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MBA PROFESSIONAL REPORT

**Introducing Professional Writing Skills to Future Naval Officers:
An Adjunct to NPS Distance Learning**

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 December 2008**

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**INTRODUCING PROFESSIONAL WRITING SKILLS TO FUTURE NAVAL
OFFICERS: AN ADJUNCT TO NPS DISTANCE LEARNING**

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INTRODUCING PROFESSIONAL WRITING SKILLS TO FUTURE NAVAL OFFICERS: AN ADJUNCT TO NPS DISTANCE LEARNING

ABSTRACT

Newly-minted naval officers will be judged by seniors on the merits of their writing skills. Required undergraduate English composition courses do not prepare officers to write clear, well-organized correspondence required during active duty service.

This project answers the following question: will written communication training provided to midshipmen prior to commissioning enable them to report to their first assignments with the written communication knowledge and skills to communicate their intentions clearly at first attempt and write with impact, thus decreasing the administrative burden on senior officers. To answer this question, we provided professional writing training in the form of interactive modules to 17 NROTC midshipmen at Marquette University and then assessed their understanding and capacity to apply the concepts.

Midshipmen earned scores that met or exceeded our criteria for comprehension of the guidelines for professional writing. In addition, midshipmen interview responses were overwhelmingly receptive to this training, and, as a result, 100-percent of midshipmen surveyed felt better prepared for future professional writing tasks.

We recommend that the NETC mandate standardized writing training for midshipmen prior to their commissioning. Additionally, we recommend that the NPS partner with the NETC to assist in creating a distance-learning tutorial for professional writing.

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LIST OF ACRONYMS AND ABBREVIATIONS

BUPERS – Bureau of Naval Personnel

DON – Department of the Navy

FITREP – Fitness Report

GSBPP – Graduate School of Business and Public Policy

MBA – Master of Business Administration Degree

NETC – Naval Education and Training Command

NPS – Naval Postgraduate School, Monterey, California

NROTC – Naval Reserve Officer Training Corps

PNS – Professors of Naval Science

SECNAV – Secretary of the Navy

SECNAVINST – Secretary of the Navy Instruction

USMC – United States Marine Corps

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I. INTRODUCTION

“Naval writing is changing.”

– DON Correspondence Manual (SECNAV, 1996, p. 95).

A. PROBLEM

Naval officers learn to write professional correspondence from publications and on-the-job training. The Navy’s principal instruction for writing is SECNAVINST 5216.5D: *The Department of the Navy Correspondence Manual*¹ (SECNAV, 2005), which orders how naval writers are to craft their correspondence. Another popular correspondence publication is *The Naval Institute: Guide to Naval Writing*.² In this desktop reference, author Robert Shenk provides clear guidelines for officers to craft virtually any type of naval correspondence. Shenk’s guidelines complement the directives set forth by *The Correspondence Manual*, and both documents stress the importance of clear, concise writing.

Guidance for clear, concise writing in *The Correspondence Manual* and *The Guide to Writing* mimics very closely the principles taught in business and professional writing courses such as bottom-line and high-impact writing. *The Correspondence Manual* stresses the importance of breaking from the “habit” of writing with “ornate formality” and instead focusing on “the simple idea—do not pollute” (SECNAV, p. 95).

On-the-job training comes from mentors at various assignments in an officer’s career. This mentorship is often spotty due to demanding operational requirements. For instance, a division officer aboard a surface combatant typically has one direct mentor—a department head—who is arguably serving in the most demanding position onboard the ship. Unfortunately, department heads are not usually rewarded for their mentorship, but rather their ability to accomplish demanding tasks in a timely manner. Mentors may not realize the importance of providing written communication feedback. Often, mentors

¹ From this point forward, the authors refer to this instruction simply as “*The Correspondence Manual*.”

² From this point forward, the authors refer to this text as “*The Guide to Writing*.”

have difficulty giving concrete, useful, feedback about effective written communication because they lack a clear, critical vocabulary about communication effectiveness. As a result, new officers can receive vague, subjective, or even inaccurate feedback about how to improve their written communication.

Consequently, the junior officer is left to draft correspondence based largely on his/her own experience of what constitutes good writing. Instead of taking the time to read and understand the guidelines contained in *The Correspondence Manual* or *The Guide to Writing*, the junior officer is more likely to use as a template a previously accepted version of the correspondence he/she is trying to draft. This approach perpetuates poor writing within a command. As junior officers continue to use poor examples of writing across multiple commands, continued exposure to poor writing has a long-term impact on their ability to produce clear, professional correspondence. *The Correspondence Manual* summarizes the junior officer's dilemma best with the following statement: "[i]n any large organization, older members train younger ones, old letters make convenient models, and old ways seem the safest" (p. 95).

B. BACKGROUND

Many naval officers report to their first active-duty assignments within weeks, sometimes days, of their commissioning date. Senior officers at these commands expect junior officers to report with a basic set of skills and have long assumed that professional writing skills are taught at the university level and in officer accession programs. Most undergraduate students, however, do not receive education in professional writing. Unless a student specifically takes a technical writing class, undergraduate writing experiences typically consist of writing essays and research papers that serve to answer particular questions specific to a field of study.

Although undergraduate writing assignments provide value to a naval officer's general education, they do not prepare officers for the diverse and specific correspondence methods—memorandums, evaluations and fitness reports, awards, instructions, and naval messages—they will encounter immediately upon entering active-duty service. Ultimately, academic and professional writing differ from one another in

both audience and purpose. University instructors gauge a writer's knowledge of a subject, while workplace professionals read to act.

C. PURPOSE

This project determined whether written communication training provided to midshipmen, prior to commissioning, might enable these future officers to report to their first assignments with the requisite knowledge to write with impact, decrease the administrative burden on senior officers, and communicate their intentions clearly at first attempt. In addition, this project sought to empower future officers to challenge inefficient writing traditions and avoid developing inefficient writing habits.

We provided written communication training to a group of midshipmen to determine if that training could improve newly minted officers' writing abilities. Written communication tasks built into the training gauged the training's effectiveness, and interviews with midshipmen determined their perceptions of the training. We provided recommendations to GSBPP as to whether the training should be extended to other commissioning sources. We also provided recommendations to The Naval Education and Training Command (NETC) describing how this distance-learning program might be further tailored to address specific types of naval correspondence.

D. SIGNIFICANCE

Naval officers should not have to wait until they receive graduate education to be taught industry-proven professional writing skills. Officers enter graduate education programs at various stages in their careers. Some officers never earn their graduate degree. All officers, however, need to make a positive impact when writing for their commands. Their correspondence skills speak volumes about their character and professionalism. As one Marine Corps Lieutenant Colonel lamented, "Few of my young lieutenants could write well. They had little concept of detail, style, spelling, or grammar. Duty in the Fleet [...] requires an ability to write" (Shenk, 1997, p. 2). A naval officer's opportunity to learn sound professional writing skills should not be left to chance.

In today's Navy, Sailors are inundated with correspondence of varying priority. If a writer expects his reader to give a document its due attention, the writer must ease the reader's burden and succinctly communicate his message the first time. Further, electronic media is often the first choice for routine correspondence. Because messages sent via electronic media are easy to misinterpret, it becomes even more imperative that the writer's message be crafted so it is unambiguous to the reader. Concepts such as bottom-line and high-impact writing will help officers make smart organizational and stylistic choices—resulting in messages that are quick to read, easy to understand, and effective in serving their purpose.

Sailors' evaluations or fitness reports are a significant portion of the performance data available to members of selection or promotion boards. Because promotion is competitive, it is essential that correspondence clearly speak to the sailor's strengths. A sailor's livelihood is at stake during a promotion or selection board, and language about the sailor's character and performance must literally jump off the page of a document if it is to be remembered by its readers. Again, it is essential that a sailor's chain-of-command understand the concepts of bottom-line and high-impact writing if they are to create documents that board members can quickly and easily understand.

E. RESEARCH QUESTION

One objective of this project is to empower future officers to challenge inefficient writing traditions and avoid poor writing habits. To this end, the authors feel the critical research question is:

- Will written communication training provided to midshipmen, prior to commissioning, enable these future officers to report to their first assignments with the requisite knowledge to write with impact, decrease the administrative burden on senior officers, and communicate their intentions clearly at first attempt?

F. RESEARCH APPROACH

We visited the Marquette University NROTC unit and researched answers to the question stated above. During our visit to Marquette, we conducted classroom instruction, administered a survey to gather participant demographics and information

about previous writing experience, delivered interactive bottom-line and a high-impact online training tutorials, and conducted group interviews with 19 midshipmen. We analyzed the interview and survey responses along with written samples to gauge levels of training comprehension. Finally, we scored midshipmen online writing samples using a five-point rubric.

G. CONCLUSION

The naval writing standards contained in *The Correspondence Manual* and *The Guide to Writing* are generally not enforced. Currently, the standards for plain-language writing are not mandatory training or reading at most commands. When one of the authors of this MBA project was nearing his commissioning date, his commanding officer presented him with a discount coupon for *The Guide to Naval Writing* and recommended he purchase the guide. At the time, \$11 seemed like a steep price for just another “how-to” guide. The author passed on purchasing this text and, like so many of his colleagues, disregarded the opportunity to invest in his writing skills before learning the bad writing habits that awaited him. Like many naval officers, this author would experience spotty on-the-job training and mentorship. Due to the poor writing templates he mimicked, he would largely disregard the guidance for written standards on clear, concise writing as prescribed by the SECNAV.

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II. LITERATURE REVIEW

A. OVERVIEW

To frame this project, we focused the literature review section on research in bottom-line and high-impact writing concepts, communication effectiveness and efficiency, academic and professional writing, discourse communities, and naval writing. We analyzed the work of research specialists, cognitive psychologists, professional naval writers, and business communication researchers. Also, we revealed in the literature review key terminology and definitions associated with different writing styles.

