Association for Business Communication

Southwestern United States

2008 Refereed Proceedings
March 5-8, 2008
Houston, Texas

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Editor's Note

Welcome to the 35th meeting of the Association for Business Communication-Southwestern United States. Many thanks are given to the planners, program chairs, reviewers, presenters, and other contributors responsible for making this a great conference. Special thanks go to Ann Wilson, Vice President and Program Chair of ABC-SWUS, who has assembled a great program that will appeal to business communicators.

The program this year includes 27 presentations by 47 authors from institutions in Arkansas, California, Canada, Illinois, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, and Texas. Eleven of the papers are included in this proceeding.

Each year completed papers that are submitted for the program are considered for the Irwin/McGraw Hill Distinguished Paper Award. This year's distinguished paper was awarded to **Debbie DuFrene, Carol Lehman, and Judith Biss.** They will present their paper on Thursday at 3:30 p.m., immediately before the ABC-SWUS business meeting. Congratulations to Debbie, Carol, and Judi.

Congratulations are also in order for **Bobbye Davis**, **Southeastern Louisiana University**, who is being awarded the 2008 Prentice-Hall Outstanding Educator Award. In these proceedings, you will also find information on previous program chairpersons, Distinguished Paper Award recipients, and recipients of the Outstanding Research and Outstanding Teacher awards.

You will find in this proceedings a call for papers for next year that includes the dates for both presentation proposals (September 15) and the proceedings (January 15) of the accepted presentations.

I hope this conference becomes a memory of professional enhancement and great times with colleagues as we share our collective knowledge and research.

Susan Evans Jennings
Editor

2007 – 2008 OFFICERS

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CONGRATULATIONS!
Recipient of the 2008 Prentice Hall Outstanding Educator Award

Bobbye J. Davis, Southeastern Louisiana University

CONGRATULATIONS!
Recipients of the 2008 McGraw-Hill/Irwin Distinguished Paper Award
Receptivity and Response of Students to an Electronic Textbook

Debbie D. DuFrene, Stephen F. Austin State University
Carol M. Lehman, Mississippi State University
Judith L. Biss, Stephen F. Austin State University

Conference Schedule

March 6, 2008
(Thursday)

8:30 a.m. – 10:00 a.m.

SESSION A **Welcome by ABC-SWUS President Carolyn Ashe**

The Business Communication Course:
Content Development, Delivery & Transfer

Session Chair: **Ann Wilson, Stephen F. Austin State University**

What Do Students Retain? A Case Study of Course Content Transfer
Geraldine Hynes, Sam Houston State University
Robert Stretcher, Sam Houston State University
Bala Maniam, Sam Houston State University

Investigating the Business Communication Class: Teaching Resources and the Learning Environment
Marsha L. Bayless, Stephen F. Austin State University
Betty S. Johnson, Stephen F. Austin State University

Business Communication Across the Curriculum: What We Can Learn From Other Disciplines
Joe Hutchison, University of Central Oklahoma
NaRita Anderson, University of Central Oklahoma
William Wardrope, University of Central Oklahoma

Special Undergraduate Student Presentation
Stretching Across Continents: The Business and Cultural Environment of Turkey
Mert Varol, University of Central Oklahoma
Cagatay Mitil, Universityof Central Oklahoma
William Wardrope, University of Central Oklahoma

10:30 a.m. – Noon

SESSION A **Communicating in the Corporate Environment**

Session Chair: **Debbie DuFrene, Stephen F. Austin State University**

Corporate Executives' Thoughts on Business Communication
Tim Clipson, Stephen F. Austin State University

The Corporate Website as a Recruiting Tool: Best Practices at Ten Top Companies
Randall Waller, Baylor University
Debra Burleson, Baylor University

Greening Business Communication
Patrick McHugh, University of California—Santa Barbara

1:30 p.m. – 3:00 p.m.

SESSION A **Communicating with Technology**

Session Chair: **Marsha L. Bayless, Stephen F. Austin State University**

Using Camtasia Software to Create an Instructional Product
Marcel Robles, Eastern Kentucky University

Text Messaging Acronyms and Shorthand – What Do Our Students Know and Think?
Betty Kleen, Nicholls State University
Shari Lawrence, Nicholls State University

The Perils of I-Messaging
Faridah Awang, Eastern Kentucky University

Job Application Letters: A Comparison of Web Material and Textbook Material
Harold A. Hurry, Sam Houston State University

3:00 p.m. - 3:30 p.m.

FBD Coffee Break

Hosted by the Officers of: Association for Business Information Systems
Southwest Academy of Management
Southwestern Finance Association

Please make plans to visit the exhibits to receive information on the latest books and newest education technologies.

◆

Please let exhibitors know how much we appreciate their presence and continued support!

3:30 p.m.- 5:00 p.m.

SESSION A **Special Session**

Session Chair: **Carolyn Ashe, ABC-SWUS President**
University of Houston—Downtown

Recipient of the 2008 McGraw-Hill/Irwin Distinguished Paper Award -

Receptivity and Response of Students to an Electronic Textbook
Debbie D. DuFrene, Stephen F. Austin State University
Carol M. Lehman, Mississippi State University
Judith L. Biss, Stephen F. Austin State University

ABC-SWUS Business Meeting
Carolyn Ashe, President

ABC in Action
Roger Conaway, ABC President
Betty S. Johnson, ABC Executive Director

5:00 p.m.- 6:30 p.m.

Swap-meet First FBD Swap-meet

March 7, 2008
(Friday)

8:30 a.m.- 10:00 a.m.

SESSION A Pedagogical Approaches and Students' Perceptions

Session Chair: Harold A. Hurry, Sam Houston State University

Students' Preferred Means of Communication: Convenience vs. Effectiveness
Marguerite Shane Joyce, Sam Houston State University

Managerial Communication Techniques
Carolyn Ashe, University of Houston—Downtown
Chynette Nealy, University of Houston—Downtown

Using Storytelling to Improve Students' Professional Writing Skills
Gwendolyn Olivier, University of Central Oklahoma
Rozilyn Miller, University of Central Oklahoma
William Wardrope, University of Central Oklahoma

Can You Digg Wikis, Blogs, and Tagging? New Communication Tools Defined and Explained
Sandra Bevill, Arkansas State University
Georgia Hale, University of Arkansas at Fort Smith

10:00 a.m. - 10:30 a.m.

FBD Coffee Break

Hosted by the Officers of: Industrial Distribution Educators Association
Southwest Academy of Management

Please make plans to visit the exhibits to receive information on the latest books and newest education technologies.

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10:30 a.m.- Noon

SESSION A **Business English**

Session Chair: **Faridah Awang, Eastern Kentucky University**

Punctuation Rules! A Case Study of the Rogers-Bell Aliant Million-Dollar Comma Dispute
Carolyn Meyer, Ryerson University

Addressing "Bad English" in International Business Communication
Yong-Kang Wei, University of Texas—Brownsville

Cultural Transience: African American MBA Student Adjustment to Business English
John Krajicek, Texas A&M University
Dave Louis, Texas A&M University

Taking the Long View – Reflections on Business Communication Guidelines, 1900-1925
Frances K. Griffin, Oklahoma State University

1:30 p.m.- 3:00 p.m.

SESSION A **Emerging Processes in Communication**

Session Chair **Betty Kleen, Nicholls State University**

Generational Differences: How Do I Say . . . ?
Betty S. Johnson, Stephen F. Austin State University
Ann Wilson, Stephen F. Austin State University

The Legal and Ethical Implications of Metadata
Frank Cavaliere, Lamar University
Cynthia Barnes, Lamar University
Purnendu Mandal, Lamar University

Do College Students Understand the Importance of Ethics?
Carol Wright, Stephen F. Austin State University

Can Emotional Intelligence Assessments Provide Insights for Improving the Quality of Student Writing?
Ashley Bennington, Texas A&M University–Kingsville

3:00 p.m. – 3:30 p.m.

FBD Coffee Break

Hosted by the Officers of: Southwest Case Research Association
Decision Sciences Institute

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3:30 p.m.- 5:00 p.m.

