicates that 14 of 30 abstract writers prefer to claim significance for their topic with real-world importance, eight refer to active research, and four describe the intrinsic importance of the topic. If the abstract had more than one type of centrality claim, it was counted under all relevant types. Some abstracts had no centrality claims, therefore, the numbers in the table do not always equal the total number of abstracts in each field.
Table 2. Centrality Claims

<table>
<thead>
<tr>
<th>Centrality Claims</th>
<th>Business (n = 5)</th>
<th>Criminal Justice (n = 10)</th>
<th>English Literature (n = 5)</th>
<th>TESL (n = 5)</th>
<th>Nursing (n = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real world importance</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Active research</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Intrinsic Importance of the Topic</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

A common centrality move, particularly in abstracts from Business (3 out of 5), Criminal Justice (5 of 10), TESL (3 of 5) and Nursing (3 of 5), is to indicate that the thesis research achieves centrality by claiming real-world relevance. Authors signal this move through the use of certain words such as "considerable" and "fascinating" that alert readers to the significance of the thesis topic. Bi's topic, for example, is of "considerable importance" to both the U.S. and U.A.E. while CJ 10 deals with the "fascinating" real-world issue of police-citizen relationships:

In both the United States and the United Arab Emirates (U.A.E.), the issue of budget cuts is one of considerable importance. [Bi 1]

One of the most fascinating issues in society today is that of the police-citizen contact. [CJ 10]
Centrality claims in the Nursing abstracts illustrate variations that can occur within a discipline. The N1 writer includes a centrality claim within the initial purpose statement which emphasizes the topic's importance because it addresses the real-world needs of an "underserved community":

This study assessed the health care needs of Rubidoux, California, an underserved community. [N 1]

The real-world importance in N4, however, is signaled by the statement that parish nursing is a "rapidly growing" profession and contains a brief description of parish nursing perhaps for readers who might not be familiar with this nursing specialty:

Parish nursing, a specialty nursing practice which includes the spiritual component of integration of faith and health, has been growing rapidly over the last decade. [N 4]

These examples demonstrate how Nursing writers signal real-world importance as a deficiency in current services (underserved) or a new (rapidly) growing area of interest.

TESL abstracts also emphasize the real-world importance in a variety of ways. The T1 writer emphasizes his topic of affective factors is an "important" language
learning component that can "significantly" impact a
student's second language learning ability:

Affective factors play an important role in the
learning of a second language. Emotions such as
anxiety and motivation can significantly affect a
second language student's learning success... [T 1]

T3 describes a "unique" linguistic structure (the phrasal
verb) that poses a "formidable problem" for second
language learners, thereby suggesting to members of the
TESL community that his thesis will provide additional
discipline-specific knowledge of interest:

The phrasal verb is a unique type of verb phrase that
consists of a main verb, most always of only one or
two syllables, followed by a particle, that together
work as a single semantic unit. Such meaning,
however, is characteristically expressed in idiomatic
terms, which poses a formidable problem for students
of English as a second language... [T 3]

The T4 writer also analyzes an important topic in the
education of both children and adults due to the growing
immigration population:

Adolescent immigrant English learners who enter U.S.
schools at the secondary level are faced with
challenges that distinguish their experience in second language (L2) acquisition from that of children and adults. [T 4]

These TESL writers recognize field opportunities that validate their topic's importance and attempt to solve a "formidable" problem or recognize other "challenges" for learners.

With respect to active research centrality claims, the reader comes to the realization that this is an important topic because it has previously been studied and, therefore, the current study hopes to add to the previous research (Samraj, 2005; Swales, 1990). The B3 abstract writer utilizes this strategy by making reference to theorists that are central to the topic's research on quality management:

The purpose of this study is to review the theories developed by W. Edward Deming, J. M. Juran and Philip Crosby, developers of the theory. [B 3]

Only one Criminal Justice writer makes a specific reference to a previous study in the form of a centrality claim about "critical" issues that require an "on-going effort" in the field to understand and resolve the issue. Thus, this writer combines both real-world and active research credibility claims:
Because these issues are so critical to the quality of life in the United States, an on-going effort has been made to study and understand the causes of delinquent behavior and to devise strategies to control or eliminate its occurrence (Siegel & Senna, 1994). [CJ 2]

The N5 author specifically refers to prior research efforts that have investigated backpacks as a cause of back pain in children so readers will understand that the current study will add to or support current field endeavors:

Backpacks have been implicated as a cause for an increased incidence of back pain in children (Negrini, Carabalona, & Paolo, 1999). [N 5]

While three TESL abstracts contain “real-world” style centrality claims, they also highlight active research in the field to re-emphasize their centrality claims. T1, for example, refers to an important education theorist whom community members will recognize and emphasizes that the role of the “affective filter” has already acquired “much” research attention in second language learning:

Given impetus by Krashen’s (1985) theory of the “affective filter,” much research has examined the
role of affective factors in adult second language learning. [T 1]

The T2 writer states that Grice’s theory of implicature has “been widely used” within the field’s research, thus framing it as something that knowledgeable community members would easily recognize as an important research topic:

Paul Grice’s theory of conversational implicature has been used widely to analyze human communication. [T 2]

Although without specifically identifying the researchers, T4 reminds the reader that “in recent years” other studies have analyzed the topic:

In recent years, researchers have studied post-secondary students’ transition from secondary to post-secondary schools. [T 4]

On the other hand, the English Literature abstracts do not offer their readers the same type of signaling as seen in other disciplines but rather claim centrality by suggesting the topic’s intrinsic importance. For example, the L1 thesis examines how filmmakers scare their audience which is an intrinsic factor in the genre of horror films:

Horror Filmmakers and novelists alike can accomplish fear, revulsion, and disturbance in their respective
audience. The rhetorical and stylistic strategies employed to evoke these feelings are unique to the genre. [L 1]

One English Literature student also emphasizes the intrinsic importance of the themes of the author he is analyzing. L3 suggests that Rudyard Kipling’s writing reveals that he was more than an imperialist and refers to “maintaining” cultural identity that is “central” to Kipling’s work in order to interest the reader:

In many of his Indian stories it is the problem of maintaining identity that is central, not the problem of, say, retaining Victoria’s outposts. [L 3]

Another cultural examination by the L4 writer, examines Edwin Morgan’s poetry and reveals the poet’s ability to be innovative and “experiment” in order to claim relevance for his thesis:

Morgan serves as a leader in modern Scottish poetry by recognizing traditional Scottish values while maintaining a willingness to experiment with new and modern ideas. [L 4]

Summary of Claiming Centrality. M.A. thesis abstract writers in four disciplines (Business, Criminal Justice, TESL, Nursing) show a preference for using real-world-importance and active research types of
centrality claims to persuade their readers that their topic is important and that their research is valuable to the field. Some writers (e.g., TESL) incorporate both types of centrality claims to emphasize topic importance and to justify their research. The thesis authors typically signal centrality with words that alert their audience to important ideas. I also found that these abstract writers add to other research studies rather than creating a new avenue of research. They position their own research within previous studies and, therefore, establish a niche for their own studies.

The English Literature abstract writers, however, differ in that they establish the importance of their work by emphasizing the intrinsic importance or special qualities of the literary work, genre, or author being analyzed without establishing benefits of their research for “real-world” problems or for the scholarship. The English Literature writers, thus, communicate in a manner in which they identify their topic’s intrinsic importance without explicitly announcing its importance to the field.