B. BOTTOM-LINE AND HIGH-IMPACT WRITING CONCEPTS AND RESEARCH

Today's managers face an increasingly complex business environment in which they must process, evaluate, and communicate a plethora of information. By definition, managers must communicate well on a number of dimensions. For example, they would need to be able to routinely process disparate pieces of information into clearly written communications that are useful, applicable and actionable to their employees. These recurring, complex translations and transactions no doubt provide a platform for sustained competitive advantage in all sectors. This section reviews research applicable to the concepts of bottom-line and high-impact writing, the difference between efficiency and effectiveness, the concept of efficiency and effectiveness in writing, and how researchers determine that bottom-line and high-impact writing is both efficient and effective.

Before exploring the research concerning bottom-line and high-impact writing, we must first understand the difference between high- and low-impact writing styles. Low-impact writing, also referred to as the bureaucratic style, is traditionally how both industry and the government compose correspondence. Researchers Rogers and Brown (1993) explain that low-impact style writing contains an abundance of sentences with passive-voice verbs, convoluted sentence structures with many modifiers and qualifications, and abstract diction. Suchan and Colucci (1989) and Colucci (1987) expand the description of the low-impact style and organization to include the following:

- The report's purpose buried in the last paragraph or in the middle of the document,
- no contract sentence,
- relatively long compound, complex, and compound-complex sentences,
- passive verbs with implied subjects,
- relatively abstract language,
- long paragraphs,
- very few, if any, headings or lists,
- extensive use of nominalizations, and
- no personal pronouns.

This style of writing leads readers to ask, "Why doesn't the document just inform the reader what the [supervisor] wants in the first paragraph?" (Carey, 2002, p. 12).

For the last several decades, there has been a movement toward using the high-impact style of writing and toward placing the bottom-line idea early in documents. According to leading researchers Fielden and Dulek (1984), a communication's bottom-line should be located in, or near, the first paragraph to decrease writing and reading time in longer documents and to improve document comprehension. Fielden and Dulek (1984), Suchan and Colucci (1989), and Colucci (1987) also recommend that writers include a contract sentence immediately following the bottom-line for documents at least a page long. The contract sentence organizes the remainder of the communication by providing a framework of the major points the writer is going to cover and the order in which they will be covered (Fielden & Dulek, 1984). Positioning the bottom-line and contract sentence early in documents is one key concept of high-impact writing.

Suchan and Colucci (1989) and Rogers and Brown (1993) characterize high-impact writing as having:

- The bottom-line stated in the first paragraph,
- a contract sentence immediately following the bottom line,
- short paragraphs, bold type headings that mirror the language in the contract sentence,
- strategically used lists,

- short, simple sentences in subject-verb-object word order to encourage easy information chunking and, thus, promote quick semantic closure,
- subjects and verbs as close to each other as possible,
- active-voice verbs,
- concrete, easy-to-understand language, and
- first- and second-person personal pronouns.

Drawing on the research of Tinker (1963), Hartley and Trueman (1985), and Wright (1968), Kostelnick (1988) confirms that the use of headings, lists, bold print, underscoring, graphs, pictures, logos, and spacing assists readers in reducing uncertainty on both document (global) and sentence (local) levels. Using the above concepts, readers easily code and chunk information, which allows for improved comprehension and faster reading time (Kostelnick, 1988). Furthermore, Kostelnick provides a “12-cell Schema of Visual Communication” to assist in document construction that encompasses certain ideas of high-impact writing (p. 32). The complexity of this 12-cell schema highlights the challenges faced by document designers.

The use of a bottom-line and a contract sentence may also foster a mental model of the communication that constrains meaning (Suchan & Colucci, 1989). Suchan and Colucci assert, however, that such constraint is very helpful to readers. Together, the constraints and mental model assist readers to rapidly classify and store information, recall, and anticipate information as it is read (1989). They also assert that by positioning the mental model at the beginning of the document, a writer can alleviate the reader’s uncertainty concerning the document’s content; such positioning can also eliminate the necessity for a reader to make inferences and topical propositions (1989).

Further research into the justification of bottom-line and high-impact writing involves sentence-level research, the limitations of short-term memory, and the use of the active versus the passive voice. For instance, Miller’s research (1956, 1970) on the limitations of short-term memory and Bever’s (1972) work on short- and long-term effect on sentence processing provides important information on cognitive information-processing constraints. Most readers’ short-term memory is only capable of holding 7 ± 2 chunks of information, or less, depending on the level of amplifying detail provided

(Miller, 1956). Furthermore, Clark and Clark (1968) indicate that when readers are burdened with too much detail, they have difficulty retaining in short-term memory the primary subject-verb unit of the sentence. A reader's inability to process this pattern may force them to slow down, reread, or possibly distort or lose the meaning of the sentence (Suchan & Colucci, 1989). Writers also need to create word sequences that can be easily formed into stable groups by subject-verb-object sentence patterns that place less demand on a reader's short-term memory (1989). As previously discussed, bottom-line and high-impact writing is characterized by the use of active vice passive verbs. Passive verbs invert the subject-verb-object pattern and slow the reader's processing time. Conversely, active verbs employ the subject-verb-object sentence pattern and allow for readers to more accurately process information—ultimately leading to increased reading pace (1989). The above information-processing advantages of bottom-line and high-impact writing have led to their adoption by many private- and public-sector organizations.

C. BOTTOM-LINE AND HIGH-IMPACT WRITING EFFICIENCY AND EFFECTIVENESS

To better understand the claims of the research cited above, it is essential for us to recognize the difference between written communication's efficiency and perceived effectiveness. Also, it is necessary to understand how two different sets of researchers (both Suchan/Colucci and Rogers/Brown) used these means of measurement in their empirical studies. Rogers and Brown (1993) characterize the difference between efficiency and effectiveness in the following way: efficiency deals with internal processes, and effectiveness deals with the ability of the organization to accomplish its purpose. Using Daft's 1986 research, Rogers and Brown further define organizational effectiveness as the degree to which an organization realizes its goals. Rogers and Brown, in addition to Daft, perceive efficiency as a more limited concept that pertains to the internal workings of the organization. Also, these researchers describe efficiency as the amount of resources used to produce a unit of output. Since managerial writing is intended to accomplish work, it is appropriate to define effective and efficient writing with the same distinction in mind: effective writing accomplishes the author's goal, while

efficient writing demands of the reader relatively fewer resources (time, energy, additional communicative acts) (Rogers & Brown, 1993).

The efficiency of high-impact writing is well acknowledged. However, Rogers and Brown (1993) were among the first to distinguish between efficiency and effectiveness with regard to bottom-line organization and high-impact writing style. Suchan and Colucci's study (1989) measures efficiency rather than effectiveness. Their study determines that respondents read high-impact writing faster, that it increases their message comprehension, and that it requires less re-reading than low-impact writing. Suchan and Colucci's study measures the time required to read, the ability of readers to comprehend what was written, and the need for readers to re-read the document—all of which involve time and resources and, therefore, efficiency. On the other hand, Rogers and Brown's (1993) study defines effectiveness as a determination of whether an Army officer more often complies with written instructions in a high-impact or low-impact style. Compliance with instructions is the ability of the organization to accomplish its purpose—which, in this study, is an order to pick up additional materials. The Rogers and Brown (1993) study gives strong support that high-impact writing elicits higher compliance with instructions and is, therefore, more effective than the low-impact style. In summary, these two studies indicate that bottom-line and high-impact writing styles are both more efficient and effective than traditional, low-impact writing styles.

D. ACADEMIC AND PROFESSIONAL WRITING

Schreiber (1993) contends that academic writing is widely perceived as “expressive, informative, and persuasive” (p. 178). Academic writing largely takes the form of essays and research papers and serves to answer particular questions specific to a field of study. This type of writing can be objective or subjective in nature—objective, as with research papers or scientific studies, or subjective, as with reflective or expressive writing. An academic writer knows his or her audience to be a professor typically regarded as an expert in a field. The writer expects the professor will take the time to read the text in its entirety and will provide prompt feedback. The professor grades the writing for purpose and response to specific assignment guidelines, as well as for organization, clarity, and grammar (Schreiber, 1993).

Contrary to academic writing, professional writing serves to conduct business and is considered an exchange or interaction between writer and audience. Drawing on research by Cain (1988), Keene (1993), and Olsen and Huckin (1991), Schreiber (1993) lists elements of professional writing that include unique terminology, graphics, specific formatting, and accuracy. Often, professional writing dictates instruction, provides information, or answers questions. Professional writing takes the form of correspondence, memoranda, status reports, instruction manuals, recommendations, evaluations, and electronic mail. Schreiber also describes professional writing as having a job-specific focus, being addressed to readers whom the writer may or may not know, and who may have different perspectives on and interest in the subject. A professional writer's audience is not obliged to read a document in its entirety and might skim its contents for information it deems pertinent. Furthermore, professional writers are often regarded as experts on the subject about which they write. Their audience, however, may not be expert on the contents of the writing. It is the job of professional writers, then, to provide their reader with the requisite background information about the subject on which they write.

E. LIMITATIONS OF ACADEMIC WRITING IN PREPARING STUDENTS FOR THE WORKPLACE

Schreiber (1993) contends that the academic writing experience falls short in providing the writer a foundation for future job-related writing tasks. Professional writers new to their jobs will write for an audience that has different expectations than the academic audience to whom they are accustomed. The professional writer's audience will have varying levels of interest in a document's subject. The readers might also have to choose between several documents competing for their attention and time. Furthermore, the audience will require different amounts of amplifying information to provide the necessary context for a document's purpose.

In addition to the difference in audience, Beaufort (2000) highlights the difference in purpose between academic and professional writing. The purpose of university writing processes and products is "to evaluate mastery of standard written academic English, to evaluate subject matter knowledge, and to evaluate critical thinking skills" (p. 217). In

contrast, the purpose of professional writing is largely to inform or call a reader to action. Often, where mastery of subject matter is valued, brevity and attention to document design are not.