SESSION A **Research**

Session Chair: **Marcel Robles, Eastern Kentucky University**

Student Satisfaction with Collaborative Writing (CW) Experience
Kristine Tarshis, Saint Xavier University

Using You-Attitude in Grant Proposal Development
Paul Tuttle, Winston-Salem State University

Comparing Mailed Survey Methods: Response Rate, Cost, and Response Time
Susan E. Jennings, Stephen F. Austin State University
Ann Wilson, Stephen F. Austin State University

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Future National and Regional Meetings

2008 – 2009

Association for Business Communication-Southeastern United States
March 13-15, 2008
Columbia, South Carolina

Association for Business Communication- Asia and Pacific Rim
March 27-28, 2008
Singapore

Association for Business Communication 72nd Annual Convention
October 30-November 1, 2008
Lake Tahoe, Nevada

Association for Business Communication-Southwestern United States
February 24-28, 2009
Oklahoma City, Oklahoma
Program Chair: Marcel Robles

ABC-SWUS Program Chairpersons 1973 - Present

2008-2009	Marcel Robles
2007-2008	Ann Wilson
2006-2007	Carolyn Ashe
2005-2006	Harold A. Hurry
2004-2005	Lana W. Carnes
2003-2004	Marsha L. Bayless
2002-2003	Betty A. Kleen
2001-2002	William Sharbrough
2000-2001	Carol Lehman
1999-2000	William P. Galle, Jr.
1998-1999	Anita Bednar
1997-1998	Timothy W. Clipson
1996-1997	Debbie D. Dufrene
1995-1996	William J. Wardrope
1994-1995	Roger N. Conaway
1993-1994	Donna W. Luse
1992-1993	F. Stanford Wayne
1991-1992	Beverly H. Nelson
1990-1991	Marian Crawford
1989-1990	Marlin C. Young
1988-1989	Sallye Benoit
1987-1988	Tom Means
1986-1987	Lamar N. Reinsch, Jr.
1985-1986	Sara Hart
1984-1985	Betty S. Johnson
1983-1984	Larry R. Smeltzer
1982-1983	Daniel Cochran
1981-1982	Nancy Darsey
1980-1981	John M. Penrose
1979-1980	R. Lynn Johnson
1978-1979	Raymond V. Lesikar
1977-1978	Jack D. Eure
1976-1977	Phil Lewis
1975-1976	Dale Level
1974-1975	Bette Anne Stead
1973-1974	Sam J. Bruno

First Call for Papers

Association for Business Communication
Southwestern United States
Oklahoma City, Oklahoma
February 24-28, 2009

You are invited to submit a proposal or paper for presentation at the 2009 ABC-SWUS conference in Oklahoma City. Research papers or position papers related to the following areas are encouraged:

Communication Technology	Technology and Education
Innovative Instructional Methods	Business Education Issues
International Business Communication	Paradigm Shifts in Communication
Training and Development/Consulting	Interpersonal Communication
Nonverbal Communication	Executive/Managerial Communication
Legal and Ethical Communication Issues	Organizational Communication

- Papers or proposals should include: a statement of the problem or purpose, methodology section (if applicable), findings (as available), a summary, implications for education and/or business, and a bibliography. If you are submitting a proposal only, it should contain 750 to 1500 words.

- Submitted papers should not have been previously presented or published or be under consideration or accepted for presentation elsewhere.

- Personal and institutional identification should be removed from the body of the paper. Identify yourself and your institution only on the cover page. Submissions will be anonymously reviewed.

- A cover page is required with the title of the paper and identifying information for each author: name, institutional affiliation, address, phone and fax numbers, and email address.

- For your research to be considered for the Richard D. Irwin Distinguished Paper Award, you must submit a completed paper rather than a proposal.

- All authors and co-authors are expected to join ABC-SWUS and pre-register for the FBD meeting.

- Submissions:
    - Must use Microsoft Word
    - Presentation proposals must be received by September 15, 2008 **(accepted presentations proceedings deadline will be January 15, 2009)**.

Send to Program Chair Marcel Robles
Email Address: Marcel.Robles@eku.edu
Phone Number: 859.622.1117

Prentice-Hall and Thomson Learning Outstanding Educator Awards

For

The Association for Business Communication
Southwestern United States

To be eligible for the award, recipients must have received the ABC-SWUS Outstanding Educator Award, must not be a previous recipient of either the Prentice-Hall or Thomson learning awards, must be a member of the Association for Business Communication, and must teach in the business communication discipline. This top tier ABC-SWUS award began in 2001 to honor outstanding educators in ABC-SWUS who were already recognized by our association. The award was sponsored by Prentice-Hall in 2001 and 2002, and by Thomson Learning in 2003, 2004, 2005, 2006, and 2007. The award winner must also have been recently active in the association as evidenced by attendance at recent ABC-SWUS conferences. The award winners are listed below:

2008	Bobbye J. Davis, Southeastern Louisiana University
2007	Betty A. Kleen, Nicholls State University
2006	William Wardrope, University of Central Oklahoma
2005	Betty S. Johnson, Stephen F. Austin State University
2004	Marsha L. Bayless, Stephen F. Austin State University
2003	Lillian H. Chaney, University of Memphis
2002	Debbie DuFrene, Stephen F. Austin State University
2001	Anita Bednar, University of Central Oklahoma

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Outstanding Researcher and Teacher Awards

These awards were developed and first awarded in 1992 to recognize the accomplishments of the region's members. Nominated candidates are evaluated by a panel of previous award winners. No awards were given in 1998, 2001, 2003, or 2007. The association began alternating the awards every other year in 2000 between researcher and teacher. The recipients below each received a plaque and award of $100.

2006	Janna P. Vice, Outstanding Researcher Award
2005	Bobbye Davis, Outstanding Teacher Award
2004	Marcel Robles, Outstanding Teacher Award
2004	William Wardrope, Outstanding Researcher Award
2002	Lillian H. Chaney, Outstanding Researcher Award
2002	Jeré Littlejohn, Outstanding Teacher Award
2000	William Sharbrough, Outstanding Researcher Award
1999	Betty Kleen, Outstanding Researcher Award
1999	Robert Olney, Outstanding Teacher Award
1999	William Wardrope, Outstanding Teacher Award
1997	Al Williams, Outstanding Teacher Award
1996	Betty S. Johnson, Outstanding Researcher Award
1995	Marsha L. Bayless, Outstanding Researcher Award
1995	Anita Bednar, Outstanding Teacher Award
1994	Nelda Spinks, Outstanding Teacher Award
1993	Timothy W. Clipson, Outstanding Teacher Award
1993	F. Stanford Wayne, Outstanding Researcher Award
1992	Debbie D. DuFrene, Outstanding Researcher Award
1992	Beverly H. Nelson, Outstanding Teacher Award

The Association for Business Communication
Southwestern United States

Irwin-McGraw Hill Distinguished Paper Award Recipients

2008 Debbie D. DuFrene, Carol M. Lehman, and Judith L. Biss
Receptivity and Response of Students to an Electronic Textbook

2007 William J. Wardrope and Roger N. Conaway
Readability and Cultural Distinctiveness of Executives' Letters Found in the Annual Reports of Latin American Companies

2006 Janna P. Vice and Lana W. Carnes
Professional Opportunities for Business Communication Students That Go Beyond the Course Grade

2005 Lillian H. Chaney, Catherine G. Green, and Janet T. Cherry
Trainers' Perceptions of Distracting or Annoying Behaviors of Corporate Trainers

2004 Patricia Borstorff and Brandy Logan
Argumentativeness and Verbal Aggressivenes: Organizational Life, Gender, and Ethnicity.

2003 Ruth A. Miller and Donna W. Luce
The Most Important Written, Oral, and Interpersonal Communication Skills Needed by Information Systems Staff During the Systems Development Process

2002 Roger N. Conaway and William Wardrope
Communication in Latin America: An Analysis of Guatemalan Business Letters

2001 Annette N. Shelby and N. Lamar Reinsch Jr.
Strategies of Nonprofessional Advocates: A Study of Letters to a Senator

2000 Donna R. Everett and Richard A. Drapeau
A Comparison of Student Achievement in the Business Communication Course When Taught in Two Distance Learning Environments

1999 Susan Plutsky and Barbara Wilson
Study to Validate Prerequisites in Business Communication for Student Success

1998 Jose R. Goris, Bobby C. Vaught, and John D. Pettit Jr.
Inquiry into the Relationship Between the Job Characteristics Model and Communication: An Empirical Study Using Moderated Progression Analysis

1996 Beverly Little, J. R. McLaurin, Robert Taylor, and Dave Snyder
Are Men Really from Mars and Women from Venus? Perhaps We're All from Earth After All

1995 Bolanie A. Olaniran, Grant T. Savage, and Ritch L. Sorenson
Teaching Computer-mediated Communication in the Classroom: Using Experimental and Experiential Methods to Maximize Learning

1994 James R. McLaurin and Robert R. Taylor
Communication and its Predictability of Managerial Performance: A Discriminant Analysis

1993 Mona J. Casady and F. Stanford Wayne
Employment Ads of Major United States Newspapers

1992 Betty S. Johnson and Nancy J. Wilmeth
The Legal Implications of Correspondence Authorship

1991 Rod Blackwell, Jane H. Stanford, and John D. Pettit Jr.
Measuring a Formal Process Model of Communication Taught in a University Business Program: An Empirical Study

2008 McGraw-Hill/Irwin Distinguished Paper

Receptivity and Response of Students to an Electronic Textbook

Debbie D. DuFrene, Stephen F. Austin State University
Carol M. Lehman, Mississippi State University
Judith L. Biss, Stephen F. Austin State University

Abstract

While electronic textbooks are becoming more popular due to technology advances and rising textbook costs, their effectiveness as instructional tools has not been well established. In the current study of 43 business communication students' response to an ebook, students generally did not report user difficulties or slow download time. Students reported using the ebook most often to scan or read assigned content selectively, with limited use of other features. Most found the ebook to be no more difficult to read than print texts, and nearly half found the ebook more convenient. The majority believed the format of the textbook (ebook vs. print) did not affect grades earned. Most students preferred a choice in the purchase of an ebook or print textbook.