**Claiming Credibility**

One way that abstract writers may achieve credibility is through topic generalizations, a step that Swales (1990) has described in RA introduction moves, which not
only provides helpful background information to orient the reader to the present study but also suggests that the writers are knowledgeable enough of the research topic area to provide such a background. Hyland (2000) also suggests that abstract readers will judge writer credibility based on the writer's competence to write about a topic as a knowledgeable community member who is able to identify and analyze a discipline-specific problem. He says that this ability is "not only a means of motivating readers but a clear indication of disciplinary competence" (p. 78). As shown in Table 3, I found that thesis writers express topic generalizations with either a (1) broad topic introduction sentence that provides readers with a general introduction or background information about their topic or (2) more specific topic information.

Table 3. Topic Generalizations

<table>
<thead>
<tr>
<th>Topic Generalizations</th>
<th>Business</th>
<th>Criminal Justice</th>
<th>English Literature</th>
<th>TESL</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>broad topic introduction statement</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>specific topic information</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

One Business abstract, for example, includes a broad orientation statement about the different types of world
banking systems, which leads into general background descriptions of Western and Middle Eastern banking systems:

The world banking systems operate on different types of regulations that vary from country to country, depending on cultures; religious, social and economic objections. For example, the entire banking system in the Western countries, including the Anglo-Saxon and the European continents, is operating based on the concept of interest. [B 4]

However, B5 offers a "specific topic information" reference to a specific November 9, 1994 agreement to establish a campus in the Coachella Valley so that the reader is given background about one particular memorandum:

On November 9, 1994 the Trustees of California State University (CSU), signed a memorandum of understanding (MOU) ...with the objective to build a permanent upper division and graduate off-campus center in the city of Palm Desert. [B 5]

A few Criminal Justice abstracts (2 of 10) contain topic generalizations with an introductory, study-specific statement about at-risk youth centers within the
communities. These statements tell readers that the writers have identified and are knowledgable about an important topic and, therefore, are credible discipline members who are qualified to write about this issue:

A collective focus by criminal justice practitioners and concerned community members on youth and minor delinquent behavior has resulted in the creation of Youth Accountability Boards (YAB). [CJ 3]

Intake variables determine the extent to which the Operation New Hope Alternative School youth are at-risk for delinquency or reduced life outcomes, and descriptive statistics account for the relationships between risk factors. [CJ 6]

On the other hand, the English Literature abstracts contain topic generalizations that focus on a specific literary text. For example, L2 examines the character, Rob Gordon, in a "successfully adapted" film:

"High Fidelity" successfully adapted from a novel to a film because of the narcissistic portrayal of Rob Gordon in the film. [L 2]

L3 explains how the British writer is commonly viewed as an imperialist, which allows the topic generalization to
lead into an explanation of the thesis focus on "maintaining identity":

It has often been expressed that British writer Rudyard Kipling was a pitiless, xenophobic imperialist, the nineteenth century's chief apologist for imperialism. In many of his Indian stories it is the problem of maintaining identity that is central, not the problem of, say, retaining Victoria's outposts. [L 3]

There is only one TESL abstract with a broad topic generalization about "challenges" for young immigrants who are English learners, showing that the thesis writer is aware of these challenges and how they distinguish adolescents from children and adults:

Adolescent immigrant English learners who enter U.S. schools at the secondary level are faced with challenges that distinguish their experience in second language (L2) acquisition from that of children and adults. [T 4]

Even though topic generalizations allow writers to demonstrate their credibility, I found only 7 out of 30 abstracts utilize this rhetorical strategy to introduce their thesis topics by providing readers with either broad
or specific topic information. This rhetorical move appears most frequently in the Business and English Literature abstracts (2 of 5 in each respectively), less frequently in Criminal Justice (2 of 10) and TESL (1 of 5) abstracts, and not at all in the Nursing abstracts.

Credibility in the Form of Gaps. Another rhetorical strategy to express credibility is by indicating a gap as described in Swales' (2004) Move 2, establishing a niche. Hyland (2000) suggests that writers establish their credibility in the form of gaps because they can identify "a problem as something which is unknown or unresolved by the community" (p. 79). Especially in the soft fields where theories and research can overlap disciplines, Hyland found that this is an essential step where writers justify their topics' importance to the community. In regards to utilizing a gap to establish a niche for their studies, I found that 13 out of the 30 abstract writers use this strategy with either a real-world problem or a gap in previous research, the same types of gaps that Samraj (2005) found in her RA abstract data. However, English Literature abstracts do not address real-world problems nor do they offer gaps in the field's research.
Table 4. Gaps

<table>
<thead>
<tr>
<th>Gaps</th>
<th>Business (n = 5)</th>
<th>Criminal Justice (n = 10)</th>
<th>English Literature (n = 5)</th>
<th>TESL (n = 5)</th>
<th>Nursing (n = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real world problems</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Previous research</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Real-world problem gaps are illustrated by the B3 writer who explains that a gap exists where businesses "have lost" their competitiveness in today's marketplace:

*Domestic companies have lost their competitive edge by not implementing quality management.* [B 3]

Using a similar style gap, the B4 author begins the two-and-one-half page abstract by describing topic background information for readers who are not familiar with banking systems and then by following with a gap that specifies the problem of "different interpretations" and "divisions" among economists:

*These differences in bank regulations had evoked different interpretations of the concept of interest.*

*In fact, that there are divisions, among the world economists, regarding whether or not, modern-day bank interest, should be eliminated and prohibited.* [B 4]
The writer then justifies the topic by stating that the analysis is "further supported" by findings that show a gap or "flaws" in the real world of finance:

The analysis of this topic is further supported, by examples and evidences exposing the flaws in the current western financial system and the actual necessity for a universal resolution. [B 4]

Criminal Justice writers also situate their topics in the real world to exhibit their credibility. As CJ1 begins with a claim regarding "conflicting" rehabilitation ideologies, the gap allows the writer to position the study within the world of criminal justice because no model or treatment currently exists even though there has previously been "much advancement":

The current study was an attempt to bridge a gap between the conflicting ideologies of rehabilitation through custody and control. While much advancement has been made regarding the implementation of substance abuse programs...a singular model or treatment paradigm has not yet been established.

[CJ 1]

The gap in CJ7 emphasizes that law enforcement attempts have been "insufficient" to deal with property crime in
the real world and the problem will increase if not dealt with appropriately:

Furthermore, current law enforcement efforts to combat this problem are insufficient and if future efforts are not undertaken on a highly organized nationwide scale, this criminal enterprise will flourish and continue to grow. [CJ 7]

Nursing abstracts also utilize real world problems to demonstrate the writer’s credibility in recognizing these issues. For example, N1 points to “inadequate” or “lack of access” to important community resources which are “major concerns” for the public:

Inadequate public transportation and a lack of access to adequate health care services were identified as major concerns. [N 1]

With regards to gaps in previous research, several Criminal Justice, TESL, and Nursing abstract writers utilize gaps in previous research as an opportunity to set up their theses as filling the need for additional research. For example, CJ10 refers to “limited” research into police-citizen relationships:

Many past studies in this area are limited to only descriptive analysis using variables such as officer and offender characteristics. [CJ 10]
TESL writers also utilize a gap in research to situate their findings within the academic community. T2 states Grice's theory of implicature is "universal" but "few studies" have been done on other languages:

Although many scholars believe that implicature is universal, few studies have been done on implicature in other languages, such as Japanese. [T 2]

T5 relates her topic's relevance to research that has already begun into revision theories, which have been widely accepted and practiced by teachers. In addition, she shows that she knows there are still "unanswered questions" in the field in order to demonstrate her credibility as a writer on this issue:

A recent review of L2 revision studies showed that there are still many unanswered questions in this area and that much of the existing research is lacking in its reporting of methodology and context. [T 5]

T4 also combines a research gap with a real-world problem. The writer relates that "little research" has been done and "more investigation is needed" to solve this real world problem for immigrants:

While some research has noted that second language acquisition during adolescence is challenging...,
little research has been conducted about the specific factors that contribute to adolescent immigrants' success... Additionally, some research has shed light on the needs of different ethnic groups, but more investigation is needed into the needs of Mexican immigrants... [T 4]

Nursing writers also utilize gap strategies to demonstrate their credibility. The N4 writer states there is "little research" in hopes of contributing to the field:

There is very little research regarding the spiritual care practices of parish nurses. [N 4]

Whereas N5 notes there have been discrepancies or "inconsistencies" in past research:

The literature reflects inconsistencies relating back pain and backpack weight and recommendations for safe backpack weight vary. [N 5]

The gap strategy appears in the applied fields of Business, Criminal Justice, TESL, and Nursing with either real-world problems or deficiencies in previous research studies. However, the English Literature writers do not utilize this strategy to demonstrate their credibility. It may be that these abstract patterns reflect their fields'
accepted norms for demonstrating their studies’ credibility.

Acronyms, Disciplinary Jargon, and Research Citations. Writers also establish credibility through the use of other rhetorical elements such as references to common assumptions, uses of acronyms, jargon and research citations. Hyland (2004) states that one strategy to promote credibility is through frequent use of acronyms and discipline jargon, thus suggesting that the abstract writer has “implicit cultural knowledge”. His analysis found acronyms and jargon occurred in 45% of hard science abstracts and in only 18% in the soft disciplines (p. 80).

I found usage of these rhetorical elements in all five fields (Business, Criminal Justice, English Literature, TESL, and Nursing) with all of the TESL writers (5 out of 5) using this strategy. I have underlined the following phrases as examples of acronyms and jargon by abstract writers:

...who comply with ISO standards. [B 3]

...signed a memorandum of understanding (MOU)... [B 5]

Findings conclude that the RSAT program appears to be successful... [CJ 1]

...some evidence of an adversarial “we versus them” relationship. [CJ 1]
...the role of a military style counseling and vocational program in reducing recidivism. [CJ 2]
...new form of "property crime"..., ... report details on the "fencing" operations... [CJ 7]
...describes the modus operandi utilized in committing this crime. [CJ 7]

Trends in restorative justice...have created the need... [CJ 9]

...Director Stephen Frears' talking-into-the-camera technique... [L 2]

...the British cultural elite's fear of "Americanization." [L 5]

...theory of the "affective filter,"... two community college ESL students...the L2 culture [T 1]

Japanese implicature occurs in its "amae", politeness... [T 2]

The phrasal verb is a unique type of verb phrase... [T 3]

...transferred from L1 to L2... [T 4]

...research in L1 composition... The L2 studies that followed... [T 5]

An APN Case Manager would be recommended... [N 1]
The strategy of linking past research studies in formal citations was found by Hyland in less than 10% of the hard discipline abstracts and only applied linguists within the soft disciplines frequently cited previous research (2000, p. 79). Likewise, I found some instances from each field where thesis abstract writers demonstrated insider knowledge by specifically referring by name to past researchers which I have underlined:

...review theories developed by W. Edward Deming, J. M. Juran and Philip Crosby... [B 3]
... to devise strategies to control or eliminate its occurrence (Siegel & Senna, 1994). [CJ 2]
...to reduce the others as well (Greenwood, Model, Rydell, & Chiesa, 1996). [CJ 2]
...by replicating Gibb's and Erickson's 1976 study... [CJ 5]
... through the use of Christopher Lasch's theories and the use of other psychologists... [L 2]

Given impetus by Krashen's (1985) theory... [T 1]
Paul Grice's theory of conversational implicature...

[T 2]
The purpose here is to draw upon Lakoff and Johnson's theory... [T 3]
The assessment was structured according to Jensen and Bowman's (2002) community assessment model. [N 1]

Backpacks have been implicated as a cause for an increased incidence of back pain in children (Negrini, Carabalona, & Paolo, 1999). [N 5]

Authors can also build credibility for themselves without formally citing specific studies but instead just simply stating that past research has been done in their area:

This study attempts to build on earlier research... [T 5]

This study supports past studies which examined... [N 3]

This study adds to the growing body of evidence to limit... [N 5]

By incorporating past research studies, the writer increases his credibility by building on previously recognized studies in either confirming previous results or in presenting a new research direction. However, the limited findings in my corpus might possibly indicate that M.A. student writers are not as aware of the need to use this strategy as are dissertation student writers whose goal is publication.

Summary of Claiming Credibility Strategies. Claiming credibility is realized in all five disciplines, however, there are similarities and differences within each
academic community. With regards to topic generalizations, there were only a few writers in four fields who presented longer abstracts and allowed space for a few introductory statements to guide their readers into their topic discussions. The Business and Criminal Justice authors used either broad or specific topic information statements that showed credibility in the writer’s ability to identify relevant topics. In addition, some English Literature authors showed they had knowledge of unique elements of a piece of literature and why it was worthy of analysis.

I found the gap strategy is less frequently used in this corpus (13 out of 30 abstracts) and is realized by expressing a real-world problem or by indicating a gap in previous research. Certain disciplines (e.g., Business, Criminal Justice) favored the real-world problem gaps, while others (e.g., TESL, Nursing) had both real-world and research type gaps. The Criminal Justice abstracts referred to “flaws” or “discrepancies” in current research to demonstrate that they can identify the need for their studies. The TESL and Nursing abstracts, however, draw attention to limitations in previous studies which allow writers to situate their research as valuable to the field. However, establishing a niche is not the preferred
strategy of English Literature writers, who do not present their studies as addressing real-world problems or deficiencies with previous research. As with their centrality claims, writer credibility may be more implicitly sought in the English Literature abstracts through only general comments on the thesis topic rather than statements about how it serves a purpose in the real world or within the field.

There was some use of acronyms, disciplinary jargon, and research citations in these abstracts as a rhetorical strategy to establish credibility. The fact that some writers do not use these strategies may indicate that they do not feel they need to show what Hyland called "implicit cultural knowledge" but, instead, may want their text to speak to a larger audience rather than just community members within their own discipline. The few Business, Criminal Justice, English Literature, TESL, and Nursing writers who provide discipline-specific language might possibly be using this strategy to show they already perceive themselves as community members who are able to communicate effectively in the prescribed manner of professionals within their disciplines.
Cyclical Patterns of Centrality/Credibility Presentations

An interesting cyclical pattern of centrality-gap-centrality-gap is found in some Criminal Justice abstracts in which the author presents an initial centrality claim, follows with a gap to justify the claim, and then re-states another centrality claim, following with a gap to emphasize the importance of the research. An example of such move cycling is seen in CJ2. Because juvenile delinquency is of interest to members of this discourse community and the system has not effectively dealt with the problem, the CJ2 writer establishes that there has been "increased interest" in the research in this area and the gap in which the justice system, specifically that it "seems incapable" of dealing with youth crime. The writer then re-emphasizes in another centrality/gap pattern that the "critical" point of "concerned" criminologists is their "limited success" in dealing with juveniles:

Centrality - The events of the past few years have increased interest in the study of juvenile delinquency (criminal behavior committed by minors).