The business community has now devoted journals, seminars, and undergraduate and graduate coursework to address the difficulties of transitioning between academic and professional writing. Still, new industry professionals are often surprised by the differences between academic and professional writing for several reasons. To begin, university students might simply be unaware of the future professional writing assignments they will encounter. In addition, students have trouble understanding the difficulty in transitioning from academic to professional writing because it is difficult to imagine the amount and types of writing they will be tasked with outside the university setting.

Doheney-Farina (1989), Freed and Broadhead (1987), Myers (1985), and Odell and Goswami (1985) have researched the social process of transitioning to the writing conventions of a new environment. Lutz (1989) describes the transition process as three stages of socialization: pre-arrival, initiation, and insider. For a university student, though, entering an organization's socialization process is challenging. At best, a student might achieve the pre-arrival or initiation stage of his or her future work environment through interviews, internships, or part-time employment. For a student to gain insider status while attending the university, however, is unlikely. Lutz further identifies three ways to ease the transition; these include looking at style guides, imitating rhetorical models, and attending planning and editing sessions with mentors or supervisors (pp. 124-126). But as Brandt (1990) points out, access to this type of knowledge "requires granting membership status to students (which is, regrettably, not usual in the institution of the school)" (p. 120).

Beaufort (2000) asserts that a professional writer must understand the larger implications a document has on an organization's goals and values and must be "fully immersed in the social/political context of the discourse community" (p. 188). A document's function in the organization, therefore, dictates what to say and what not to say. Beaufort further emphasizes that professional "[w]riting is not a general, portable

skill that all managers should have already” (p. 216). Instead, professional writing is a skill that is learned by a member during and after the assimilation process with a new organization. To ease the transition between academic and professional writing, Beaufort suggests that universities adopt discipline-specific writing courses and bring more types of business writing into undergraduate writing curricula. This research clearly highlights the challenges faced by new professional writers and the failures of current academic coursework to prepare them for future writing tasks.

F. THE CONCEPT OF DISCOURSE COMMUNITY

As previously discussed, a writer’s struggle to learn the conventions of an organization’s discourse is widely regarded as a social or communal process. Blyler and Thralls (1993) examine the social perspective of professional writing through this social constructionist lens. To the social constructionist, the concept of community is a central tenet and presents a framework for examining a community’s discourse. More specifically, discourse is created and perpetuated through a communal process. The social constructionist approach contends that a discourse community requires its members to have similar mental models of how writing is accomplished and that those mental models are derived from organizational goals, culture, principles, and communication norms. The organization’s shared beliefs translate into standard practices in discourse construction. These beliefs justify members’ writing choices and mold their writing to the standards set forth by the discourse community.

A quick review of naval writing provides several examples of how a community shapes its own discourse. For instance on May 19, 1994, the Secretary of the US Navy directed that the word “Sailor” was to be capitalized in all references except those who belong to foreign navies (US Naval Media Center Website). In addition, the US Naval Media Center Website states, “[e]very organization has its own language, and ways to display them in print.” In one example, the media center suggests that ships are to be referred to as “she” or “her.” In another example, the website states that a writer is to “use ‘on board’ as two words, but hyphenate on board when used as an adjective.

‘Aboard’ is the preferred usage.” Though the reasons for these discourse norms may not be apparent to professional writers outside the Navy, they are largely understood by the Sailors who read them.

Suchan and Dulek (1990) define a discourse community as “any socially constituted system that has evolved complex language standards that govern members’ decisions about document organization, design, style, and even syntax and usage” (p. 89). Using research by Bruffee (1984), Faigley (1985), Kuhn (1970), and Olsen (1993), Palmeri (2004) explains the concept of discourse community as “a group of people who share common assumptions about the discourse conventions and standards of evidence that must be employed for a written text to claim authority as knowledge” (p. 39).

Suchan and Dulek (1990) assert that acceptable standards for written clarity are dictated by the organization or functional area in which the writer works. Adhering to a set of writing conventions allows members of a discourse community the benefit of interpreting information in a familiar way. Therefore, writing that is familiar to members of a discourse community is clear, unequivocal writing within that community. In other words, documents created within an organization are often best understood within the lifelines of that organization and are “products of the insider’s perspective” (Miller & Selzer, 1985, p. 447). Driskill (1989) states that a community’s values, standards, and principles create its culture. That culture, in turn, dictates the conventions for writing—such as content, approach, and word choice. Because organizations are likely to create and carry on their own unique discourse norms, transitioning between discourse communities becomes a process of discontinuity and unfamiliarity for the writer.

G. CHALLENGES IN WRITING FOR A NEW DISCOURSE COMMUNITY

It can be difficult for any writer to learn the language of a new discourse community. In fact, writing in a new environment is often shocking for a new community member because the undergraduate writing experience largely fails to prepare them for that specific community. Berkenkotter, Huckin, and Ackerman (1991) contend that developing writing competence in a new environment requires a first-hand understanding of the communications inherent in that environment. To make matters

worse, a writer's understanding of what constitutes meaningful discourse may be significantly different from that of their new organization.

Doheney-Farina (1989) expands the number of factors that cause difficulty for writers writing in a new discourse community to include political and psychological adjustments. Before members can achieve insider status, they must learn the politics—internal and external—that dictates their organization's discourse. The subject of Doheney-Farina's study, Anna, learned the political limits of her organization's discourse abruptly and emphatically when a supervisor rejected her draft of a company newsletter. To Anna, her suggestions were appropriate and warranted, but to Anna's new organization, her suggestions were too controversial for readers of the newsletter. The supervisor revised Anna's first draft of the company newsletter—not because it was poorly written, uninteresting, or fundamentally flawed, but because of external politics and the significance the controversial content would carry to its larger audience. Internal politics also present significant challenge to the new writer in a discourse community. Differences in opinion, power (perceived or legitimate), and personality will invariably dictate how an organization produces discourse.

Doheney-Farina describes Anna's psychological adjustments as a conflict between her and her organization's ethos. As a university student, she was encouraged to be an advocate for arguments that she crafted from her personal experiences. In her new organization, however, she was no longer an advocate for any of the ideas contained in her writing. She was to be objective in her writing and to maintain a completely neutral position. She was required to simply report information, not to persuade her readers. Where creativity and interpretation were valued in the university, her organization expected her to be a conduit through which information merely flowed.

H. THE IMPORTANCE OF UNDERSTANDING A COMMUNITY'S DISCOURSE

Ultimately, the writer must decide whether or not he or she will conform to a community's language norms in an effort to achieve insider status. Success for the writer, however, will undoubtedly be judged by his/her ability to align his/her discourse

with organizational goals. Schreiber (1993) believes the organization will demand that the writer conform to its goals and character.

Bruffee, in his seminal social constructionist article (1986), describes two types of discourse: normal and abnormal. Normal discourse maintains its community by promoting and conserving it. If a writer's discourse conforms to the community's goals and conventions, the writer will likely succeed in his/her discourse assignments. Abnormal discourse, however, breaks from traditional community discourse and can be perceived as "ridiculous, outrageous, or [even] revolutionary" (Doheney-Farina, 1989, p. 39).

The way a community perceives a discourse, though, is completely relative to the writer's situation or environment. Therefore, it is critical to the writer's success that he/she understands the community's preference for type of discourse. Does the writer's new discourse community support "abnormal" discourse or does it routinely produce "normal" discourse? If the organization supports abnormal discourse, the writer's discourse may serve as change agent or source for innovation. If not, the community's discourse effectively maintains the status quo, and the writer must adhere to the discourse standards—words, style, and design—adopted by their community if his/her words are to be accepted. The alternative for the writer is to not be allowed full membership and risk being perceived as an outsider. Suchan and Dulek (1990) maintain that, by accepting and internalizing a community's discourse conventions, members are signaling that they value and wish to continue being a part of that community.

Effectiveness, therefore, is in the eyes of the reader—particularly of those readers who are in positions of power and influence; thus, effectiveness will undoubtedly vary across discourse communities. Even if a writer creates a discourse that is actually efficient, his/her readers might subjectively deem the piece ineffective. Suchan and Colucci (1989) provided empirical evidence that a high-impact writing style was more efficient than the bureaucratic style. To their surprise, some readers actually preferred the bureaucratic style because they were more accustomed to it (1989). In other words, the less-efficient, bureaucratic writing style aligned more directly with the organization's

norms and traditions. Consequently, creating discourse that is both effective and efficient is a skill that a writer learns over time and with much thought.

I. NAVAL WRITING GUIDANCE

Several tools may assist naval officers in the conduct of daily business—particularly in the task of writing. The two most employed tools to support naval officers are *The Correspondence Manual* and *The Guide to Writing*. *The Correspondence Manual* is the primary document that prescribes the uniform standards for the management and preparation of naval correspondence. This SECNAV instruction includes chapters on correspondence management, correspondence formats, and naval writing standards. Though the initial two chapters of the instruction provide officers with supportive information on correspondence, Chapter 3 (Naval Writing Standards) directly pertains to this project. Chapter 3 stresses the need to improve naval writing by describing strategies which are akin to bottom-line and high-impact writing. The chapter consists of several sections that emphasize ideas such as (SECNAV, 2005, pp. 99-120):

- Use short paragraphs.
- Take advantage of topic sentences.
- Use personal pronouns.
- Keep sentences short.
- Write disciplined sentences.
- Be concrete.
- Prune wordy expressions.
- Free smothered verbs.
- Avoid dead verbs.
- Learn the symptoms of passive voice.

This list corresponds to many of the same features that Dulek and Fielden (1984), Suchan and Colucci (1989), and Rogers and Brown (1993) use to describe key components of bottom-line and high-impact writing.