Introduction

The textbook as we know it is undergoing a rapid metamorphosis. The heavy paper text is giving way to a computer-based ebook that offers various advantages while posing some definite challenges. While ebooks are becoming more readily available, research is needed about how students use such products and their attitudes toward them.

Purpose

This research was undertaken to determine how business communication students used a commercially available electronic textbook as their course text and their attitudes about their ebook experience.

Literature Review

The movement toward ebooks over the last decade has been fueled not only by the ready availability of the technology to deliver varied content online but also by the rising cost of traditional textbooks. A 2005 report by the U.S. Government Accountability Office estimated that over the previous two decades, college textbook prices increased at twice the rate of inflation (U.S. Government Accountability Office, 2005). Some government

officials see high textbook prices as a barrier to higher education for lower income students (Dervarics, 2007).

Reasons for High Textbook Prices

Several reasons can be cited for the precipitous climb in textbook prices in the last two decades. Changes in the characteristics of textbook products have driven up costs. Current textbooks offer much more eye appeal than in the past, with more color, images, and photographs—elements that add to production cost. Furthermore, increased and expanded electronic supplements are costly for publishers to develop, produce, and maintain. The release of frequent new editions has also been cited as contributing to the cost of textbooks; publishers' critics deny the need to produce frequent revisions, which render used copies of older editions useless. The practice of bundling texts with various kinds of paper and electronic supplements is also cited as unnecessarily adding to the price students must pay for textbooks (Kingsbury & Galloway, 2006).

Other major contributors to the cost of new textbooks are the increased efficiency in the used book market, which allows used books from around the world to be traded handily (U.S. Government Accountability Office, 2005) and widespread illegal copying of books, especially in some countries that impose no or minimal penalties for doing so (Mooney, 2006). Publishers must therefore charge enough for new books to recoup their investment in the first year following an edition's release, as they earn no profit on the used books that circle the globe for resell in the subsequent life of the text edition nor from illegal copies that are made and sold.

Ebooks Gain in Popularity

In considering ways to keep text costs low for students, many instructors have looked to the ebook concept as a solution. While commercially available ebooks carry a cost to students, it is typically considerably less than for the corresponding print text, averaging 45 percent less than hardcopy versions (Foster & Read, 2006). Some developmental costs of a text, however, are fixed; so while paper, printing, and physical distribution costs are eliminated, costs for commitment of time, knowledge, expertise, and editorial control are still incurred. Ebook purchasers pay not only for the information the text provides but also for a system of learning that incorporates objectives, content, reinforcement, assessment, and resources to achieve course goals. In seeking to eliminate all or most text costs, some instructors have turned to "freely available" Internet sources.

Some authors make their works available online for free using open resource licensing. Additionally, wiki-style websites allow multiple users to easily add, remove, or edit content. Editorial control of such sites varies widely, so instructors who use these types of sources bear the responsibility of assuring accuracy before assigning content to students. Furthermore, copyright infringement is often present in these works, which poses a moral obligation on the instructor to model legal compliance to students. "Freely

available" sources also suffer from the here today, gone tomorrow problem (Buczynski, 2006).

Instructors typically consider several factors in their text choice, whether print or electronic. They require content that is current and objective and copy that is correct and free from errors. Instructors want texts that cover the topics their courses address and that are easy to read and understand, without being "watered down." Effective design is also a consideration, with appropriate visuals, models, and diagrams that aid in comprehension, retention, and appeal. Instructors want text coverage that challenges students to think critically, evaluate effectively, and reach unbiased, well-reasoned conclusions (Stansfield, 2006). A more recent requirement of many instructors, as it has become available from publishers, is a text that is customizable in its content and features (Buckzynski, 2006).

Many students today would prefer to have no text, or at least not one that they have to purchase. An increasing number of students are of necessity or by preference choosing to go without textbooks (Buczynski, 2006). If a purchase is necessary, students typically feel it should be only a few dollars. Students desire a text that is brief, easy to read, and addresses information actually covered in class. Students also prefer text material that can be accessed in a number of ways and on a variety of devices, with little regard for the legalities of sharing (Ishizuka, 2007).

Ebook Usage by Students

Early ebook offerings over the last 10 years typically met with little success, as noted in the recent *ComputerWorld* naming of ebooks as one of "The 21 Biggest Technology Flops" (Haskin, 2007). The article refers primarily to non-academic ebook offerings designed to be downloaded and "conveniently" read on a handheld reader. The lack of standardization and incompatibility of electronic readers and article formats are cited as major limitations, as is the awkwardness of the devices. While many people still prefer the comfortable, reassuring feel of paper, technology-savvy readers appreciate the capability to download ebooks to a portable computer or handheld device such as a PDA, Smartphone, or ebook reader (Johnson, 2007). Some forecast that the iPhone could very well provide the impetus toward digital reading, and that in a short time, downloadable ebooks will be sold and read on the device (Reid, 2007).

Ebooks must be carefully designed if they are to work effectively to produce student learning. Fundamentally, they should be more than the presentation of text on screen. The computer can offer features that print books cannot (O'Byrne, 2007). An entire textbook can be digitally searched, and realistic simulations can be offered (Kingsbury & Galloway, 2006). Text, sound, images, video, and animation can be combined in an endless array of combinations, and information can be connected to other related pages or external documents (Warlick, 2004). An ebook can be an interactive learning experience, tailored to the needs and interests of the student (Wright, 2007). Ebook content can also be updated as new information becomes available and distributed to

students on a variety of portable devices (Barack, 2006). But for all its unique advantages, an ebook will not succeed if students will not use it.

Because the availability of ebooks is limited, student use of ebooks has not yet been widely studied. Saimbert and Smith (2005) found that patron acceptance to library-held ebooks was low, but it was increasing over time. Hernon, Hopper, Leach, Saunders, and Zhang (2007) studied the use of ebooks by students in three subject areas. The use of library-held ebooks by undergraduate students in economics, literature, and nursing was observed, and students were also surveyed about their experiences. Encouragement of faculty was found to be the major factor in whether students made use of available ebooks. Research also showed that when visiting an ebook, students did not want to read it entirely and were very likely to browse or scan content and skip around, rather than read entire passages. Printing was used by many as a way to minimize online reading. While online annotation was possible, most students preferred print copy that they could mark up with pencil or marker.

Methodology

Forty-three students in two face-to-face classes at a public university used the *Business Communication, 15th edition* (Lehman & DuFrene, 2008) ebook during a summer 2007 undergraduate business communication course. Each class met daily for 90 minutes during a five-week period. Although printed copies of the new edition text were available to students wishing to purchase them, a technical release delay in the ebook resulted in the publisher agreeing to provide free access codes to it for all students. The access codes were available to students by the end of the first week of the five-week course. The instructor in the study conducted the course using the ebook prior to attending a later-offered publisher's standardized technology training session, which included instruction on the use of the ebook.

Given the rapid pace of summer school, several chapters had been covered before the ebook codes were available. Therefore, the students relied primarily on the PowerPoint slides provided with the text to supplement the instructor's lectures. After emailing a publisher provided ebook code to each student, the instructor scheduled a session in a computer lab to assist students in registering and accessing the ebook study tools. All students were able to register successfully to access the ebook during this lab session. The instructor then used a computer projection system to demonstrate the ebook and its study tools. Students had immediate hands-on opportunity to access chapter content, e-lecture, pre- and post-tests, and other learning tools. Students registered during this lab time, asked questions, and practiced with the tools. On at least two other occasions, the instructor reviewed the ebook study tools in the classroom upon request of several students who had difficulty navigating through the ebook content.

Throughout the course, the instructor requested regular oral feedback from students on the use of the ebook. After the initial learning curve, most seemed comfortable in accessing the ebook; however, some students chose to purchase a print copy of the textbook although it was not required. At the end of the course, the instructor

administered an in-class survey to students on the use of the ebook. Students were encouraged to share their personal experience in using the book as their responses were important for instructional improvement and future product development.

Findings

At the end of the course, all 43 enrolled students completed the in-class survey consisting of 17 questions related to the students' use of and attitude toward the ebook. Of the 43 students completing the survey, 94 percent indicated that the instructor's initial explanation for using the ebook was adequate. In a question regarding the degree of ease in using the ebook, 14 percent indicated that it was difficult to use; however, the majority, 63 percent, felt that it was somewhat easy to use. The remaining 23 percent noted it was very easy to use; these were likely students with higher levels of computer proficiency.