Gap - And while the justice system seems incapable of controlling youth crime, the general public demands
that police guarantee community safety and the courts rigorously punish dangerous adolescent offenders.  
Centrality - Because these issues are so critical to the quality of life in the United States... 
Gap - Criminologists have been concerned and are looking for solutions but with limited success... [CJ 2]

CJ9’s cyclical pattern begins with a gap in criminal justice agencies operations and then a centrality claim that mentoring “has emerged” as a resource. Another gap of “glaring deficiency” offers the opportunity for another centrality claim showing the “immediate need” for evaluation procedures:

    Gap - Trends in restorative justice...have created the need...

Centrality - Mentoring...has emerged as a realistic community based resource...

    Gap - One glaring deficiency in the operations of most criminal justice agencies is the lack of evaluation...

    Centrality - There is an immediate need for evaluation procedures... [CJ 9]
An interesting cyclical pattern also occurs in T3 in which the writer presents a centrality claim of real world importance, a gap in a real world problem, explanation of the problem, gap in question-raising, and a solution pattern. This sequence orients the reader to the topic by explaining that phrasal verbs present a challenge for today's students which will be addressed in the thesis:

Centrality claim - The phrasal verb is a unique type of verb phrase...

Problem - Such meaning, however, is characteristically expressed in idiomatic terms, which poses a formidable problem for students of English...

Explanation of problem - Consider the phrase “chew out”. Newcomers to English likely know “chew” firsthand as the verb meaning...

Question-raising - But how is one to guess that, as a combined form, “chew out” means to “scold”? 

Solution - The semantic ambiguity of phrasal verbs presents a pedagogical problem that can be tackled from the premise that phrasal verbs are in fact systematically coherent in terms of perceptual underpinnings to the words at play. [T 3]
This multi-strategy approach for justifying the importance of the research and the writer's credibility may also demonstrate that writer's chose to guide the reader through the thought processes that helped him/her arrive at certain conclusions during the research in order to assist the reader in following along to reach the same conclusion.

Traditional Abstract Moves

Perhaps not surprisingly, the traditional abstract moves of Purpose, Method, Results, and Conclusion (Bhatia, 1993; Hyland, 2000; Samraj, 2005) were also found in the student M.A. abstracts in the five fields. Samraj (2005) explains the notion of discipline variation in her study is due to Environmental Science, originally comprised of ecology and applied ecology, now becomes a new interdisciplinary field which includes resource economics, environmental ethics, and conservation biology. In my study, I also found that writers in particular disciplines differed in frequencies with which they used particular moves and ways that they realized them. For example, both English Literature and TESL abstracts show differences in frequency and usage of these traditional moves even though
both are disciplines within the same field of English albeit in fairly disparate sub-fields.

**Purpose Move**

I found that Purpose statements in my corpus contain statements regarding (1) the situation/problem to be studied and, occasionally, (2) research questions. By stating the situation to be studied in the thesis, the writer is able to set forth the reason for embarking on the research project. If the author includes research questions, it can demonstrate the writer’s awareness of fellow community members’ desire to seek answers to the same important issues.

In regards to describing the situation to be studied, I found that the Business (5 of 5), Criminal Justice (9 of 10), English Literature (5 of 5), TESL (5 of 5), and Nursing (5 of 5) abstracts overwhelming preferred to explain their purpose in terms of a problem or issue of interest within their field. For example, the B4 writer seeks to expose flaws in the western financial system:

> The argument of eliminating interest is highlighted in the paper... [B 4]

The CJ9 author evaluates mentoring youthful offenders:

> This thesis will evaluate the implementation of a mentor program in a county probation day school
setting with youth adjudicated by the juvenile court.

[CJ 9]
The L1 writer analyzes horror rhetoric in novels and films, key genres in literary studies:

> Divulging these strategies will be the major focus of this thesis... [L 1]

T4 discusses factors that contribute to successful language acquisition:

> The purpose of this thesis is to analyze social distance and other motivational factors impacting the development of Mexican English learner students... [T 4]

N3 accesses educator's perceptions of "priority" school nursing activities that influence interactions with school nurses:

> This study evaluated the differences in perceptions of priority school nursing activities... [N 3]

With respect to the inclusion of research questions in the Purpose move, I found it was realized in only the Criminal Justice (1 of 10) and Nursing (1 of 5) abstracts as seen in the examples from CJ10 and N2:

> This study goes beyond previous research by attempting to explore the delicate police-citizen relationship during arrest encounters by using a classical criminological perspective. Why do arrests
Likewise, N2 presents the purpose statement and then the research questions:

The research questions included: (a) Does the Granite Hill Elementary School population mirror the worldwide trend of increasing childhood overweight and childhood obesity, and (b) how does the Granite Hill Elementary School population compare to the International Obesity Task Force standards? [N 2]

Also noteworthy in the Purpose moves is that abstract writers in each discipline tend to use certain verbs to state their purposes. The commonalities in verbs used to signal these moves are illustrated in the table below:
Table 5. Verb Choice

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Criminal Justice</th>
<th>English Literature</th>
<th>TESL</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>analyze</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>argue</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>assess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>describe</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>determine</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>XX</td>
</tr>
<tr>
<td>evaluate</td>
<td>XX</td>
<td>XXX</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>examine</td>
<td>X</td>
<td>XXXX</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>explore</td>
<td></td>
<td>XX</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>focus</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>identify</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>investigate</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>review</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 demonstrates that each field uses certain verbs in signal phrases to explain their purposes to the reader. Business and Criminal Justice writers use phrases such as “examines” and “evaluate” that identify what the author intends to do. For example:

This paper examines... [B 1] This study will focus on evaluating... [B 2] The purpose of this study is to review... [B 3] This study examined... [CJ 4] The thesis evaluates... [CJ 6]

English Literature writers similarly used verbs such as “examine” and “focus” to signal their Purpose:
This study focuses... [L 3] This thesis is an examination... [L 4]

TESL authors preferred to "analyze", "argue" or "investigate" the topic:

I will analyze Japanese conversational implicature...

[T 2] This study attempts to build upon past research by investigating language learners'... [T 4]

Nursing writers presented their purposes as topics to be evaluated, to determine, to assess, or to describe:

This study assessed... [N 1] The purpose of this study was to determine... [N 2] This study evaluated... [N 3]

Even though the Purpose move appears in every abstract, placement of this move in the discourse structure of the abstract varies across fields. The Business and Criminal Justice abstract writers position the purpose statement anywhere from the beginning of the abstract to the concluding paragraph. The B1 writer waits until the final paragraph of the one-and-a-half page abstract to state:

This paper examines a variety of budgetary issues... [B 1]

In contrast, B2 positions it as the first sentence of the abstract:
This study will focus on evaluating the performance appraisal system... [B 2]

However, not all abstracts contain only one purpose statement. For example, B4 presents three purposes which specify for the reader the research goals:

The argument of eliminating interest is highlighted in the paper, detailed and proved at one level... A comparison of banking services and an evaluation of the effectiveness of both systems is presented... A final issue was exposed... [B 4]

The majority of Criminal Justice writers prefer to place the purpose statement at the beginning or in the middle of their abstracts. The statements are short and concise:

This paper is an examination of privatization of local level corrections in Southern California. [CJ 8]

The English Literature abstract writers present the purpose statement toward the beginning of the abstract. For example, L4 begins:

This thesis is an examination of the poetry of Edwin Morgan. [L 4]

L5 also prefaces the purpose towards the abstract’s beginning with how the analysis will take place:
By examining the rise of Mass Culture Theory and its effect on the perception of popular fiction and the popular press, this thesis will explore the... [L 5] TESL writers position purpose statements in the middle or at the end of their abstracts, after a gap, perhaps to emphasize the importance of their studies. The T5 author, for example, provides a gap in previous studies then follows with a purpose that will resolve those unanswered questions:

A recent review of L2 revision studies showed that there are still many unanswered questions ... and that much of the existing research is lacking in its reporting... This study attempts to build on earlier research... [T 5]

Nursing abstract purpose statements were also found at the beginning and in the middle of the abstracts. However, some purpose sentences contained aspects of purpose and methodology. N5, for instance, tells about the type and purpose of study, and the number, grade level and age of the participants all in one sentence:

This quantitative, non-experimental study of 60 middle school students compared height, with and without backpacks, to determine if backpack weight caused significant change in height in a sample of
6th, 7th, and 8th graders whose average age was 12.3 years. [N 5]

While the location of the purpose statement in the text may vary, all of these fields contain this move. Verb choices reveal certain words used to communicate and signal the move may fall along disciplinary lines.