Additionally, naval officers can purchase and use *The Guide to Writing* by Robert Shenk to assist in developing correspondence. This desktop reference is not an official

DON document, but it provides clear *guidelines* for officers to craft virtually any type of naval correspondence. Like *The Correspondence Manual*, much of the guide is devoted to types of correspondence and how best to create them. In the introduction, however, Shenk provides a set of general rules on naval writing and editing that equate to the principles of bottom-line and high-impact writing outlined by Dulek and Fielden, Suchan and Colucci, and Rogers and Brown. These rules include placing the main point up front, using bullets, lists, or other visual signposts, and adding headings to improve readability (Shenk, 1997). Additionally, Shenk devotes nine pages to providing details and summaries of the principles found in Chapter 3 of *The Correspondence Manual*, as well as tips on how to avoid poor phrases and verb choices. While not specifically stating the terms of “bottom-line” and “high-impact,” both naval writing guides direct Navy service members to write in a manner that reflects the bottom-line and high-impact concepts. Though the SECNAV directs naval writers to implement these concepts, writers have largely failed to institutionalize them. Writing styles and norms vary by community, command, and commanding officers throughout the Navy.

J. CONCLUSION

By examining the relevant research, this literature review provides the reader a framework for understanding and analyzing this study’s research questions. The review describes the written standards for naval correspondence prescribed by the DON. Also, it explores published research that identifies the benefits of bottom-line and high-impact writing through improved efficiency and effectiveness. Furthermore, the review discusses the challenges faced by students leaving the comforts of academia, entering a new discourse community, and having to confront the limitations of their undergraduate writing experience.

Our goal is to enable future naval officers to report to their first assignments with the requisite knowledge to write with impact, decrease the administrative burden on senior officers, and communicate their intentions clearly at first attempt. This MBA project further seeks to put action behind the SECNAV’s claim that “[n]aval writing is changing” (SECNAV, 2005, p. 95). As a naval officer’s career progresses, his or her writing becomes increasingly important—as reflected by the statement, “[w]riting is

another way of *competing*. [a] lot of my impression of you is based upon what your write” (Shenk, 1997, p. 1). With this quote in mind, we are trying to prepare future naval officers to be efficient, professional writers when they first enter the Navy.

III. RESEARCH APPROACH

A. RESEARCH QUESTIONS

According to *The Correspondence Manual*, “[i]mprovement is doubly difficult when habit is reinforced by group inertia” (p. 95). Two objectives of this project are to empower future officers to challenge inefficient writing traditions and to avoid poor writing habits. To this end, we feel the critical research question is:

- Will written communication training provided to midshipmen, prior to commissioning, enable these future officers to report to their first assignments with the requisite knowledge to write with impact, decrease the administrative burden on senior officers, and communicate their intentions clearly at first attempt?

B. HYPOTHESIS

From the primary research question, we developed several hypotheses:

- Midshipmen are capable of comprehending and putting into practice the concepts of bottom-line and high-impact writing, and
- midshipmen would be better prepared for writing assignments at their first duty stations as a result of mandated training on naval writing standards.

C. RESEARCH APPROACH

We visited the Marquette University NROTC unit to gather data to answer the primary research question. First, we conducted classroom instruction to teach midshipmen the theory behind bottom-line and high-impact writing concepts. Second, the midshipmen each completed interactive bottom-line and high-impact online tutorials. Both tutorials included concept refresher and practical application exercises through revision of realistic naval correspondence. Third, we administered a survey to gather participant demographics and background data about the participants (see Appendix A). Last, we conducted group interviews with the midshipmen to better understand their comprehension of the training (see Appendix B).

D. RESEARCH SAMPLE

The sample of midshipmen consisted of Marquette University NROTC students in their senior year of undergraduate education. Marquette University is located in Milwaukee, WI, and is a private, Jesuit institution offering many degrees in both arts and science. We chose Marquette University as the research site because it was our alma mater and we feel strongly about giving back to the NROTC unit located there. Additionally, our personal contacts at the NROTC unit were helpful in securing participation of the midshipmen.

E. CLASSROOM TRAINING

Since the concepts of bottom-line and high-impact writing are sometimes not taught in undergraduate coursework, we began the training with classroom instruction. The classroom instruction was lecture based, using a small number of PowerPoint slides to introduce key concepts and theory and to provide the midshipmen with exemplar professional documents. Second, we provided the midshipmen with examples of low-impact writing. Third, we stressed the multiple benefits obtainable to midshipmen in their future assignments based on their ability to produce clear, concise, written communications. Finally, we described and framed the online writing tutorials that the midshipmen would complete following classroom training.

F. ONLINE WRITING TUTORIALS

In our third academic quarter at NPS, we completed a managerial communications course taught in the GSBPP. The managerial communications class introduces graduate students to the concepts of bottom-line and high-impact writing through classroom instruction and interactive online writing tutorials. With permission from the tutorials' creator, NPS Professor Jim Suchan, we tailored the tutorials for brevity, and adjusted the content for relevancy to newly commissioned officers. Since we delivered the training to full-time college students with demanding extracurricular NROTC activities, the midshipmen's commanding officer was particularly interested in minimizing additional time constraints.

The interactive portion of the tutorials consists of poorly written, realistic, naval correspondence. In their original draft, the documents have the bottom-line buried in the middle of the document and are deficient in exercising the concepts of high-impact writing. In essence, the documents reflect traditional bureaucratic prose. The midshipmen were then asked to revise the poorly written documents, making use of the bottom-line and high-impact writing concepts. Once the midshipmen completed the tutorial and submitted their responses, the tutorial displayed acceptable response examples. The midshipmen responses were not marked as incorrect. Instead, the tutorial displayed alternative responses to reinforce practical application of the bottom-line and high-impact concepts.

We later quantified the degree of comprehension each midshipmen exhibited using a five-point rubric to score each online writing sample (see Appendices C & D). In determining a holistic score for the high-impact revision, we gave a higher relative weight to items—in descending order—listed in Appendix D. We each scored the online writing samples independently, and our principal advisor decided between differences of two or more points. Ultimately, we felt a score of three or higher would indicate a midshipman's ability to translate this training into action upon commissioning.

G. SURVEYS AND GROUP INTERVIEWS

Immediately following the classroom instruction, midshipmen answered a survey instrument (see Appendix A) providing demographic information and data regarding any previous writing experiences. We also conducted group interviews with 19 midshipmen to better gauge their understanding of the writing tutorial content (see Appendix B). We used digital voice recorders to facilitate interview transcriptions. During the interviews, the midshipmen were specifically asked to think about the implications that superior naval writing skills might have throughout their career. Several weeks after our visit to Marquette, we asked the midshipmen to complete an online survey to better understand the tutorials' impact on the midshipmen (see Appendix E). The following chapter details our experiment results and analysis.

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IV. RESULTS AND ANALYSIS

A. RESPONDENT DEMOGRAPHICS

Our experiment population consisted of 19 midshipmen from the Marquette University NROTC Unit. In all, 74% (14) of the midshipmen were male, and 26% (5) were female with an average age of 21.3 years. All of the midshipmen were seniors at Marquette and within one year of commissioning. In addition, many have held a staff or leadership position in the midshipman battalion to include: battalion commander, battalion executive officer, company commander, platoon commander, and/or squad leader. The sample contained no midshipmen with significant prior military service. Only one respondent served in active duty service, during which time he spent nine months at a training command.

Regarding academic majors, the largest percentages of midshipmen were enrolled in the liberal arts and nursing programs—42.1% (8) and 26.3% (5), respectively. The remaining midshipmen were majoring in engineering and business-related fields—15.8% (3) and 15.8% (3), respectively. Generally, all of the midshipmen had completed two or more undergraduate English/expository writing courses. During the course of their education, 68% (13) of the midshipmen claimed to have had previous exposure to guidelines for clear writing. Midshipmen examples of previous exposure ranged from high school English to undergraduate business writing coursework. Additionally, 63% (12) of the midshipmen had previously crafted military correspondence in the form of memoranda, FITREPs, USMC Five-Paragraph Orders, and letters of instruction.

B. RESEARCH RESULTS

We used Microsoft Excel as a primary means to analyze the scores of the midshipmen's written submissions. We used the descriptive statistics function in Microsoft Excel to calculate the mean, median, and mode of the midshipmen scores from each online writing task. Table 1 lists the number of written submissions we received from the midshipmen.

	Task 1	Task 2	Task 3
Bottom-Line	17	10	12
High-Impact	17	-	-

Table 1. Number of Written Submissions Received from Midshipmen

Though we enrolled 19 midshipmen in the online tutorials, several either did not submit or experienced technical difficulties with their written submissions. Specifically, for bottom-line writing tasks two and three, either the internet browser or the online tutorial itself timed-out and, consequently, deleted seven midshipmen revisions during the submission process. Four midshipmen later emailed us their written submissions, and we included those responses in our analysis. As a result of this technical difficulty, though, we received fewer responses than anticipated.

Table 2 provides a summary of midshipmen scores from their online writing submissions (we provide a detailed breakdown of scores in Appendix F). As previously mentioned, we expected that midshipmen who demonstrated the capacity to apply the concepts for clear writing would score a three or higher on their written submissions. In our analysis, we chose to use the median and mode as indicators of central tendency because of our small sample size. Subsequently, we found that the median and mode better represented the sample than did the mean.

Regarding the bottom-line writing tutorial, the scores in Table 2 validate and lead us to accept our first hypothesis—that midshipmen are capable of comprehending and putting into practice the concepts. In fact, 100% of midshipmen in the sample averaged a score of three or higher across all three writing tasks. The median score for the midshipmen sample, averaged across all tasks, was a five and is clearly above our criteria for demonstrating a capacity to apply the concepts presented in the training. In addition, the mode for bottom-line submissions demonstrates that midshipmen most frequently (59%) achieved an average score of five.