Over the course of the approximate four weeks the ebook was available to them, 67 percent of the students said they accessed the ebook outside of class six to nine times. Seven percent accessed it more than 10 times, but surprisingly, 25 percent accessed it only 1-3 times or not at all. Those students who did not access the ebook may include the 16 percent of students who purchased the traditional printed copy of the textbook. Approximately 30 percent of those surveyed said they read the chapter information in the ebook to supplement lectures. Another 50 percent indicated using the ebook only on occasion to supplement lectures. Approximately 20 percent of the students never used chapters in the ebook to supplement lectures. Again, this percent may have included the 16 percent of students who were using the traditional print textbook. Interestingly enough, about four percent of the students responded that they did not use either form of the book.

Students were asked to identify the specific ways they used the ebook and to rank the items, with a ranking of 1 assigned to the most frequently used method. Figure 1 summarizes the frequency of the reported uses.

As shown, most students used the ebook to browse or scan assigned content or to read content selectively. About one third of students said they printed content, and somewhat less reported reading assigned content completely and downloading content for preparing study notes. As shown, only 15 percent indicated that they used "other" ebook features which included tools such as chapter reviews, online quizzes and flashcards, online tests, and activities for homework assignments. However, all who indicated these other uses rated them as the most used method.

Figure 1
Patterns of Ebook Usage

Use of Ebook	Percent That Used	Average Frequency of Use Ranking
Browsed and scanned assigned content	77	1.57
Read content selectively	63	2.06
Printed content	33	2.11
Read assigned content completely	30	3.25
Downloaded content for insertion into Word or other software for study notes	28	2.86
Searched content by keywords	20	4.00
Annotated content by inserting notes, hyperlinking, etc.	15	2.50
Other	15	1.00

Nineteen percent of those surveyed reported printing two or more chapters of the ebook; but within this group of students, 40 percent printed only a portion of the chapters, and 36 percent printed chapter activities and applications assigned by the instructor. Only one student reported printing an entire chapter. Sixty-five percent of the students said they did not print any portion of the ebook.

Students rated the ease of reading chapter content online compared to reading a traditional print textbook, with 7 percent reporting that the ebook was much more difficult. Another 37 percent said they found it somewhat more difficult to read the ebook, and 37 percent said the reading was at about the same level of difficulty as when reading a traditional print textbook. Another 18 percent found it easier or much easier to read. However, in response to a question on the convenience of an ebook, nearly 50 percent found it more convenient than the traditional print textbook. Fewer than 30 percent said the ebook was less convenient, and 23 percent said the convenience was about the same.

Students were asked about their performance on exams and assignments based on use of the ebook versus the print textbook. Only 9 percent believed they would have earned lower grades on exams had they used a print textbook, and 21 percent expected that their exam grades would have been better had they used a print textbook. Seventy percent of the students stated they expected their exam grades would have been the same regardless of the use of the print textbook or the ebook. In reflecting on graded assignments, 76 percent of the students believed that grades on assignments would have been the same regardless of the use of a traditional print textbook or ebook. Four

percent believed that they would have had lower grades on assignments had they used a print textbook, and 20 percent felt they would have had better grades on assignments had they used a print textbook.

When asked their opinion about the required textbook medium for a course, students indicated that they preferred a choice in the purchase of an ebook or print textbook, as shown in Figure 2.

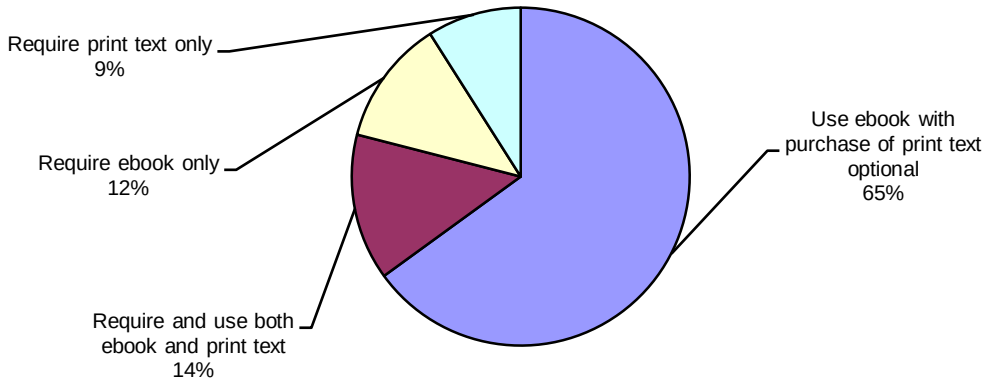

Figure 2
Preferences for Print Versus Ebook Formats

Most students preferred the situation of having an ebook with the option of purchasing a print text, while a small percentage still preferred only a print text. When asked about ease of use of their ebook, 80 percent of students found the layout and arrangement of the ebook made it moderately easy or quite easy to use. Only 21 percent felt that it was moderately difficult or awkward to use, and no students found it quite difficult or awkward to use. In terms of the download time for images, 85 percent found the wait time was relatively short or quite short.

Students were also asked to indicate their usage and perceived value of the ebook and specific study tools available with the technology package. Students' perceived value was assessed using a three-point Likert scale that ranged from "no value" (score of 1) to "much value" (score of 3). Results are shown in Figure 3:

Figure 3
Usage and Perceived Value of Various Online Tools
(Responses in Percents)

Online Tool	Used	No Value	Some Value	Much Value	Mean Value
PowerPoint slides	98	0	27	73	2.67
Ebook	88	3	63	34	2.32
Pretest	42	5	39	56	2.50
Posttest	33	7	36	57	2.50
Quizbowl game	30	15	46	38	2.23
Crossword puzzles	23	10	80	10	2.00
Voice narrated e-lectures	21	11	44	44	2.33
Vocabulary flashcards	21	22	44	33	2.11

As shown, the PowerPoint slides and the ebook were the most used tools, followed distantly by the pretest. The tools rated most useful were the PowerPoint slides, the pretest, and the posttest; voice narrated e-lectures and the ebook were rated somewhat lower in value. Although voice narrated slides, the quizbowl game, crossword puzzles, and vocabulary flashcards were each used by a minority of students, most who used them indicated that they had "some value" or "much value."

As with most surveys, the solicited written comments were interesting and reflected a wide range of opinions about the use of the ebook. The following positive comments on the use of the ebook were typical of those received:

"It's more convenient."
"There's no need to carry a heavy book."
"The ebook is much less expensive."
"The online tools are useful study tools."

The negative comments received are best summarized by the following:

> "The ebook is hard to get used to."
> "[The ebook is] hard to access, and some people don't have easy access to the internet."
> "When the internet is down there's no ebook."
> "It is hard to read, hard to find a certain page without scrolling through the chapter, and difficult to find some of the features in a timely manner."

Summary

The growing popularity of ebooks has resulted from both advances in technology and the rising cost of traditional textbooks. Instructors typically have the same expectations for ebooks that they have for print texts: accurate, complete, easy-to-read content that enhances students' critical-thinking skills; effective instructional design; and customizable content and features. Students typically prefer to have no textbook or an inexpensive one that is brief and easy to read, includes material covered in class, and is accessible through a variety of means. In addition to providing what good print texts provide, an effective ebook can provide media-rich, dynamic, and interactive features and the ability to download content to portable devices.

Limited research related to ebooks indicates low but increasing acceptance of ebooks. Previous research has shown that ebook users typically scan rather than carefully read online pages, which was corroborated in this present study. While other studies reveal that students often print pages to minimize online reading and allow for written annotations, this finding was not supported by the current study. Faculty encouragement has been shown in this study and others to be a major factor affecting students' use of ebooks. The currently reported research study also revealed the following findings concerning business communication students' receptivity and response to an electronic textbook:

- Most students did not report difficulties in using the ebook. Faculty assistance in learning to use the ebook was perceived as adequate, and the majority of students had limited or no difficulty using the ebook. Most perceived the ebook layout to be user friendly and the download time to be acceptable.

- Over the course of approximately four weeks, two thirds of the students accessed the ebook outside of class six to nine times; about one fourth, who were possibly those using the print version of the text, accessed the book only one to three times or not at all. Students used the ebook most often to browse or scan assigned content or read content selectively with very limited use of the special search and annotation features and study tools. Most students viewed content online with only limited printing of selected content.

- Student opinion was mixed on the readability of an electronic text as compared to a print text, with somewhat less than half saying the ebook was more difficult to read. However, nearly half the students found the ebook more convenient than the traditional book; about 30 percent found it less convenient. The majority of students believed the format of the textbook (ebook vs. print) does not affect grades earned on exams and assignments. About one fifth of students believed that using a print textbook would have enabled them to earn higher exam and/or assignment grades.