Method Move

Method sections occurred in Business (4 of 5), Criminal Justice (6 of 10), English Literature (4 of 5), TESL (5 of 5), and Nursing (5 of 5) abstracts. Hyland (2000) suggests that this section helps to situate the new study within the discourse community because it assures the reader that the writer has used appropriate, discipline-accepted methods to obtain results; in this way, Method sections are a means by which abstract writers can gain credibility with their audiences. Hyland (2000) noted that the Method section occurred most frequently in the hard sciences because "there was a fairly strong expectation that the abstract would indicate how the study was conducted" (p. 73).

My study revealed that the types of methodology vary within and across disciplines. I divided the Method sections into two categories: empirical and theoretical. Business and English Literature abstracts contain Method
sections that assess a problem or apply theories to literary texts. As shown in the following table, my corpus shows similarities and differences in the types of Method sections contained in their abstracts:

Table 6. Methodology

<table>
<thead>
<tr>
<th>Types of Methodology</th>
<th>Business</th>
<th>Criminal Justice</th>
<th>English Literature</th>
<th>TESL</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empirical Methodology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants/Data Collection</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Theoretical Methodology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Assessment</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Analysis/synthesis of theories</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Application of theory to text</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

The Method moves reveal differences in valued and accepted practices within these disciplinary programs. That is, abstracts reporting "empirical" methodologies (e.g., interviews, surveys, and collecting data from human subjects) or "theoretical" methodologies (e.g., problem assessment, applying theories to published texts) reflect the different research processes valued in these disciplines. Empirical methodology is frequently used in Criminal Justice, TESL and exclusively in Nursing.
abstracts. For example, CJ3 analyzes recidivism rates to determine the function of the Youth Accountability Board:

A preliminary assessment of recidivism and program completion rates of YAB participants will be conducted and compared to those of juveniles placed on informal probation. [CJ 3]

CJ4 describes the data collection of telephone contacts that are used as an intervention following residential treatment:

Contacts were made eleven months after discharge with emphasis placed on the importance of the first year of recovery. [CJ 4]

CJ8 examines privatization of local detention facilities, the writer compares success rates of various facilities:

Included are the results of state inspections. A comparison of achievement of state mandated standards is made between publicly and privately owned city jails. [CJ 8]

Although empirical methodology was discussed in each Nursing abstract, the writers report collecting different data. For example, N 1 used assessment techniques such as digital photographs and internet demographics:
The components of the assessment included digital photographs, web-based Internet assessments, key informant interviews and community surveys. [N 1]

N2 used student data collection forms:

Data from the Presidential Physical Fitness Test was extracted from 50 Student Data Collection Forms. [N 2]

and the N4 writer used written questionnaires:

A qualitative design was undertaken using seven purposefully selected volunteer parish nurses. [N 4]

Like Nursing writers, the TESL writers frequently obtained data from human subjects or other records of observed behavior:

Twenty-four immigrant English learners from Mexico were given a survey that attempted to gauge their degree of social distance. Interviews with the students and their parents were conducted as well. [T 4]

Data for the study come from interviews with four different freshman composition teachers and eight of their ESL students... [T 5]

Only one Business writer obtained data from human subjects as B5 seeks to determine the number of students planning
to attend the off-campus center and whether their ethnicity plays a role in student choices:

Two hundred and thirty one students attending the spring 1999 semester at College of the Desert provided the data for this study. [B 5]

With respect to theoretical methodologies, I found that Business abstract writers preferred to assess problems or analyze theories. Problem assessment was presented in B2 which evaluates the performance appraisal system in a small food processing company:

This study involves an evaluation of the current performance appraisal system used by Filiz Gida. [B 2] The B4 author assesses problems in the current western financial system:

The answers for these questions comes through a detailed investigation of interest free mortgage financing [B 4]

Analysis of business theories is the theoretical strategy in B3 as the writer reviews B3 analyzes quality management theories as well as the type of award given to successful companies:

Also reviewed is the Baldrige Award, the award given to those companies who comply with ISO standards. [B 3]
The English Literature abstracts are the most unique of the five fields as there is no trace of empirical data or experimental procedures. Rather, the authors, when they try to address the approach of their study, explain the theme that will be explored or the literary theory that will be analyzed and/or applied to a text.

In order to examine how Rob Gordon's character is adapted to the screen in the film "High Fidelity," one must first examine his narcissism. [L 2]

However, there was also one TESL writer who used the theoretical approach and used application of theory to text. T3 explains how metaphor can be used to explain phrasal verbs:

This thesis thus details how metaphor, linguistically evident in so many ways, and especially so in phrasal verbs, can be exploited as a means of explaining how and why phrasal verbs act as they do. [T 3]

The Methods move reveals the preference of applied disciplines to use empirical methodology while Business followed the theoretical approach similar to the non-applied field of English Literature. Although TESL and English Literature are within the same broad discipline, they again use different methods. Like Nursing, TESL uses
human subjects for research but English Literature writers focus on explaining a literary theme or theory.

Results Move

With regards to presenting the actual findings of their studies, 19 out of 30 abstracts actually state the results. The Criminal Justice (7 out of 10), TESL (4 out of 5) and Nursing (4 out of 5) abstracts are the three disciplines that most frequently state their studies' results. These are also the three fields that most commonly described traditional empirical methodologies, which may indicate that in such fields reporting scientific, experimental type research, writers (including these student writers) may believe that the scientific community members expect to read the study's outcomes. Such direct signaling of the results was found in the Criminal Justice, English Literature, TESL, and Nursing abstracts:

Findings conclude that the RSAT program appears to be successful... [CJ 1]

Results indicate that there are several factors significantly related to... [CJ 10]

The findings of these studies will describe cultural, biological... [L 1]
The format change in the "Saturday Review" is the result of... [L 5]

Demographic data demonstrated that 52% of the students were... [N 2]

Measurements revealed an average backpack weight of 4.6kg... [N 5]

The study revealed that social distance does correlate to... [T 4]

Table 7 shows the majority of abstract writers from the applied fields which use theoretical methodology tend to report their findings and explicitly signal those results.