Regarding the high-impact writing tutorial, we also accept our first hypothesis, but with one qualification—that scores for the high-impact written submissions were significantly lower than were the bottom-line scores. Still, a majority of midshipmen

(71%) scored a three or higher on their online writing submissions. Here again, a median and mode of three both meet our criteria and confirm that most midshipmen demonstrated a capacity to apply the concepts presented in the training. We provide possible explanations for the disparity between bottom-line and high-impact submission scores in the “Research Themes” section below.

	Mean	Median	Mode
Bottom-Line	4.56	5	5
High-Impact	2.88	3	3

Table 2. Statistics for Midshipmen Written Submission Scores

The qualitative data from the group interviews and the empirical data from our online survey both support and validate our second hypothesis—midshipmen would be better prepared for writing assignments at their first duty stations as a result of mandated training on naval writing standards. According to our online survey results, 18 of 18 midshipmen felt better prepared for future professional writing tasks after completing the two writing tutorials. Those same 18 midshipmen also felt that correspondence training should be mandated for NROTC midshipmen. Only one midshipman did not respond to our online survey.

C. RESEARCH THEMES

Results from our research generally fell under one of four themes. We describe these four themes in the paragraphs that follow. Though we accept our hypotheses based on the data above, the paragraphs below qualify our acceptance with midshipmen responses in group interviews and by linking those responses to research we presented in our literature review.

1. Understanding the Difference between Academic and Professional Writing

The first theme evident in our research data was that midshipmen generally understood the differences between academic and professional writing. The midshipmen

commonly agreed that their writing is a product of their high school and undergraduate English and expository writing courses. When surveyed and interviewed, the midshipmen described definitions of the academic and professional writing that were in line with those we described in our literature review.

Schreiber (1993) describes academic writing as expressive, often in the form of essays and research papers, and written for a specific audience who will read the document in its entirety. During the group interviews, many of the midshipmen brought up parts of Schreiber's definition when describing the difference between academic and professional writing. For instance, one midshipman stated, "In academic writing often times you have a lot more space to write more, and in professional writing [...] you've got less space to write in" (2008, September 8). Another midshipman stated, "In academic writing, you're going to have full arguments where you're going to have multiple points backing up each argument whereas in professional writing you [have] very few backups" (2008, September 8)³. Yet another midshipman described her writing as "flowery" and lengthy, as a product of her undergraduate English and writing courses (2008, September 8). After completing the writing tutorials, she knew the importance of not drafting an email similar to the low-impact email presented in the high-impact tutorial. All three midshipmen were communicating that academic writing is generally not constrained by length and contains greater amounts of background information.

In contrast to academic writing, Schreiber (1993) and Beaufort (2000) describe professional writing as a business exchange and a call to action between professionals. In addition, readers often have different interest in a document's subject and might only skim it for pertinent information. Like Schreiber, the midshipmen spoke of professional writing as job-specific and directed to readers with varying levels of interest in its content. Most importantly, the midshipmen were in general agreement that professional writing is concise and to the point, with its bottom line stated up-front. For instance, one midshipman stated, "[...] in professional writing, you [have to] get to the point right away" (2008, September 8). Another said that professional writing is "clear, and precise [and] to the point" (2008, September 8).

³ For confidentiality, individual midshipman names are not included in this report.

As previously stated, 68% (13) of midshipmen indicated on their survey instruments that they had, during the course of their education, been exposed to concepts for clear writing. After comparing the survey instrument answers to group interview responses, we concluded that most midshipmen had, in fact, not received education in clear writing. Only three of the 19 midshipmen had taken a course in professional writing, to include business writing and technical communications. One of those three midshipman received instruction on professional memorandum writing while enrolled in an English class at the University of Wisconsin-Washington County (UWWC). Her professor—and Army Reservist—stressed the need to be concise in professional writing to include what the midshipman described as “taking out the mumbo-jumbo” (2008, September 8). Another of those three midshipmen took a technical communications course in his engineering studies. Both of these midshipmen scored above the average in both their bottom-line and high-impact written submissions. Unfortunately, we did not receive written submissions from the midshipman who had taken the business writing course. Other midshipmen had received limited professional writing training in the form of memoranda, instruction manuals, USMC Five-Paragraph Orders, and engineering technical reports. One midshipman had even drafted read-me files for mobile phone software.

In our literature review, we discussed that new professionals are often surprised by the differences in academic and professional writing, and often they are unaware of the difficulty in transitioning between these two types of writing. In response, Beaufort (2000) suggests that to ease for students the transition between academic and professional writing, universities might adopt discipline-specific writing courses. These discipline-specific courses serve as a primer, or an introduction, for the student to the types of discourse he/she will likely encounter in future assignments. During group interviews, several midshipmen explained to us that, before the training, they were simply unaware that some of their writing habits contradicted the concepts for clear writing. One midshipman said:

There are things you don't even realize that you are doing. I was familiar with a lot of the concepts you guys talked about, but then I realized that I actually had been doing that [contradicting the concepts for clear writing], like in emails that I have been writing and stuff. So, it was good to have you read the concepts and then apply it and put it to use. (2008, September 8)

Another midshipman shared that completing the tutorials helped him to identify those aspects of his writing he should strive to improve (2008, September 8). In the case of these midshipmen, the writing tutorials served as a primer for professional writing.

2. Better Prepared and More Confident

The second theme we found in our research was that, after completing the online tutorials, midshipmen felt better prepared for future professional writing assignments. In our online survey, we explicitly asked the midshipmen, "Do you feel better prepared for future writing assignments as a result of the online [writing] tutorials you completed?" In response, a resounding 18 of 18 answered "yes." During our group interviews, one midshipman plainly stated, "I feel more prepared now, Sir [...] and feel better about how I can write stuff now" (2008, September 8). After completing the online tutorials, the midshipmen clearly perceive themselves to be more prepared for professional writing assignments.

As a result of feeling better prepared, midshipmen exhibited confidence in applying the concepts of clear writing. One midshipman stated, "As a future military officer, I understand the concept of being direct and concise, but these tutorials gave me the confidence to write like I already knew I should" (2008, September 8). Another midshipman shared a story about a recent request he made to an academic advisor for a letter of recommendation. He stated that his original request included "bumbling" and "a lot of background information." After completing the online tutorials, he sent the advisor an improved email following the guidelines for clear writing. In his revised email, he asked the advisor for a letter of recommendation, up-front, and then provided the necessary background information (2008, September 8). Perhaps most significant, though, was that several midshipmen discussed ways to improve future battalion memoranda and emails at a staff meeting just hours after completing the online tutorials

(2008, September 8). That the online tutorials served as a primer for professional naval writing might also explain a midshipman's immediate increase in confidence.

In our literature review we also discussed the difficulty for a university student to begin a socialization process with his/her future organization. Midshipmen, however, are a unique group of university students in that they are already going through what Lutz (1989) describes as the initiation stage of organizational socialization. In preparing for careers in the naval service, midshipmen are accustomed to applying learned concepts to ready themselves for future assignments. It seems, then, that a midshipman would naturally derive confidence from being included in the initiation stage for naval writing. Such was the case for Marquette University NROTC midshipmen who demonstrated a willingness to change and immediately apply the concepts presented in the online writing tutorials. As Brandt (1990) points out, access to knowledge of organizational discourse is typically not granted to university students. Providing midshipmen a primer for naval writing standards—such as the tutorials in our research—essentially grants them access to the naval discourse community and eases the transition between academic and professional writing.

Why, then, did the midshipmen score much higher on the bottom-line than on the high-impact submissions? Several factors might explain the disproportion in scores. First, the bottom-line tutorial introduced relatively fewer concepts. Namely, a writer should consider stating up-front his/her document's purpose—its bottom line. The midshipmen then applied that primary concept in three different written submissions. In contrast, the high-impact tutorial introduced four separate concepts, and then asked the midshipmen to apply all of them in one, final, written submission. That the high-impact concepts often go against the writing habits learned from mentors or in undergraduate education likely made them even more difficult to put into practice.

Second, we asked the midshipmen only to revise portions of the original bottom-line documents up to, and including, their bottom line. For all three bottom-line writing tasks, this portion of the document included three sentences or less. In comparison, the high-impact tutorial required the midshipmen to revise the entire document, which was considerably longer than any of the bottom-line documents. That the tutorial did not

provide the midshipmen opportunities to practice applying each concept individually, before the final task, likely increased its degree of difficulty. During our managerial communications course at the NPS, we had the opportunity to spend more time with each of the concepts before applying them to a holistic document revision. Due to time constraints with the midshipmen, we were unable to provide them a similar opportunity.

Third, we did not stress our desire for the midshipmen to leave the high-impact document's original context largely unchanged. Though the original drafter of the document could have omitted several sections of the document, we did not wish the midshipmen to alter its content. Instead, we asked that they only rearrange and alter the content as it applied to the four concepts introduced in the tutorial. As a result of our neglect, a majority of the midshipmen focused on deleting portions of the original document they felt unimportant and consequently devoted their time to cutting content as a means to make their revisions more impactful.

Finally, the midshipmen were voluntary participants in our research. While their participation afforded them an opportunity for professional development, the NROTC staff could not mandate the training nor did it count completion of the tasks towards any grades. In contrast, our professors at the NPS graded written submissions in the form of course participation and reinforced our comprehension of the concepts with written deliverables throughout the course. Though we cannot be sure, it is safe to assume that more time with the concepts and mandatory participation might have produced higher scores.

Even in the high-impact revision, the midshipmen still consistently demonstrated an ability to apply the concepts for bottom-line writing. As described by the rubric in Appendix D, we graded the submissions on whether or not the midshipmen stated the bottom line at, or near, the document's beginning. In determining a holistic score for the high-impact revision, we gave the highest relative weight to the criteria for identifying a document's bottom line. On the criteria for document bottom line, 14 of 17 midshipmen received a five—the highest score on a five-point scale. Clearly, the midshipmen benefitted from multiple opportunities to apply the concepts for bottom-line writing

3. Discourse: A Communal Process

That the Marquette University NROTC midshipmen battalion creates and perpetuates its own discourse standards is the third theme we found in our research. During group interviews, we were not surprised to find that midshipmen typically modify and issue previous versions of similar written documents throughout the battalion. Recounting our experience as NROTC midshipmen, we remembered producing discourse in the same manner—by modifying past documents as dictated by the situation.