- Most students preferred a choice in the purchase of an ebook or print textbook. The preferences of the remaining students were widely varied with some preferring the use of both and others preferring only the option or an ebook or only an option of a print text. Students were quite favorable in their assessment of the value of the ebook, PowerPoint slides, and pre- and post-test chapter quizzes. Although reported use of the other online tools was limited, students who used them generally found them of value.

Implications

While the results found in this study are not necessarily generalizable to other groups of business communication students or to those using other ebook products, the research findings raise several issues related to ebook usage:

1. Business communication students seem to find an ebook an acceptable instructional tool if it is properly designed for easy navigation. More research about ebook development is needed to determine effective format, appearance, and navigation features. Until ebooks are more commonly used, instructors have the responsibility of assisting students in learning to navigate their ebooks and use the various tools and capabilities provided.

2. While business communication students tend to see value in various online learning tools, the tools are generally not used or are used only sparingly. More research is needed as to the learning impact made by various tools and how to assure that they produce optimal results. Instructors have a responsibility to select ebooks that are soundly designed to meet learner needs. Students may also need further guidance and encouragement in using the various online tools, as they pose new options for study and reinforcement.

3. Most business communication students prefer a choice in ebook or print text, and some students still prefer print. Offering options seems appropriate at this time, though at some point in the future, the preference of students will likely shift in a polar direction toward the sole use of ebooks.

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Managerial Communication Techniques

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Abstract

Communication is vital for employees to understand their roles and duties, have a strong work ethic, and feel optimistic in the work place. Effective communication from managers to employees is critical for production and progress. Management is required to effectively communicate with employees to obtain necessary information and to elaborate on issues and concerns. Effective communication skills for management are a key element in building a successful team in business.

Introduction

The ability to communicate is central to managers. They delegate tasks that need to be completed as well as offer inspiration and motivation. Communication skills are what determine how concise or how inconsistent managers may be with getting the point across.

Managers spend most of their time communicating; thus, sending an effective message to the receiver is essential at all times. Effective communication skills help one to succeed. Verbal and nonverbal communication influence interpersonal skills. While knowing how to communicate is beneficial, it may be insufficient. Cultural diversity impacts ones understanding of communication and varies according to nationality. Additionally, non-verbal communications have a different impact around the world. Research conducted by Barry (2007) on communication barriers concluded that some of the most common communication barriers include: language, distorted perceptions, misreading of body language and tone, receiver distortion, power struggles, self-fulfilling assumptions, managers hesitation to be candid, perceptual biases, interpersonal relationships, and cultural differences.

Business meetings are a daily occurrence. While preparing for the meeting, there are certain aspects that should be considered before participation. One must capture the attention and involve all included by an appropriate joke or humor, an open-ended question that generates discussion from the audience or a demonstration or presentation aid. These are a few techniques that can be used for getting everyone involved. Whatever is communicated, introduce the purpose and preview all of the points that will be developed. Lehman and DuFrene (2006) report that generally, people communicate for three basic purposes: to inform, to persuade and to entertain.

Phillip Harkins (1999, p. 4) suggests, "communication is generally a struggle with mixed, uncertain, and unpredictable results."

The communication between a manager and those supervised is vital to be successful. Working individually rather than as a team will make the process of efficiency slower. Synergy does not exist when everyone works with only themselves in mind. Communication from the manager must be encoded properly in order for employees to decode properly. Managers are who employees go to when there is an issue to be discussed. The manager is looked at as a leader and must make sure he or she understands any information he or she is given. The manager is responsible for understanding and being aware of all necessary information that pertains to his or her duties and responsibilities. An employee who believes he or she does not completely understand all information is a situation for a manger to handle effectively.

A manager must be direct and straight forward with employees who they supervise. The effectiveness of a manager will be recognizable through employees' performance and work habits. An effective manager will be involved in problem solving, resource managing, conflict handling, motivating, coordinating, growth and development, and managing the organization's environment (Morse & Wagner, 1978).

Managerial behavior is a major issue relating to communication. A manager's behavioral dimensions yielded five factors which include group achievement and order, personal enhancement, personal interaction, dynamic achievement, and security and maintenance (Wofford, 1971). All five dimensions are effective and can lead employees to better understanding of information and responsibilities. Employees cannot be responsible for information they do not know. "Component criterion measures represent an intermediate level between the ultimate measures and focusing on the overall organization and the immediate level focusing on the individual employee" (Wahba & Shapiro, 1973). A manager focused primarily on the employees will show how a manager adheres to their needs. A manager in return expects an employee to perform all their duties and responsibilities.

It is important, as a society, to behave and communicate ethically. But, it is even more important for business and management to adhere to ethical standards. Lehman and DuFrene (2006, p. 21) state, "If top management are not perceived as highly ethical, lower-level managers may be less ethical as a result". If this type of unethical tone is set by management, then what incentive would an employee have to behave any differently?

Research suggests that unethical behavior negatively affects business communication. In the 2003 National Business Ethics Survey, 39% of employees at firms, with no ethics program, reported misconduct. Research has shown that when standards and/or code of ethics, ethic training, and/or advice lines are available, people will hold themselves and others, to high ethical standards. Employees, in companies that have ethical programs in place, are more likely to report those who are not adhering to such standards. Having such policies and programs in place proves to be effective to businesses. Also, state and national government are starting to take a serious stand in

increasing ethical standards for all. The Sarbanes-Oxley Act was passed in 2002. This Federal law was passed in response to a number of major scandals including those affecting Enron, Tyco International, Peregrine Systems, and WorldCom (Wikipedia, 2007). These scandals, of extreme unethical behavior, caused a serious decline of public trust.

Purpose

The study focuses on the fundamentals of managerial communication and unethical behavior and communication within business.

Methodology

Questionnaires were given to 207 students at an ethnically diverse university in an urban metropolitan area. All the participants were employed and working at various levels within the different businesses. The first section of the questionnaire explored ethnicity, gender, and age. The second section of the questionnaire focused on how employees feel about communication and the manager's role as an effective communicator. An analysis of the data and the results of the survey are presented below.

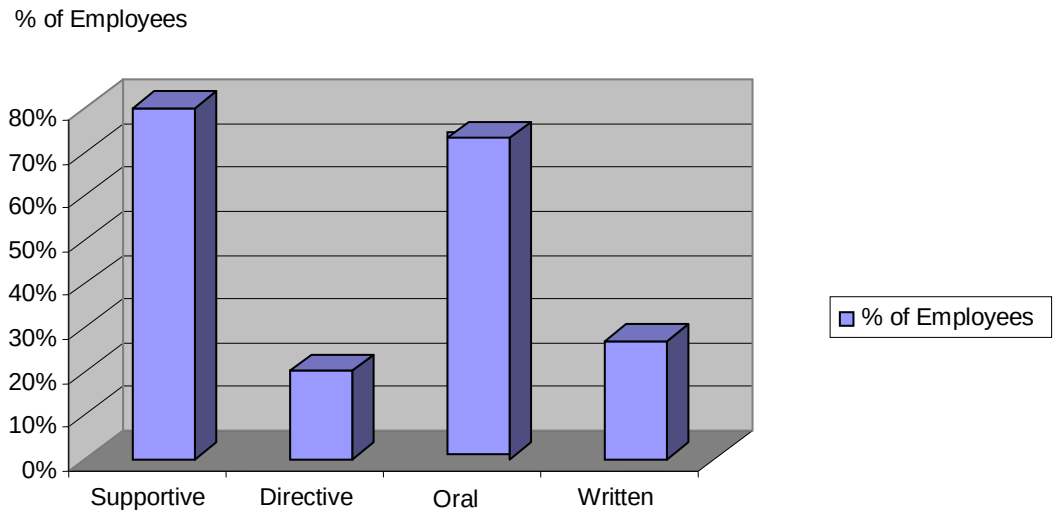
Findings

An analysis of the data revealed most employees expressed the same beliefs regarding certain issues relating to management. Participants also expressed that writing how they felt regarding their manager in the questionnaire yielded a more accurate response from employees. Some employees did have conflicting issues with management that they felt were not being handled properly (example: balance of work, favoritism, expectations).

Findings showed that 93 percent of the participants felt that communication was most important professionally and personally. With regards to written and oral communication, 73 percent of the participants preferred communicating orally while 27 percent requested issues be addressed in written format. Some respondents expressed that written communication is not effective if it lacks clarity and therefore, can be decoded incorrectly. Eighty percent of participants responded better to supportive communication: managers listening, recognizing, encouraging, and providing less supervision. Once employees know their roles and responsibilities, less supervision is required as long as work performance is acceptable. The other 20 percent preferred directive communication from management because they felt more supervision means the less chance of errors (see Figure 1 below). Some employees felt that a manager's role may be too political. Participants expressed that there were occasions when a manager may have "favorites" in the workplace, which may put more work on some employees. Managerial communication becomes weak when a manager puts the needs of some employees above others.

Figure 1

Do you respond better to directive, supportive, oral, or written communication?