Table 7. Frequency of Results

<table>
<thead>
<tr>
<th>Abstract</th>
<th>Business</th>
<th>Criminal Justice</th>
<th>English Literature</th>
<th>TESL</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>2</td>
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<td>--</td>
<td>x</td>
<td>x</td>
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</tbody>
</table>

Business writers (1 out of 5), on the other hand, tend not to provide the findings for their readers which might
entice their readers to continue reading the thesis to discover the findings. This may also be due to the fact that the Business writers in my corpus used mainly theoretical methodology. In contrast to the applied fields, the non-applied field of English Literature (2 out of 5) does not always relay the study's outcomes as presenting facts but rather the writers present the results as conclusions drawn from their studies.

**Conclusion Move**

The Conclusion section allows the writer to describe research implications for real-world benefits or applications, to propose recommendations for the direction of future research on this same important topic, or demonstrate literary importance to the field. The real world benefit and/or application of the research are the most prevalent in my corpus which may indicate that the abstract writers are concerned with demonstrating the practical validity and usefulness of their research.
Table 8. Frequency of Conclusions

<table>
<thead>
<tr>
<th>Discipline</th>
<th>real world benefit/application</th>
<th>need for future research</th>
<th>literary importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>English Literature</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>TESL</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Nursing</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

As Table 8 demonstrates, Business, Criminal Justice, TESL, and Nursing abstract writers present their research as a valuable asset in today's society by making suggestions of how their findings can lead to future real-world benefits. For example, Business writers specify benefits for the business community. The B4 writer concludes his abstract with suggestions for alternative solutions that address the U.S. market:

The answer for these questions comes through a detailed investigation of interest free mortgage financing, one product of the profit sharing banks, and along with strategic alternatives to effectively targeting the US market. [B 4]

The CJ8 author, for example, ends her abstract by noting that her thesis offers recommendations to ensure the success of private jail facilities:
Suggestions to assist in the success of privately operated jail facilities are also included. [CJ 8] TESL abstract writers also indicate real-world benefits as T4 offers teaching recommendations:

...I make several recommendations for developing high school curricula that address the needs of Mexican adolescent English learners. [T 4]

The majority of Nursing writers focus on real-world applications in support of previous research efforts in the field:

This study adds to the growing body of evidence to limit backpack weight to 10% of body weight or less. [N 5]

The English Literature abstracts, however, tended not to include explicit conclusions making it difficult to distinguish them from the research findings. It seems that the Literature conclusions are not about real-world applications but more about what the reader can learn about the literary text and/or the author. For example, in L3, the writer expresses his belief that community members can learn more about Kipling than has previously been written:

I consider these stories to be representative of a two-part larger idea that is repeatedly expressed
both in the concrete details of Kipling's stories and in the way he uses language. [L 3]

Sometimes the author, as in L2, will use the initial topic generalization statement to present the conclusion:

"High Fidelity" successfully adapted from a novel to a film because of the narcissistic portrayal of Rob Gordon in the film. [L 2]

Thus, while four of the disciplines typically situate their Conclusions in the real world, the English Literature writers focus on topic conclusions which are of interest only to fellow community members. Again, this may reflect the applied and non-applied distinction within this corpus.

Hedging in Thesis Abstract Writing

In addition to moves, the rhetorical conventions of hedging in research abstracts can reflect the epistemological and social conventions of the disciplinary community and, through these communicative practices, members may show support for and authorize new material to be presented to readers both inside and outside their inner circles. Hedges could be viewed as one of the types of rhetorical choices Hyland (2000) calls "[t]he ways that writers chose to represent themselves, their readers and
their world, how they seek to advance knowledge, how they maintain the authority of their disciplines and the processes whereby they establish what is to be accepted as substantiated truth" (p. 11). Scholars writing RAs find it necessary to convey the writers' ideas and present findings to community members in the right tone and with the appropriate language.

Hedging in research writing can be conveyed through such linguistic forms as modals, personal pronouns, and various syntactic structures. For example, modal choices can "be used to reveal the hidden ideologies and subjectivities in academic discourse" (Ventola 1997, p. 176) as writers express their degree of commitment to their ideas or hedge against possible challenges to their study's results. As discussed in Chapter 1, Hyland (1996) proposes that hedges can serve such functions as presenting readers with claims without the use of bald statements in order to seek reader ratification of those claims. His study of 26 RAs in molecular biology demonstrates how social and institutional contexts are reflected in scientific research writing as writers attempt to gain recognition by making "the strongest claims for which they have epistemic authority" (p. 435).
Regarding abstracts, the abstract writer must be assertive but not arrogant and mindful of the discipline's requirements for socially acceptable communication strategies. One interest of this study is to examine whether thesis writers use hedges for these or other purposes in their thesis abstracts and whether there are different patterns of hedging used across the disciplines. The language that various disciplines choose to communicate their ideas can reveal how academic writers hedge findings and take an authorial stance to maintain good relationships with readers and professionals within their academic discourse community. In my study of Master's thesis abstracts, I found that thesis writers use different kinds of hedges including modals to convey the results of their studies, and the omission of personal pronouns which demonstrates the absence of writer agency. I discuss each of these patterns below, including also the tendency among many abstracts to report their findings baldly, that is, without any hedges.

Modal Usage

In this section, I consider how hedging strategies may be used by abstract writers to create solidarity with other community members and increase their credibility within that discourse community. With respect to modals,
my analysis revealed that some individual abstract writers use modals as what Hyland (1996) calls "writer-oriented hedges," weakening the writers' commitment to the propositional content of their statements (p. 443). As shown in Table 9 below, the most frequently used modal is can while the other modals, may/might, could, should, would are used infrequently. Many of the Business, Criminal Justice, and TESL abstract writers used modals as hedges throughout their texts whereas only one Nursing and one English Literature writer used modals as a hedge.

Table 9. Modal Usage

<table>
<thead>
<tr>
<th>Modals</th>
<th>Business</th>
<th>Criminal Justice</th>
<th>English Literature</th>
<th>TESL</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>may</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>might</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>would</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>can</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>could</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
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<tr>
<td>should</td>
<td>2</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
</tbody>
</table>

For example, one Nursing abstract contains a modal verb in the Conclusion section to hedge the writer’s commitment to the recommendation from the study's findings.

An APN Case Manager would be recommended as the ideal provider to implement preventative health care
services and increase access to health care in a community with limited medical services. [N 1]

Even though only one Nursing abstract used modal verbs, more Business writers clearly hedged their findings with modals such as can, may, would, could, should. B1’s use of may hedges the claim that budget cuts will definitely stimulate business:

The conclusion is that budget cuts in the United States may help to stimulate business... [B 1]

A similar hedge was found in some TESL abstracts as well:

Rather, anxiety in language learning may be conditioned by a variety of individual learner factors. [T 1]

At the programmatic level, schools can consider a dual-language immersion, which could facilitate... [T 4]

However, some Business and TESL abstracts used modals that were more forceful:

The goal is to show organizations the importance of quality management in the organization, and how it should be implemented and used to derive the greatest advantages in the marketplace. [B 3]

A dual-language immersion program would also help students form relationships with English-speaking,
non-Latinos who value the Spanish language and Latino culture. [T 4]

Although not all Criminal Justice abstract writers use modalization, those who did use the modals can, could rather than may. For instance, CJ1 provides one benefit of the study and then hypothesizes another possible benefit: 

...identifying the attitudes and perceptions...can not only provide valuable insight...but could further contribute to our knowledge of program design. [CJ 1]

Butler (1990) found the frequency of modal verbs was higher for may and can in the discussion sections of scientific texts when discussing their findings while Ventola (1997) found may frequently in the social sciences and humanities (p. 168). My study shows that Business, Criminal Justice and TESL abstracts seem to be behaving in similar ways and use hedging through modal choices, however, English Literature and Nursing writers demonstrated infrequent modal usage.