The social constructionist describes members of a discourse community as having similar mental models for writing, and that members derive those models from their organization's culture, principles, and communication norms (Blyler & Thralls, 1993). Subsequently, shared beliefs translate into written standards and a communal process creates and perpetuates discourse. Such was certainly the case for the midshipmen in our research. The midshipmen receive their examples for written correspondence from pass-down files or directly from midshipmen senior to them. The midshipmen justified using these documents with comments ranging from "That's the way we were taught" to lack of training and simply following orders (2008, September 8). As Suchan and Dulek (1990) contend, members of a discourse community interpret in a familiar way information that adheres to a set of written conventions. For instance, one midshipman said, "We've had to do FITREPs every year, but we've never received formal training or guidance on exactly how to do that, so you kind of just read past ones and try to make [yours] similar" (2008, September 8). Another midshipman responded, "[a]t the beginning of every semester... the battalion staff always sends down a memo on how to write memos" (2008, September 8).

The habit of using past correspondence as a model for current messages is what *The Correspondence Manual* describes as "the most stubborn of all obstacles" (SECNAV, 2005, 95). That inefficient writing might be passed on from older to younger midshipmen is the hazard in creating their own discourse community. The crucial question, then, is whether or not the battalion's discourse follows SECNAV mandates or *The Guide to Writing* guidelines for clear writing. When asked if they had referenced *The Correspondence Manual* or *The Guide to Writing* when drafting battalion discourse,

zero of 19 midshipmen had done so. When asked if the battalion made either publication available for reference, only two of 19 midshipmen said yes; the remaining 17 were not sure. Though writing produced by these midshipmen is likely familiar and, therefore, unequivocal within their battalion, it largely fails to follow guidelines for clear writing.

4. The Importance of Clear Writing

A final theme we found in our research was that midshipmen overwhelmingly agreed that their ability to write professionally would facilitate success and convey a perception of competence in their first assignments. During our group interviews, one midshipman stated that her future senior officers might not know her personality or day-to-day accomplishments in her first months at a new command. Rather, those senior officers are likely to only know about her from the messages she creates, approves, or forwards up the chain-of-command for their signature. The midshipman further stated that messages she sends to senior officers will give them an impression of her, and that they might remember that discourse when they see her and begin working face-to-face (2008, September 8).

Another midshipman recounted an experience at the Marine Corps Officer Candidate School in which his platoon commander required that he and his fellow officer candidates write and submit essays on various topics. During the opening days at the school, his platoon commander knew nothing more about him than the essays he drafted. “All we were was [*sic*] papers to him,” the midshipman lamented. Even a few weeks into the program the midshipman’s platoon commander still did not know him personally and had to determine the midshipman’s class rank from solely his essays and physical fitness scores. Yet another midshipman stated, “We are what our paper says [...]; we can save time and face with senior officers by writing well the first time” (2008, September 8). Certainly, these midshipmen understand the weight carried by future writing tasks.

If the Secretary of the Navy mandates that naval writing follow the guidelines for clear writing, then a newly commissioned officer who follows those guidelines should produce writing that his/her command normally accepts. As discussed in the literature review, however, a reader or discourse community subjectively determines what constitutes “good” writing. Research shows that a writer must understand his/her

community's preference for type of discourse—normal or abnormal—if he/she wishes that discourse to be effective. In our experience, naval writers generally fail to follow the guidelines for clear writing issued in *The Correspondence Manual* and *The Guide to Writing*. A naval officer will likely serve in a command that favors and perpetuates the traditional, bureaucratic prose. Depending on command culture, an officer's chain-of-command may not accept "abnormal" discourse. In such a case, the young naval officer will have to conform to his/her community's discourse standards if he/she wishes to succeed in writing assignments.

D. SUMMARY

This chapter provides the results of our research and justification for accepting our hypotheses—that midshipmen are capable of comprehending and putting into practice the concepts for clear writing, and that midshipmen would be better prepared for writing assignments at their first duty stations as a result of mandated training on naval writing standards. Midshipmen in our study demonstrated a capacity to learn and implement the concepts for clear writing: 100% and 71% scored a three or higher on bottom-line and high-impact written submissions, respectively. We also provide justification as to why the midshipmen might have scored higher on the bottom-line than on the high-impact written submissions.

In addition to our empirical results, the results of our qualitative research generally fell under one of four themes: that midshipmen understood the difference between academic and professional writing; that they felt more confident and better prepared for professional writing tasks after completing the online tutorials; that creating discourse is a shared process; and that the midshipmen understood the importance of their ability to produce clear writing in regard to future job performance. In the following chapter, we provide our conclusions and recommendations as well as possible implications for future research.

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V. CONCLUSION, RECOMMENDATIONS, AND IMPLICATIONS FOR FURTHER RESEARCH

A. CONCLUSION

The goal of our project was to determine if midshipmen could comprehend and employ the guidelines for professional writing. Today, midshipmen and newly commissioned officers generally receive little to no training in professional writing prior to commissioning. Even after commissioning, new officers often receive spotty training from overworked mentors and through the perpetuation of current writing samples available at the command. The results of this project validate that midshipmen can generally comprehend and employ the concepts of clear writing. What follows is a summary of our study's most important empirical and qualitative results:

- The empirical scores of the written submissions met or exceeded our criteria for comprehension of the guidelines for professional writing. This led us to accept our first hypothesis—that midshipmen are capable of comprehending and putting into practice the concepts of clear writing, though the scores for bottom-line written submissions were higher than for high-impact submissions.
- The midshipmen interview responses were overwhelmingly receptive towards the training and believed it effectively served as a primer for future professional writing. In several cases, midshipmen commented that the training served as a wake-up call and identified areas of weakness in their writing (2008, September 8). These positive interview responses, along with online survey results, validate our second hypothesis—midshipmen would be better prepared for writing assignments at their first duty stations as a result of mandated training on naval writing standards.
- As a result of our online tutorials, 100% of midshipmen surveyed felt better prepared for future professional writing tasks. These results are reinforced through the responses gathered at our group interviews following the completion of the training.
- Our online survey found that 100% of midshipmen felt that professional writing training should be mandated prior to commissioning.

In our literature review, we discussed the difficulty of learning to write in the professional environment. Beaufort (2000) believes that professional writing is a learned skill that takes place during the assimilation process in an organization. This led us to the question: can the guidelines for clear writing be learned by a midshipman? Since midshipmen are in an ideal position, the initiation stage, of joining the Navy or Marine Corps—their future organization—they are in a unique position to learn the writing concepts mandated by the SECNAV. By exposing midshipmen to the concepts in *The Correspondence Manual*, they can begin to employ them prior to reaching the fleet. As the midshipmen scores and interview comments indicate, professional writing training would greatly enhance a newly commissioned officers' ability to quickly contribute at his/her first command.

Since the midshipmen are already in a training environment, they are in an optimal position for training on the writing policies governed by naval directive. The mission of the NROTC program is “[...] to commission college graduates as naval officers who possess a basic professional background, [...] and have a potential for future development” (NETC Website). However, professional writing is currently not included in that basic professional background for midshipmen, unless they personally enroll in class outside of the NROTC-mandated curriculum. For instance, several midshipmen at Marquette University had enrolled in a business writing or technical communications courses and scored above average on the tutorials. Mandated training affords all future naval officers the opportunity to learn professional writing skills before commissioning.

Training using tutorials like those employed in our research serves as a primer and exposes midshipmen to future professional writing tasks. In our literature review, Brandt (1990) notes that university students are not granted access to the knowledge of organizational discourse. As previously mentioned, the midshipmen are unique because they already have access to the Navy's basic organizational discourse. Providing midshipmen a primer for naval writing standards—such as the online writing tutorials in our research—essentially grants them access to the naval discourse community and eases the transition between academic and professional writing. As a result of exposure to the concepts for professional writing, midshipmen can expect:

- To enjoy, as a result of early exposure, an easier transition into professional writing,
- to experience decreased discontinuity and shock in transitioning from academia to a professional environment, and
- to understand “what makes good naval writing” prior to commissioning (SECNAV, 2005, p. 96). For instance, the midshipman who described her writing as “flowery” and lengthy had a more concrete idea of what type of writing was expected in the professional world after completing the tutorials.

In addition to the benefits described above, the tutorials are readily available. The tutorials we used in our research were tailored for content and brevity for the midshipmen. But these tutorials could easily be lengthened by the addition of extra tasks and learning objectives. Programmers can easily modify the tutorials by converting a Microsoft Word document into hyper-text markup language before uploading content to the Internet. The tutorials do not require any special hardware or software in order to run.

As we discussed in Chapter I, the tendency is for junior officers to subjectively learn professional writing skills from spotty mentorship and previously drafted correspondence. Providing training to midshipmen prior to commissioning breaks from this norm. By implementing this training, the Navy will provide future junior officers the necessary skills to identify “bad” writing when they check aboard their first command and provide them with the motivation to make a change. Also this training will give officers more confidence in crafting professional discourse, since they will have been exposed to *The Correspondence Manual* and *The Guide to Writing*.

B. RECOMMENDATIONS

“For naval writing to improve, you must make it improve.”