Summary

Effective managerial communication is key to an efficient and productive work environment. With the technological advances within the last few decades, communication by managers is not only important face-to-face, but also by means of email, teleconferencing, and video conferencing. Szukala (2001, p. 13) reflected, "The great temptation, in the midst of such breathless excitement about the communications revolution is to be seduced by the new technologies and see this as the answer to our business problems or the key to greater wealth and innovation."

Verbal and nonverbal communication by managers is also of the utmost importance in ensuring effective communication. Non-verbal communication consists of all the messages other than words that are used in communication. Verbal communication transfers messages for example by intonation, tone of voice, vocally produced noises, body posture, body gestures, facial expressions, or pauses.

It is especially important for businesses and management to adhere to ethical standards. Unethical behavior allows for serious consequences in business. Many companies are putting ethics programs in place, and the national and state governments are inputting legislation to increase ethical standards. Top management needs to be perceived as ethical or else employees will react accordingly.

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The Legal and Ethical Implications of Metadata

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Abstract

This paper addresses the legal and ethical implications of metadata on businesses. Metadata is information about computer generated documents that can be inadvertently transmitted to others. The problems associated with metadata have become more acute over time as word processing and other popular programs have become more receptive to the concept of collaboration. As more people become involved in the preparation of documents, the more the likelihood of inadvertent disclosure, and the greater certainty that trial lawyers suing businesses will endeavor to gain an advantage through the capture of metadata during the discovery process. Many computer users are unfamiliar with metadata and the implications of creating and disseminating metadata. Bar associations are belatedly trying to inform their members of the existence of metadata and the risks associated with it, with many yet to address the issue. Courts, advisory groups, and those bar associations that have addressed the issue have recommended different approaches. The issue is further complicated by the introduction of new programs, such as Microsoft's Office 2007.

Introduction

Technology has forever changed the way business communicates. Unfortunately, users of technology often adopt technological innovations without understanding all of their legal and ethical ramifications. Indiscriminate use of e-mail by company officials has been a godsend to plaintiff's lawyers, in many instances being an important factor in multi-million dollar (and larger) judgments (Varchaver, 2003). According to the National Law Journal, 60-70 percent of all corporate data resides in or are attached to e-mail; 99 percent of all documents are in digital form; three out of every four lawsuits involving Fortune 500 companies utilize electronic company data ("Ready….or Not?", 2007). Companies that are not adequately prepared to manage digital data could face hefty legal penalties under a variety of laws, not the least of which is the relatively new Sarbanes-Oxley Act of 2002 which under its Section 1102 "[m]akes it a crime for any person to corruptly alter, destroy, mutilate, or conceal any document with the intent to impair the object's integrity or availability for use in an official proceeding or to otherwise obstruct, influence or impede any official proceeding" ("Summary of the Provisions…",2002).

Trial lawyers often refer to e-mail as the "cockroach of litigation," a nuisance that multiplies rapidly and defies extinction (Cavaliere, 2003). Lawyers have now begun to look at metadata, sometimes referred to as "invisible ink," as an additional benefit for the discovery process, finding all sorts of hidden gems in the supposedly hidden and secret information surreptitiously generated by word processors, databases, and spreadsheets (Reach, 2004). This paper will define metadata, discuss its legal and ethical implications, and offer some suggestions for reducing the unintended consequences associated with using technology without full understanding.

Metadata Cautionary Tales

Ignorance about metadata has led to some amusing, or frightening stories, depending on one's position as sender or recipient of the once-hidden information. The following cautionary tales are posted on the American Bar Association's Web site:

> October 2000: The Wall Street Journal reports that a candidate running for the U.S. Senate began receiving anonymous emails containing messages written in MS Word criticizing and attacking the candidate. A savvy aide looked at the document properties and discovered they were authored by the chief-of-staff of the opposing party.
>
> February 2003: A dossier on Iraq's security and intelligence organizations, cited by Colin Powell and published by 10 Downing Street, is discovered to have been plagiarized from a U.S. researcher on Iraq. Since the dossier was published on their website in MS Word format, researchers also discovered the four people in the British government who edited the document. They were subsequently called to Parliament for a hearing.
>
> March 2004: SCO Group, seller of UNIX and Linux, sent out a warning letter to 1,500 of the world's largest companies threatening legal liability for using Linux if they failed to obtain a license from the Utah-based company. After filing suit against Daimler-Chrysler, metadata in a MS Word document revealed that the SCO's attorneys had originally identified Bank of America as the defendant (Reach, 2004).

What is Metadata and How is it Created?

Metadata is commonly defined as "data about data" (Silvernail, 2007). Others refer to metadata as hidden data that isn't always obvious in the visible document and is an integral part of most word-processing software, such as Microsoft Word (Steele, 2006). In January 2006, the Florida Bar Board of Governors described metadata thusly, after

first admitting that a number of its members were, up to that point, unaware of its existence:

> Basically, metadata is information a word processing or document creation program keeps about the history of that document. This history includes changes, deletions, additions, which persons have accessed the document, and electronic notes that have been attached at various times. Such information is not visible on the screen, but it can be held in the background. And this information usually accompanies the document when it is electronically transmitted (Blankenship, 2006).

Microsoft has been trying to alert users to the potential problems associated with the creation and storage of metadata in documents for years. According to Microsoft (2007):

> Whenever you create, open, or save a document in Microsoft Word, the document may contain content that you may not want to share with others when you distribute the document electronically.
>
> Here are some examples of metadata that may be stored in your documents:
> • Your name
> • Your initials
> • Your company or organization name
> • The name of your computer
> • The name of the network server or hard disk where you saved the document
> • Other file properties and summary information
> • Non-visible portions of embedded OLE objects
> • The names of previous document authors
> • Document revisions
> • Document versions
> • Template information
> • Hidden text
> • Comments

There are essentially three types of metadata: descriptive, structural, and administrative metadata. The descriptive metadata includes elements such as author, title, and abstract information for a document. Structural metadata shows information regarding data format, media format, file types, compression method, and software needed to render the data, etc. The administrative metadata is most important for managing various documents. The information includes when and how a document was created, the file type, who can access it, and other technical information. In Microsoft Word files, the hidden data could be about names and user names of authors, companies, network

server, file properties, document versions, template information, hidden or previously deleted text, server, and printer information. As will be discussed later, with the right tools, such hidden data can be extracted easily.

Metadata information can be viewed from a saved word document (in Microsoft Word 2007) by following this path: from the Office Button go to Prepare, then to Properties, from there go to Advanced properties under the Document Properties button. Advanced Properties brings up a dialog box with five choices: General, Summary, Statistics, Contents, and Custom, each of which reveals different types of information. Document properties are available in all of the Microsoft products.

Metadata and the Law

There is no duty to create evidence, such as metadata, to help a potential plaintiff for a suit that does not exist. The law, however, is violated when an individual or company is being sued, or reasonably expects to be sued, and destroys evidence, including its own metadata. In legal parlance, this is referred to as spoliation (Black, 1979).

Spoliation

"The destruction of evidence. It constitutes an obstruction of justice. The destruction, or the significant and meaningful alteration of a document or instrument." --- Black's Law Dictionary

Corporate executives, and not just their lawyers, must be very aware of the importance of document retention and retrieval from company computer archives once litigation is threatened, including any existing metadata, since "[a] recent survey of corporate counsel found that the typical US company faces an average of 305 lawsuits and spends $12 million a year on litigation alone, not including settlements or judgments" (Mullins, 2007). Multimillion dollar (and greater) judgments have been rendered when documents have been destroyed or not produced pursuant to court order. The document destruction policy of Arthur Andersen was considered a smoking gun by the jury in Houston that ultimately sealed the fate of that once venerable accounting firm. While the Supreme Court ultimately overturned the jury award, the damage was already done, the Big 5 accounting firms were down to the Final 4.

From the U.S. Supreme Court
Arthur Andersen, LLP v. United States, 544 U.S. 696 (2005)

"On October 10, Odom spoke at a general training meeting attended by 89 employees, including 10 from the Enron engagement team. Odom urged everyone to comply with the firm's document retention policy. He added: 'If it's destroyed in the course of [the] normal policy and litigation is filed the next day, that's great. . . . [W]e've followed our own policy, and whatever there was that might have been of interest to somebody is gone and irretrievable."

More and more, metadata is being included in requests for discovery in lawsuits. A federal district court opinion from 1995, *Williams v. Sprint/United Mgmt. Co.,* dealt with this issue when a defendant failed to produce documents with the metadata intact (*Williams v. Sprint*, 2005). The company had used a scrubbing program, about which more will be discussed later, to sanitize its electronic discovery of metadata, which the plaintiff had failed to specifically request in the discovery order. The court, after having first recognized a lack of precedent in this area, stated the following standard:

> [W]hen a party is ordered to produce electronic documents as they are maintained in the ordinary course of business, the producing party should produce the electronic documents with their meta data intact, unless that party timely objects to production of meta data, the parties agree that the meta data should not be produced, or the producing party requests a protective order (*Williams v. Sprint,* 2005).