Personal Pronouns

I found that personal pronouns occurred fairly infrequently in the data within most of the disciplines. In Business and Criminal Justice, for example, there was only one instance each of the personal pronoun I and it appeared in the Methods move. The authors’ use of the
first person singular I emphasizes the use of their own method strategy and can demonstrate that the writer used good judgment in choosing this methodology if the study's results are successful.

I discuss whether budget cuts and other budgetary changes... [B 1]

I am evaluating a program... to determine its ability... [CJ 2]

This use of personal pronouns can also serve as a hedge by exhibiting a visible writer and, thus, indicating to the reader this is only the writer's evaluation and/or opinion but not necessarily an absolute truth. I found the TESL writers used the singular pronoun I in purpose statements:

In this thesis, I will analyze Japanese conversational implicature to discover these differences. [T 2]

I argue accordingly that George Lakoff and Mark Johnson's theory... can prove instrumental in devising a better way of teaching phrasal verbs. [T 3]

as well as in the Conclusion section:

In light of these findings, I make several recommendations for developing high school curricula
that address the needs of Mexican adolescent English learners. [T 4]
The one instance of the pronoun I in the English Literature abstracts occurred when the L3 writer states his conclusion of the analysis:

*I consider these stories to be representative of a two-part larger idea... [L 3]*

I found no personal pronoun usage in the Nursing abstracts, which is consistent with Myers' (1989) belief "that scientific knowledge is supposed to be taken as universal; therefore any implication that a belief is personal weakens it" (p. 14). Since the pronoun I emphasizes a subjective presence, biologically-oriented disciplines like Nursing may continue the neutral, impersonal tradition where the author remains in the background to maintain the objectivity of the study.

This lack of writer agency is apparent in other ways as well, including having the data to speak for the writers in the Results sections. Hyland (1996) claims that "the most distinctive signal of writer-oriented hedges is the absence of writer agency" which can be seen in the use of "abstract rhetors" to nominalize a personal projection (p. 444). This type of hedge, which was present in Criminal Justice, English Literature, TESL, and Nursing
abstracts, is commonly found where writers indicate that the conclusions were drawn from the data rather than from the author, thus, impersonalizing the results or their conclusions:

Findings conclude that the RSAT program... [CJ 1]
The results of the investigation show that ... [CJ 3]
Results indicate that there are several factors significantly related to... [CJ 10]
The findings of these studies will describe cultural, biological... [L 1]
The results indicate that misunderstanding of... [T 5]
Measurements revealed an average backpack weight... [N 5]

It appears that some English Literature writers use a similar technique by allowing the thesis chapter presentation to show a lack of writer agency. For example, L2 states:

Chapter three will discuss how the film music further expresses Rob’s narcissism. [L 2]

Similarly, some thesis authors in Business and English Literature present their theses as an impartial, professional analysis of a business or literary topic. B2’s method statement makes no reference to who evaluated the business system:
This study involves an evaluation of the current performance appraisal system... [B 2]

Business writers also remain detached from the findings, as B4 says the answer comes from the investigation and not from his own analysis:

The answer for these questions comes through a detailed investigation of interest free mortgage financing... [B 4]

The L4 author begins the abstract as though there was no subjective involvement with the topic:

This thesis is an examination of the poetry of Edwin Morgan. [L 4]

The lack of personal pronouns in a text might indicate that Master thesis writers, to some degree, seek to distance themselves from their research in order to demonstrate more credibility with other community members. The lack of writer agency is apparent in both the applied and non-applied fields, which creates the effect of impersonalizing their research conclusions.

Absence of Hedges

Although there were these instances of hedging across the abstracts, I also found some writers presented their results and conclusions quite baldly without any hedging
modification. For example, CJ5 states the findings are "opposite" to the previous study:

The geographic defined results are opposite to the original study. [CJ 5]

The L5 writer also presents bold statements that show definite results:

The format change in the "Saturday Review" is the result of two primary factors: the internal debate within the genre of detective fiction, and the external... [L 5]

T4 firmly states that schools "need to make an effort" rather than recommending change:

Schools need to make an effort to help build better relationships between diverse groups on campus and to create alliances between the school and home. [T 4]

N4 also baldly indicates the need for spiritually-oriented nursing education:

Nursing education relevant to the spiritual realm at all levels of education is needed. [N 4]

The absence of hedges was not prevalent in this corpus and did not appear to occur in one particular field. This may be an indication of individual writer preference rather than an accepted disciplinary writing strategy.
Discussion of the Move and Hedging Analyses

The analyses of these 30 abstracts across these five fields revealed that the M.A. thesis writers used many of the moves that have been described for published RA abstracts (Bhatia, 1993; Hyland, 2000; Samraj, 2005). Samraj (2005) determined that it is “by comparing genres within a single discipline that we can explore the nature of relations across sets of genres” (p. 153). I cannot assert that these abstracts are typical of those of their respective fields because of the small size of this corpus; however, they do represent possible patterns in student abstracts in various disciplines. There were interesting differences across the five fields in writers’ employment of these moves, which may highlight different values, concerns and research practices across these disciplines. These rhetorical elements, however, follow a similar sequence which reflects Samraj’s abstracts move order of purpose, methods, results, and conclusions.

Specifically, my study revealed a six-move organization that reflects similarities and differences within each discipline. As shown below in Table 10, the moves are realized through different steps and showed additional variations at the step level.
<table>
<thead>
<tr>
<th>Abstract moves</th>
<th>Steps realizing the move</th>
<th>Variations of steps</th>
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<tbody>
<tr>
<td>Move 1</td>
<td>• Real world importance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Active research</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Intrinsic topic importance</td>
<td></td>
</tr>
<tr>
<td>Move 2</td>
<td>• Topic generalizations</td>
<td>• broad topic introductions</td>
</tr>
<tr>
<td></td>
<td>• Gaps</td>
<td>• specific topic information</td>
</tr>
<tr>
<td></td>
<td>• Acronyms, disciplinary jargon, research citations</td>
<td>• real world problem</td>
</tr>
<tr>
<td>Move 3</td>
<td>• Empirical</td>
<td>• previous research</td>
</tr>
<tr>
<td>Move 4</td>
<td>• Theoretical</td>
<td></td>
</tr>
<tr>
<td>Move 5</td>
<td>• data/participants</td>
<td></td>
</tr>
<tr>
<td>Move 6</td>
<td>• Real world benefit/application</td>
<td>• problem assessment</td>
</tr>
<tr>
<td></td>
<td>• Need for future research</td>
<td>• analysis/synthesis of theories</td>
</tr>
<tr>
<td></td>
<td>• Literary importance</td>
<td>• application of theory to text</td>
</tr>
</tbody>
</table>

The basic thesis abstract structure consists of six rhetorical moves: (1) Claiming Centrality, (2) Claiming Credibility, (3) Purpose, (4) Methods, (5) Results, and (6) Conclusions, which appear throughout this corpus in varying combinations depending on the discipline. In regards to my corpus, most thesis writers include moves...
for explicitly promoting the importance of their work which Hyland (2000) described as a promotional statement to claim significance. Centrality claims in Move 1 relate to issues of the real world, active field research, and intrinsic topic importance. Business, Criminal Justice, and Nursing abstract writers prefer stating real-world topic importance rather than acknowledging active research in the field. The focus on real-world relevance in these fields possibly indicates that these writers are concerned with practical, real-world issues that their academic communities consider important. This might also indicate this strategy is used primarily in the applied fields rather than non-applied disciplines.