- DON Correspondence Manual (SECNAV, 2005, p. 96)

We recommend that the NETC mandate standardized writing training for midshipmen prior to commissioning. Again, the tendency is for officers to subjectively learn professional writing skills, and it is incumbent on Navy leadership to not only issue

directives on how to write professionally, but also to enforce those directives. As we stated earlier, the writing standards dictated in *The Correspondence Manual* and *The Guide to Writing* are generally not enforced. In addition, most commands do not make it mandatory for officers to read and adhere to the standards for plain-language writing contained in these texts. However, simply reading these texts will likely not result in officers internalizing the concepts contained within. As demonstrated in our research, concepts become more familiar to the midshipmen through practical application.

As previously stated, an officer's writing speaks to his/her professionalism, and that writing is often a form of competition. We also know that "[d]uty in the Fleet [...] requires an ability to write" (Shenk, 1997, p. 2). In light of writing's significance, we urge that the NETC devote the necessary resources to incorporate professional writing training into the curricula for midshipmen in officer accession programs. We should not leave to chance—through on-the-job training and/or possible graduate coursework—that naval officers receive industry-proven, professional writing training.

As stated in *The Correspondence Manual* and from our own experience, we know that it is easier for naval writers to perpetuate previous work than it is to create messages from scratch. In part, naval writers choose to continue modifying previous messages due to a lack of confidence in creating new ones. Training, like that which we administered to the midshipmen in our research, might provide officers the confidence necessary to challenge poor writing and produce "good" naval writing—as described by the SECNAV—in its stead. Exposing midshipmen to the concepts for professional writing will enable them to report to their first assignments with writing a part of their skill set.

In our online survey, we specifically asked: "Do you feel that correspondence training should be mandatory or optional for NROTC midshipmen?" In response, 18 of 18 midshipmen believed correspondence training should be mandatory. Though these midshipmen may not represent the entire population of midshipmen, it is safe to assume that many would agree that the NETC should mandate professional writing training.

“Stress clear writing, not just grammatical correctness, in military courses of study.”

- DON Correspondence Manual (SECNAV, 2005, p. 96)

Because of NPS’s expertise in the concepts for professional writing, we recommend that the NPS GSBPP partner with the NETC to assist in creating a distance-learning tutorial for professional writing. Our professors at the NPS stressed the importance of clear writing during our managerial communications course. Those same professors have introduced countless military officers to the concepts for professional writing. Though we introduced the midshipmen in our research to “bottom-line” and “high-impact” writing concepts that we learned at the NPS, the GSBPP could easily alter the titles of those concepts to be more synonymous with the SECNAV’s concepts for clear writing to include: “organized,” “natural,” “compact,” and “active” writing (SECNAV, 2005, pp. 97-120). Making minor modifications such as these to the training would directly follow the SECNAV’s guidance to “[m]ake [chapter three] part of writing improvement courses [...]” (SECNAV, 2005, p. 96).

For the NPS to extend educational training to officer accession programs would require minimal resources. The training in the form of interactive tutorials is already in the public domain and approved for unlimited distribution. More importantly, the training is internet-based and requires only that instructors create personal accounts for each student. In return for assisting the NETC in creating an online distance-learning program, the NPS will essentially be advertising its services to future Navy/Marine Corps officers. Early exposure to the NPS might lead officers to seek assignments at the NPS later in their careers. Finally, extending a distance-learning tutorial to officer accession programs would reaffirm the NPS’s commitment to provide unique, relevant, and value-added education to the Naval Service.

To the NETC, we recommend that it work with NROTC unit commanders to distribute a course of study that introduces midshipmen to the concepts of professional writing. The personal perspectives of unit commanders—derived from 20 or more years of active duty service—will add value to courses of study and provide midshipmen with unique insight on the importance of professional writing skills.

In the future, the NETC might create additional tutorials to address more specific types of military writing. For instance, the NETC could develop online tutorials to teach midshipmen how to write awards, memoranda, instructions, FITREPs, and evaluations. The NETC might partner directly with BUPERS to determine specifically how officers are to write FITREPs and evaluations. Exposure to these critical pieces of discourse would help to standardize what BUPERS receives from commands and ultimately includes in a Sailor's/marine's administrative records. We believe that concrete feedback from BUPERS on what selection boards look for in FITREPs and evaluations would greatly reduce the ambiguity associated with creating these types of messages. Similarly, standardized training on such writing would help to increase an officer's confidence and provide an impetus for the officer to challenge poor writing and not simply mimic previous examples.

“Whatever your role, don’t wait for the next person.”

- DON Correspondence Manual (SECNAV, 2005, p. 96)

Our final recommendation is that the results of our project be presented at the next Professors of Naval Science (PNS) Conference. At the PNS conference, commanding officers from each NROTC unit across the country meet annually to share best practices and ideas for improved curricula. During our visit to Marquette, the NROTC commanding officer suggested the PNS Conference as an ideal forum for introducing recommendations to curricula changes because the NETC takes very seriously the recommendations from the commanding officers.

When we initially contacted the commanding officer at Marquette about participating in our project's research, he shared that he was equally concerned with his midshipmen's lack of exposure to types of military writing. As a result, he was requiring his senior midshipmen to complete assignments in military writing. Here again, NETC-mandated training would eliminate commanding officers from having to create professional writing training from the ground up. In addition, NETC standardized training would allow for each commanding officer to provide his/her midshipmen with the same writing guidelines.

In summary, we recommend that the NETC mandate professional writing training for NROTC midshipmen. We also recommend that the NETC partner with the NPS and leverage its strengths and years of experience from educating officers in professional writing concepts. To build support for our recommendations, we suggest that the results of this project be presented to commanding officers of NROTC units throughout the country at the next annual PNS Conference.

C. IMPLICATIONS FOR FURTHER RESEARCH

Opportunities exist for further research into the idea of mandated professional writing training in the naval service. The three opportunities described below are not all-inclusive. We are sure other opportunities for research exist along similar research topics. First, researchers could undertake a more robust study of midshipmen comprehension of professional writing concepts to include multiple accession programs. Conducting research similar to ours, a researcher might expand the training to midshipmen at the Naval Academy, at multiple NROTC units, and officer candidates at the Officer Candidate School.

Second, researchers might try to determine which stage of an officer accession program is most beneficial to present to midshipmen professional writing training. We presented our training to midshipmen in the first semester of their senior year. But is this the ideal time to conduct the training and ease the transition from academic to professional writing? A similar question centers on how much training is required, on average, before an officer is likely to internalize the concepts for clear, professional writing? In other words, would midshipmen benefit from multiple exposures to the concepts?

Third, but not finally, researchers might pursue from NETC permission to conduct a pilot training program. The limited scope of a pilot program could provide researchers the opportunity to conduct the training and then track newly commissioned officers as they report to their first commands. Researchers could then follow up with officers to find out answers to research questions such as:

- Did the training, in fact, serve to ease the transition between discourse communities,

- do seniors and subordinates in the officer's chain-of-command perceive him/her to be a more professional writer,
- do the officers feel more confident in applying the concepts for professional writing outside the comforts of the accession programs and in their active duty assignments, and
- what changes might be incorporated into the training from the pilot program's lessons learned?

APPENDIX A SURVEY INSTRUMENT

Thank you for taking time to participate in this survey. Your responses will be used to help Naval Postgraduate School researchers quantify the effectiveness of current Navy writing initiatives and to help shape future improvements.

Your individual responses will not be used to evaluate your performance in the Marquette NROTC Program. Your responses will remain anonymous except to the authors, so we hope you will provide candid responses.

Midshipman (last name): _____

1. What is your age?
2. Do you have prior military service? If so, how many years?
3. In what academic year are you currently enrolled? Please circle.
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Super-senior
4. What is/are your major(s)? Minor(s)?

5. Please list your prior education, if applicable.

a. Technical certifications: _____

b. Associate's degree: _____

c. Previous bachelor's degree: _____

d. Graduate education courses: _____

6. What writing courses have you completed during your time at Marquette? (Please list and provide a short explanation.)

7. Before today, have you been exposed to any guidelines on clear writing? If so, where?

8. Have you previously been exposed to examples of military writing? If so, what kinds?

9. Please list any professional writing that you have personally drafted (i.e., memorandums, status reports, instruction manuals, recommendations, fitness reports, or evaluations)?

10. Have you referenced the SECNAVINST 5216.1D: *Department of the Navy Correspondence Manual* or *Guide to Naval Writing* in any previous writing tasks? Yes / No

11. Are the above publications readily available for you to use? Yes / No / Not Sure

APPENDIX B GROUP INTERVIEW QUESTIONNAIRE

1. Please explain, from your own perspective, the difference between academic and professional/technical writing?
2. What kind of writing do you expect to do when you're an Ensign? Do you feel prepared to do that type of writing? Explain why.
3. What difficulties did you encounter when revising the writing tutorial documents? What caused those difficulties?
4. Have you been tasked with any professional writing assignments in school, ROTC, or previous jobs? If so, please explain how you thought about that writing task and the process you used to complete the task.
5. Consider the following statement by a former commanding officer: "[w]riting is another way of competing... [a] lot of my impression of you is based upon what you write."⁴

What do you think that CO meant by that statement? Do you believe you have the writing skills to compete as an Ensign? Why or why not?
6. With this statement in mind, how might you use the content provided in the online writing tutorials to assist with future writing assignments as a naval officer?

⁴ Robert Shenk. (1997). The naval institute: Guide to naval writing. Annapolis, MD: The Naval Institute Press, p. 1.