In crafting the order to produce the metadata in this case, the judge referred to Appendix F of The Sedona Guidelines: Best Practice Guidelines & Commentary for Managing Information & Records in the Electronic Age (Sedona Conference, 2005). These Guidelines, produced by a distinguished panel of judges and lawyers, acknowledge that there are pluses and minuses involved when considering the relevance of metadata. According to the case:

> Most metadata is generally not visible when a document is printed or when the document is converted to an image file. Metadata can be altered intentionally or inadvertently and can be extracted when native files are converted to image files. Sometimes the metadata can be inaccurate, as when a form document reflects the author as the person who created the template but who did not draft the document. In addition, metadata can come from a variety of sources; it can be created automatically by a computer, supplied by a user, or inferred through a relationship to another document (*Williams v. Sprint,* 2005, p. 646*).*

The Court went on to discuss which party should have the burden of proof with respect to the production or protection of metadata. The Court came down on the side of requiring the defendant to show that the metadata should not be produced:

> The initial burden with regard to the disclosure of the metadata would therefore be placed on the party to whom the request or order to produce is directed. The burden to object to the disclosure of metadata is appropriately placed on the party ordered to produce its electronic documents as they are ordinarily maintained because that party already has access to the metadata and is in the best position to

> determine whether producing it is objectionable. Placing the burden on the producing party is further supported by the fact that metadata is an inherent part of an electronic document, and its removal ordinarily requires an affirmative act by the producing party that alters the electronic document (*Willliams v. Sprint*, 2005, p. 652).

The Federal Rules of Civil Procedure now address the issue of electronic discovery (*Federal Rules of Civil Procedure*, 2007). Under the rules, parties are required to consult at the outset of a case about the nature of pertinent electronic documents in their possession and the manner in which they are maintained. The consultations should "include specific discussions as to whether a receiving party wants to obtain the metadata, and if so, whether the sending party wishes to assert a claim of privilege as to some or all of the metadata" (*Opinion 341,* n.d.). It has been noted that "parties can negotiate to exclude metadata from produced documents in the obligatory meet and confer under the new Federal Rules of Civil Procedure, but without such an agreement, metadata must be produced" (*ABA: Lawyers Can Search*, 2007, p. 11).

The Ubiquitous Nature of Metadata

Metadata is a fact of life in most companies. In a survey involving about 100,000 Word documents collected from various Web sites around the world, it was observed that every document contained hidden information. Half of the documents had up to 50 hidden words, one-third had up to 500 hidden words, and 10 percent had more than 500 words concealed within them (Ward, 2003). The hidden text revealed various types of information – general information to specific personal information such as Social Security numbers and data about the internal network the document traveled through.

Metadata is not just the product of carelessness; however, IT professionals find it very useful when maintaining and attempting to access company computer archives:

> [T]he archive requires metadata to be useful. The ability to understand the type of transaction data being managed by the archive is vitally important because the types of data that could be archived are as varied as the number of individual businesses and applications in use. Furthermore, chain of evidence metadata is required to prove the authenticity of the data in the archive.
>
> But we create the archive for transaction data because we may someday need to access it for discovery. As you know, culling data for e-discovery can be challenging when trying to locate just a small subset of the applicable data among gigabytes or even petabytes of information. The archive solution must allow for the review of each type of business transaction in context with its metadata (Ward, 2003).

The National Information Standards Organization carries forward this salutary view of metadata, describing it as "structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage an information resource." Understanding the significance of metadata within a given information system and organizational context helps the IT department because it can help to obtain answers to the following questions (Franks & Kunde, 2006, pp. 55-61):

- Who is responsible for the original data?
- Who has rights to access the data?
- When was the data created or entered into the document?
- What quality control was performed on the data?

These benefits of metadata to IT specialists may be opposed to the interests of the company and its legal counsel, however. As previously discussed, in a lawsuit, metadata can help make a plaintiff's case. Making matters even worse, a function in many versions of Microsoft Office programs, including Word, Excel and PowerPoint, allows fragments of data from other files previously deleted, or that were worked on at the same time, to be hidden within a saved document (Ward, 2003).

Ethical Implications of Metadata in the Legal Profession

If someone inadvertently sends you a document containing metadata, are you prohibited by law from viewing it? No laws currently exist that criminalize such activity, but there are ethical issues to be considered. The American Bar Association and some state bar associations have weighed in on the issue of the ethical responsibility of lawyers with respect to the inadvertent transmission by other attorneys of documents containing metadata. The Florida Bar Association has taken the following position on this matter:

> The duties of a lawyer when sending an electronic document to another lawyer and when receiving an electronic document from another lawyer are as follows:
>
> (1) It is the sending lawyer's obligation to take reasonable steps to safeguard the confidentiality of all communications sent by electronic means to other lawyers and third parties and to protect from other lawyers and third parties all confidential information, including information contained in metadata, that may be included in such electronic communications.
>
> (2) It is the recipient lawyer's concomitant obligation, upon receiving an electronic communication or document from another lawyer, not to try to obtain from metadata information relating to the representation of the sender's

client that the recipient knows or should know is not intended for the recipient. Any such metadata is to be considered by the receiving lawyer as confidential information which the sending lawyer did not intend to transmit.

(3) If the recipient lawyer inadvertently obtains information from metadata that the recipient knows or should know was not intended for the recipient, the lawyer must "promptly notify the sender" (*Professional Ethics*, 2006).

The American Bar Association takes a different stance on this sensitive issue. Unlike the Florida Bar, looking at metadata is not considered an ethical problem by the ABA.

Model Rules of Professional Conduct-Transactions With Persons Other Than Clients - Rule 4.4 Respect For Rights Of Third Persons

(a) In representing a client, a lawyer shall not use means that have no substantial purpose other than to embarrass, delay, or burden a third person, or use methods of obtaining evidence that violate the legal rights of such a person.

(b) A lawyer who receives a document relating to the representation of the lawyer's client and knows or reasonably should know that the document was inadvertently sent shall promptly notify the sender.

How to Eliminate or Minimize Metadata

To prevent the creation or accidental release of documents containing metadata, businesses may adopt one of several options:

A. Follow the advice of some senior lawyers, use the telephone or face-to-face meetings instead of memorializing sensitive discussions.
B. Use a different word processing program. Creation of documents in Adobe Acrobat, which uses the portable data format (PDF) is a safer way of avoiding metadata. In fact, many government agencies have abandoned Microsoft Word in favor of PDF documents.
C. Employ utility programs that scrub information from Word documents. For example, DOC Scrubber 1.1 is a utility program which can analyze and remove metadata from Word documents.

D. Follow Microsoft's advice about how to make documents safer. According to the advice on minimizing metadata from the Microsoft Support Web page:

> "How to Automatically Remove Personal Information When You Save"
> You can now automatically remove personal information from a Word document when you save the document. To turn this option on, follow these steps:
> 1. Click the **Office Button**.
> 2. Click **Prepare** from the pull-down menu.
> 3. Click **Inspect Document**. The options available are **Comments and Revisions**, **Document Properties**, **Custom XML Data**, **Headers and Footers**, and **Hidden Text**.
>
> 4. Select the option that you want inspected, then click **Inspect**.
>
> 5. After the document has been inspected, click **Remove All items found**.
>
> Note: This is the preferred method of removing personal information when you save a Word document."

Conclusion

Metadata is a part of electronic communications. Too many people are still oblivious to the ramifications of metadata. Metadata, like e-mail, is turning into another example of pestilence, eagerly sought by trial lawyers on fishing expeditions seeking incriminating evidence. Given the advantages metadata offers for IT professionals, totally eliminating metadata is probably not a feasible option for most larger companies. It should be examined and managed. Document creators must be educated about metadata and its potential significance. When document creators become better aware of metadata and the harm it can unintentionally cause the company, steps can be taken to eliminate or, at least, minimize the harm.

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What Business Communication Competencies Do Students Apply To Other Disciplines?

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Abstract

Business degrees typically require a variety of courses targeting analytical skills, general knowledge, and communication competencies. Integration of these learning outcomes is crucial for students' effective professional activities, yet little is known about cross-disciplinary transfer of specific skills and knowledge. This study examined the extent to which graduate students applied oral and written communication skills from a Managerial Communication course to assignments in an analytical Finance course. Principles of organization were the most frequently applied communication strategies, while analyzing the audience, revisions targeting plain language, and developing supporting ideas and graphics were not applied as frequently. Additionally, quality levels of the analytical course deliverables seemed relatively unaffected by students' prior Managerial Communication course experience.

Purpose

Business schools typically are comprised of departments, each of which promotes its subject matter as a crucial element for business success. Some departments combine more than one academic area, such as Management and Marketing, Finance and Economics, or Accounting and Information Systems. In our College of Business, for instance, the Business Communication faculty is housed in the same department as the Business Law and the Finance faculty. But even within these cross-disciplinary units there often is little true understanding – among faculty as well as students -- of how the subject areas are integrated. This research suggests that a much-ignored synergy across disciplines, particularly between Business Communication and analytical subjects, would be beneficial to students as they prepare for professional life.