In addition to these types of centrality claims, TESL writers made references to active research efforts in the field to re-emphasize important issues while only a few writers in other fields referred to active research. However, English Literature abstract authors do not signal centrality claims explicitly but rather suggest or hint at the topic's intrinsic importance. This strategy may indicate the theoretical nature of the field in which English Literature community members might not need nor expect specific signaling about topics that are commonly known and already acknowledged as important to the
discipline. Samraj (2005) found in her study of Conservation Biology abstracts that centrality claims were oriented towards real-world applications and speculated that in such a "crisis discipline" world problems were used as a persuasive technique to attract readers (p. 149).

Credibility claims, Move 2, were found in the form of topic generalizations, gaps, and/or in the use of acronyms, disciplinary jargon, and research citations. Topic generalizations were rarely utilized but when they did appear, it was in a longer abstract rather than the shorter half-page abstract format. The two types of topic generalizations were broad topic introduction or specific topic information statements. Though topic generalizations were used infrequently, when they were used, Business, Criminal Justice, English Literature, and TESL abstracts showed a preference for specific topic information statements to demonstrate writer credibility. The Nursing abstracts seem to adhere to the scientific community's expectation of finding a gap in existing research in order to establish a niche for their studies. These ways of promoting their research might explain that these disciplines find it necessary to justify their studies, whereas the English Literature writers offer their theses
without telling community members there is something lacking in the discipline’s research that needs to be addressed. While Samraj (2005) frequently found gaps more in the Conservation Biology abstracts to justify and promote their research into real-world issues, Hyland (2000) felt that the gap strategy was equally important in the soft disciplines to reaffirm insider credibility for researching the topic.

With regards to traditional moves, the Purpose, Move 3, is realized in every abstract in this corpus with the authors clearly stating the main purposes of the theses. Primarily, abstract writers choose the situation/problem to be studied type of Purpose with only two writers in the entire corpus additionally providing research questions. This indicates that abstract writers feel the abstract genre requires a well-defined purpose to present credible research. As Bhatia (2001) states, genres have “a generic integrity of its own, which most of us as members of a specified professional community share and use to recognize, construct, interpret and use these generic artifacts to achieve the goals of our own specific professional and disciplinary community” (p. 88). Some disciplines place their purpose statements in the beginning or in the middle of the abstract and also tend
to use similar verb types to state their reasons for doing
the research. The Purpose move thus reveals consistency in
its appearance and is a requirement of the abstract genre
itself which seems to transcend disciplinary differences.

The Methods, Move 4, is realized in all five programs
but it is only presented once in the Business and once in
the English Literature abstracts. The types of methodology
are either empirical or theoretical which appear to divide
along disciplinary lines. For example, Criminal Justice,
TESL and Nursing writers primarily use the empirical
approach to explain data collection while Business and
English Literature writers use the theoretical approach.
It appears that the Business field prefers the problem
assessment type while the English Literature program
prefers to apply theory-to-text for their Methods
sections.

There is a high frequency of Results, Move 5, in the
Criminal Justice, TESL, and Nursing abstracts and, yet,
only appears once in Business and twice in English
Literature abstracts. The Results move might suggest that
these writers may be conforming to their fellow community
members' expectations to read about the research findings.
These results are usually one to two sentences and are not
given in much detail.
The majority of abstracts contain a Conclusion, Move 6, with preference for real world benefit or application statements. There are field preferences for the type of Conclusion used which may indicate the values of each discipline. Samraj (2005) found Conservation Biology, described as a "crisis discipline", offered statements of problems in the world that would appeal to their readers (p. 149). Even though Hyland (2000) found conclusions in only 21% of his abstracts (p. 74), I found that Business, Criminal Justice, English Literature, TESL, and Nursing writers frequently presented conclusions and tended to offer real-world benefits with applications and implications for society. Samraj (2005) hypothesized that the "applied nature of the discipline" determines the abstract's structure in that applied fields dealing with real-world problems necessitate more justification through practical benefits and/or applications (p. 152). While the English Literature writers discuss issues of literary importance, this might suggest that the English Literature authors are writing primarily for fellow community members whereas studies in the other applied fields hope to broaden their audience to other disciplines.

Hedging in thesis abstract writing is realized in different patterns to weaken their commitment to claims.
and establish good relationships within the discourse community. These strategies include modals and a lack of personal pronouns. Also notable was the fact that some writers use bald, unhedged statements to report their findings. With respect to modals, writers use them as writer-oriented hedges to weaken the author’s stance, and they appear more frequently in the Business and TESL abstracts than in the Criminal Justice, English Literature, and Nursing abstracts. In regards to personal pronoun usage, the writers authorial identity is kept to a minimum possibly due to the writers desire to present their findings objectively. Often times in the Criminal Justice, English Literature, TESL, and Nursing fields, the thesis writer avoids taking a personal stance and lets the data speak for itself. The lack of hedges in some abstracts may indicate that the student writer is aware of the promotional purposes of the abstract genre (Bhatia, 1993) and therefore is trying to make as forceful a promotion of their claims as possible. Conversely, it may also suggest that these student writers have not yet been socialized into ways of mitigating research claims.
Conclusions and Areas for Further Research

The results of this small-scale study may be of interest to researchers for the ways it revealed disciplinary styles of writing Master’s thesis abstracts and also provided potential insights into the discipline’s values and beliefs at CSUSB. That is, this close structural analysis of thesis abstracts has shed some light on what discourse elements are specific to student writing in certain fields. The fact that the move structure in the abstracts reflected elements that Samraj (2005) and Bhatia (1993) found in published RA abstracts suggests that the student abstracts may resemble those of professional RAs. However, the variation in moves and how they were realized suggest differences across the disciplines, which, as I have argued, may reflect variation in values and approaches to doing research in these fields. It is also possible that these differences could be due to the fact that these are student writers and thus, are not yet fully familiar with conventions of research and abstract writing in their fields.

Further research into this particular genre across different disciplines might clarify rhetorical structures in abstracts for newcomers in their fields, such as graduate students. Future research questions might
include: What is the extent to which the elements found in Masters thesis abstracts are due to writers being novice members of their academic disciplines? Are differences due to the thesis genre itself being different in some ways from published RAs? Are the results in these five fields representative of other disciplines within the same program? Additional studies could also explore discourse structures of thesis abstracts with a larger set of data from both the hard and soft disciplines as well as interview faculty members to provide insight into the types of guidelines and disciplinary requirements for writing thesis abstracts.
APPENDIX

CORPUS CONTENTS: MASTER'S THESIS ABSTRACTS
CORPUS CONTENTS: MASTER'S THESIS ABSTRACTS

A. BUSINESS
4. The Concept of Interest in the Western and Middle Eastern Society (2003) B 4

B. CRIMINAL JUSTICE
3. A Description and Assessment of a Youth Accountability Board (2001) CJ 3
4. Chemical Dependency Treatment: An Examination of Following Continuing Care Recommendations (2002) CJ 4

C. ENGLISH LITERATURE
### D. TEACHING ENGLISH AS A SECOND LANGUAGE: TESL

4. *Social Distance, Motivation and other Factors Contributing to Success in Language Acquisition and Achievement Among Adolescent Mexican Immigrants* (2002)  

### E. NURSING

REFERENCES


Harwood, N. (2005). 'Nowhere has anyone attempted...In this article I aim to do just that' A corpus-based study of self-promotional I and we in academic writing across four disciplines. *Journal of Pragmatics*, 37, 1207-1231.