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APPENDIX C RUBRIC FOR BOTTOM-LINE WRITING TASKS

(1 = lowest, 5 = highest)

Score	1	2	3	4	5
Task 1	Completely misinterpreted the email's bottom line and subject.	Correctly identified the email's <i>subject</i> – but not its bottom line – and placed it within the first three sentences of the revision.	Correctly identified the email's bottom line, but placed it near or at the end of the revision.	Correctly identified the email's purpose, but stated it in the second paragraph.	Correctly identified the email's purpose – its bottom line – and stated it within the first three sentences of the revised email.
Task 2	Completely misinterpreted the email's bottom line and subject, while beginning the email with background information.	Correctly identified and stated the email's <i>subject</i> first, while resisting the urge to provide background information.	Correctly identified the email's bottom line, but placed it near or at the end of the revision.	Correctly identified the email's bottom line, but precluded it with a paragraph of background information.	Correctly identified and stated the bottom line first, while resisting the urge to preface that bottom line with background information.
Task 3	Completely misinterpreted the email's bottom line and subject, while beginning the email with justification for the request.	Correctly identified the email's <i>subject</i> and stated it within the first three sentences of the revised email, while resisting the urge to preface the subject with justification for the request.	Correctly identified the email's bottom line, but prefaced the bottom line with more than one paragraph of justification for the request.	Correctly identified the email's bottom line, but prefaced the bottom line with a paragraph of justification for the request.	Correctly identified the email's bottom line and stated it within the first three sentences of the revised email, while resisting the urge to preface the bottom line with justification for the request.

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APPENDIX D RUBRIC FOR HIGH-IMPACT WRITING TASK

(1 = lowest, 5 = highest)

Score	1	2	3	4	5
Message Organization <i>Attention to the bottom line</i>	Completely misinterpreted the email's bottom line and subject.	Correctly identified the email's <i>subject</i> – but not its bottom line – and placed it within the first three sentences of the revision.	Correctly identified the email's bottom line, but placed it near or at the end of the revision.	Correctly identified the email's purpose, but stated it in the second paragraph.	Correctly identified the email's purpose – its bottom line – and stated it within the first three sentences of the revision.
Message Design <i>Use of white space, lists, and manageable paragraphs</i>	Used predominately unmanageable paragraphs and no lists.	Used mostly unmanageable paragraphs and no lists.	Used predominately manageable paragraphs.	Almost entirely divided the email into manageable paragraphs.	Effectively used lists and divided the email into manageable paragraphs.
Verbs <i>Attention to passive voice verbs</i>	Used predominately passive voice verbs.	Used mostly passive voice verbs.	Used predominately active verbs.	Almost entirely used active verbs.	Used active verbs throughout the revision.
Sentences <i>Attention to subject-verb-object word order and unnecessarily long sentences</i>	Used predominately sentences that violated subject-verb-object word order and guidelines for sentence length.	Mostly violated subject-verb-object word order and guidelines for sentence length.	Used predominately subject-verb-object word order and mostly avoided unnecessarily long sentences.	Almost entirely followed subject-verb-object word order and guidelines for sentence length.	Sentences followed subject-verb-object word order and avoided unnecessarily long sentences.
Language <i>Attention to abstract phrases</i>	Used predominately abstract language.	Used mostly abstract language.	Used predominately concrete language (i.e. three-four abstract phrases).	Almost entirely used concrete language (i.e. two abstract phrases).	Used concrete language by avoiding abstract phrases.

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APPENDIX E WRITING GUIDELINES FOLLOW-UP SURVEY

Please answer the following questions⁵:

1. Do you feel better prepared for future writing assignments as a result of the online tutorials you completed?
 - a. Yes
 - b. No

2. Do you feel that the correspondence training should be mandated or optional for NROTC Midshipmen?
 - a. Mandated
 - b. Optional

⁵ Survey created and recorded at <http://www.surveymonkey.com>, accessed 30 September 2008.

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APPENDIX F MIDSHIPMEN WRITTEN SUBMISSION SCORES⁶

(1 = lowest, 5 = highest)

Midshipman	Bottom-Line Task 1	Bottom-Line Task 2	Bottom-Line Task 3	High-Impact Task
1	5	-	-	3
2	5	4	5	2
3	5	-	5	4
4	5	4	2	3
5	5	-	5	4
6	-	-	-	-
7	5	-	-	1
8	5	3	5	2
9	-	-	-	2
10	5	-	3	3
11	5	5	5	2
12	5	-	5	3
13	5	5	5	3
14	5	-	-	3
15	5	5	5	3
16	5	3	5	3
17	2	4	5	4
18	5	4	3	-
19	5	5	5	4

⁶ A “-” denotes that we did not receive a submission.

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LIST OF REFERENCES

- Beaufort, A. (2000). Learning the trade: A social apprenticeship model for gaining writing expertise. *Written Communication*, 17(2), 185-223.
- Berkenkotter, C., Huckin, T. N., & Ackerman, J. (1991). Social context and socially constructed texts: The initiation of a graduate student into a writing research community. In C. Bazerman & J. Paradis (Eds.), *Textual dynamics of the professions* (pp. 191-215). Madison, WI: University of Wisconsin Press.
- Bever, T. G. (1973). Perception in thought and language. In J. Carroll & R. D. Freedle (Eds.), *Language comprehension and the acquisition of knowledge* (pp. 99-112). New York: John Wiley.
- Blyler, N. R., & Thralls, C. (1993). The social perspective and professional communication: Diversity and directions in research. In N. R. Blyler & C. Thralls (Eds.), *Professional communication: The social perspective* (pp. 3-34). Newbury Park, CA: Sage.
- Brandt, D. (1990). *Literacy as involvement: The acts of writers, readers, and texts*. Carbondale, IL: Southern Illinois University Press.
- Bruffee, K. A. (1984). Collaborative learning and the conversation of mankind. *College English*, 46(7), 635-652.
- Cain, B. E. (1988). *The basics of technical communicating*. Washington, DC: American Chemical Society.
- Carey, C. (2002). Gen. Thurman's impact on army writing. *Army*, 52(5), 12.
- Colucci, R. (1987). *An analysis of the financial implications of high-impact versus low-impact communications in the United States Navy* (Master's Thesis). Monterey, CA: Naval Postgraduate School.
- Daft, R. L. (1986). *Organizational theory and design*. St. Paul, MN: West Publishing Company.
- Doheney-Farina, S. (1989). A case study of one adult writing in academic and non-academic discourse communities. In C.B. Matelene (Ed.), *Worlds of writing: Teaching and learning in discourse communities of work* (pp. 17-42). New York: Random House.
- Driskill, L. (1989). Understanding the writing context in organizations. In M. Kogen (Ed.), *Writing in the business professions*. Urbana, IL: NCTE.

- Dulek, R., & Fielden, J. S. (1984). *Bottom-line business writing*. New Jersey: Prentice-Hall.
- Faigley, L. (1985). Nonacademic writing: The social perspective. In D. Goswami & L. Odell (Eds.), *Writing in nonacademic settings* (pp. 231-249). New York: Guilford.
- Freed, R. C., & Broadhead, G. J. (1987). Discourse communities, sacred texts, and institutional norms. *College Composition and Communication*, 38(2), 154-165.
- Hartley, J., & Trueman, M. (1985). A research strategy for text designers: The role of headings. *Instructional Science*, 14, 99-155.
- Kostelnick, C. (1988). A systematic approach to visual language in business communication. *Journal of Business Communication*, 25(3), 29-48.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd ed.). Chicago: University of Chicago Press.
- Keene, M. L. (1993). *Effective professional and technical writing*. Lexington, MA: Heath.
- Lutz, J. A. (1989). Writers in organizations and how they learned the image: Theory, research, and implications. In C. B. Matelene (Ed.), *Worlds of writing: Teaching and learning in discourse communities of work* (pp. 113-135). New York: Random House.
- Marquette University NROTC Midshipmen. (2008, September 8). [Group interviews with researchers].
- Miller, C. R., & Selzer, J. (1985). Special topics of argument in engineering reports. In L. Odell & D. Goswami (Eds.), *Writing in nonacademic settings* (pp. 427-450). New York: The Guilford Press.
- Miller, G. A. (1956). The magical number seven, plus or minus two. *Psychological Review*, 63, 81-97.
- Miller, G. A. (1970). *The psychology of communication*. Harmondsworth, UK: Penguin.
- Myers, G. (1985). The social construction of two biologists' proposals. *Written Communication*, 2(3), 219-245.

- Naval Education and Training Command. (n.d.). *NROTC-Program Mission*. Retrieved 13 October 2008, from the Naval Reserve Officer Training Program Website: https://www.nrotc.navy.mil/program_mission.cfm
- Naval Media Center. (n.d.). *All hands—Guidelines*. Retrieved July 15, 2008, from the Naval Media Center Website: <http://www.mediacen.navy.mil/pubs/allhands/guidelines.htm#S>
- Odell, L. & Goswami, D. (1982). Writing in a non-academic setting. *Research in the Teaching of English*, 16(3), 201-223.
- Olsen, L. A., & Huckin, T. N. (1991). *Technical writing and professional communication*. New York: McGraw-Hill.
- Olsen, L. (1993). Research on discourse communities: An overview. In R. Spilka (Ed.), *Writing in the workplace: New research perspectives* (pp. 181-195). Carbondale, IL: Southern Illinois University Press.
- Palmeri, J. (2004). When discourses collide: A case study of interprofessional collaborative writing in a medically oriented law firm. *Journal of Business Communication*, 41(1), 37-65.
- Schreiber, E. J. (1993). From academic writing to job-related writing: Achieving a smooth transition. *IEEE Transactions on Professional Communication*, 36(4), 178-184.
- Secretary of the Navy. (2005). *Department of the Navy correspondence manual* (Secretary of the Navy Instruction 5216.5D). Washington, DC: SECNAV/OPNAV Directives Control Office.
- Shenk, R. (1997). *The naval institute: Guide to naval writing*. Annapolis, MD: The Naval Institute Press.
- Suchan, J., & Colucci, R. (1989). An analysis of communication efficiency between high-impact and bureaucratic written communication. *Management Communication Quarterly*, 2(4), 454-484.
- Suchan, J., & Dulek, R. (1990). A reassessment of clarity in written managerial communications. *Management Communication Quarterly*, 4(1), 87-99.
- Tinker, M. (1963). *Legibility of print*. Ames, IA: Iowa State University Press.
- Wright, P. (1968). Using tabulated information. *Ergonomics*, 11, 331-343.

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