One topic that seems logical for such cooperation is the reporting of financial and statistical analyses. In Finance courses students are often required to produce and explain their analyses of a firm's condition and performance as well as financial justifications for management decisions. A challenge is to make these analyses understandable, not just to the professor who assigned the project but also to potential investors, managers, and other audiences. At this juncture, students could apply Business Communication competencies such as organizing their ideas, composing coherent messages, and presenting data in a format that is understandable to non-specialists in the finance field.

In our experience, however, students rarely see the substantive application of one course's content to another. Our MBA students supposedly hone their writing and speaking skills in the required Managerial Communication course. Yet subsequently, when asked to produce a financial analysis in a Finance course, the students disappointed their professors because of their inability to explain their findings, orally or in writing. This experience gave rise to the project described below. It is hoped that the project can provide a model for cross-disciplinary cooperative learning in other settings.

Literature Review

Enhancement of teaching and learning has been an important objective of business schools for many years (Frost & Fukami, 1997; Fraser, Harich, Norby, Brzovic, Rizkallah, & Loewy, 2005). There are a number of ways to achieve this objective, but assessing the impact of teaching by measuring outcomes remains a major feedback method. "Outcome-based evaluation, as it is commonly called, has been increasingly invoked as a way of assessing… teaching effectiveness" (Frost & Fukami, 1997, p. 1275). It seems logical, then, to evaluate teaching effectiveness by seeking evidence of the carry-over of one course's core competencies into other, subsequent courses.

This notion of course carry-over has implications for collaborative teaching as well as for outcome assessment. Interdisciplinary oriented activities in business schools are not limited to team teaching (Straus, 1973; Weiss & Peich, 1980). For instance, if faculty in other disciplines simply reinforce the principles and standards learned in business communication courses by holding their students to the same standards in their own course's assignments, the students may realize that what they learned in their communication course constitutes best practices in other (if not all) business settings. Another benefit of interdisciplinary collaboration among faculty is that it helps business students to gain a global perspective (Freeman, 1993). Universities are microcosms of society at large (Straus, 1973). Today's business culture calls for "integrated communicators" who understand and use a range of concepts, from product development, positioning and marketing, to core values, stakeholder relations, and influence strategies (Lauer, 1995). Business schools should "practice the same kind of silo-busting research and teaching that we long ago advocated to managers with great success" (Bottom, 2005). Surely it becomes easier for students to put the pieces together and approach issues with a multi-disciplinary perspective when those behaviors have been modeled by their business faculty.

Fox and Faver (1984) identified the benefits of collaboration across disciplines, emphasizing that opportunities abound for increasing productivity, sustaining motivation, and dividing labor. Additionally, cooperation in research and teaching may benefit a discipline and help it to grow – a goal that is especially important for business communication, a discipline that has generally been accepted as integral to both undergraduate and graduate business programs but that sometimes has questionable status (Knight, 1999a, 1999b).

Recognizing that it is just as important for students as it is for colleagues to appreciate the relevance of communication skills to professional success, business communication faculty often attempt to use a cross-disciplinary approach within their courses. Instructional strategies such as case studies, mock interviews and simulations, guest speakers, community service projects, and analysis of actual business documents are used to help students realize that the course has wide application (Pittenger, Miller, & Allison, 2006; Forsberg, 1987; Neff, 1990). Topics such as business research methods, problem solving, conflict management, cultural diversity, and audience selection can also enhance a business communication course (Neff, 1990). However, there are practical limits to what can be covered within a single course.

This study takes a broader perspective on the question of improving the centrality of business communication. A longitudinal study by Zhao & Alexander (2004) found that students believed their business communication course had positively affected their performance on five tasks, including writing, teamwork, and giving presentations. This effect was significant both shortly after the students took the course and after a two-year period, although the strength of the effect declined over time. Our research builds on Zhao & Alexander's (2004) study by seeking to identify the elements from a managerial communication course that students actually applied to tasks in another course in a graduate business curriculum. Our ultimate goal is to develop ways to sustain and reinforce communication competencies in the long-term.

Methodology

This study examined students' application of knowledge, skills, and attitudes (KSA's) learned in a graduate Managerial Communication course to assignments in a Finance course that required reporting of financial analyses. The Finance course title is "Introduction to Institutions, Investments, and Managerial Finance." Assignments are team-oriented, requiring a written report and an oral presentation. There is no official course sequence requirement in the MBA program, although students are encouraged to take the Managerial Communication course within the first 12 hours. Thus, the majority of students enrolled in the Finance course had previously completed the Communication course, or were taking the two courses concurrently.

Written Report

Students enrolled in an MBA-level Finance course during the fall 2007 semester were required to write a report that analyzed the financial data of a case company. The report was a major assignment, due at the end of the semester. During the class meeting immediately following the report's submission, the students completed a survey that asked them to evaluate the difficulty of their report project and the degree of difficulty of the writing process. Students who had previously taken or were concurrently taking a Managerial Communication course completed an additional survey section on transfer of learning. Survey items asked what they remembered from the course and what principles learned in the Communication course they had applied to the financial analysis report project. Of the 45 students in the Finance course who completed the

report assignment, 73.3 percent had taken the Managerial Communication course previously or were taking it concurrently with their Finance course.

Team Oral Presentation
Graduate students enrolled in a Finance course during the summer 2007 semester were assigned to teams of 5 or 6 (n=4 teams) according to whether they had already taken or were currently taking Managerial Communication. One team consisted of students who were concurrently taking Managerial Communication -- which covers oral presentations and teambuilding skills -- along with the Finance course. A second team consisted of students who had previously completed the Managerial Communication course. The third and fourth teams consisted of students who had not yet taken Managerial Communication. The students were not told that their status regarding the Communication course determined their team designation.

Students were assigned a case that requires analysis of financial data. Each team prepared a presentation to a guest audience. Students were told that the audience would consist of a non-financial executive-level professional.

On the class day that the teams gave their oral presentations, the surprise guest audience was a professor from a non-business discipline (unknown to the students). He also had substantive professional business experience, a fact that the students were told. He was asked to rank the presentations according to the effectiveness of the financial information transfer.

During the class meeting immediately following the teams' oral presentations, the students completed a survey asking them to evaluate their team's dynamics and performance. Survey items asked for students' perceptions about task organization and completion, team leadership, and conflict management. Students who had taken or were concurrently taking Managerial Communication completed an additional survey section on transfer of learning. Survey items asked what they remembered from the course and what principles learned in the Communication course they had applied to the team presentation project.

Findings

Results are reported below for six research questions. The questions focused on students' application of *report writing strategies*, *oral presentation strategies*, and *teamwork strategies* that they had applied to the Finance course assignments.

Report Writing Strategies Applied
The first research question was:

> *Among graduate students who have taken or are taking a Managerial Communication course, which strategies and principles from the course did they apply to a financial analysis report writing task in another course?*

Only one of the students who had taken or were taking Managerial Communication responded to the survey by saying that they "did not use strategies covered in the

[Managerial Communication] course when writing [their] report." Table 1 below shows the list of strategies that students identified most frequently as those they had applied to the financial analysis report assignment.

Table 1: Strategies Applied to Financial Analysis Reports

Report Writing Strategy	Frequency
Supporting main points with facts and data	30
Organizing main points according to your purpose	29
Using transitions	27
Editing for correctness	27
Organizing the report into standard sections (Executive Summary, Introduction, Discussion, Summary, Conclusions, Recommendations, References, Appendixes)	25
Using design elements (headings, bullets, white space)	25
Supporting main points with examples and illustrations	21
Revising for plain language, clarity	19
Developing and explaining graphics	15
Analyzing the audience	12

The results indicate that the report writing strategies and principles that transferred most frequently were those regarding organization of ideas and editing. Surprisingly, one of the most important principles of business communication, audience analysis, was identified the least often by the students as one that they had applied to the report project.

The second research question was:

> *What effect does taking a course in Managerial Communication have on students' perceptions about writing difficulty?*

Survey results show that an overwhelming majority of students, whether or not they had taken the Communication course, found the financial analysis report assignment to be "moderately difficult" (42.2 percent) or "slightly difficult" (31.1 percent). Furthermore, there were only small differences in the percentage of students who found the writing to be the hardest part of the assignment –27 percent of those who had taken the Communication course versus 33 percent of the students who had not. For both groups, about half believed the writing was equally as hard as determining the content of their reports. Apparently, learning report writing strategies in a Communication course does not affect students' perceptions about writing difficulty.

Oral Presentation Strategies Applied
The third research question was:

> *Is there a difference in oral presentation skills between graduate students who have taken a Managerial Communication course and students who have not?*

Regarding quality of the team presentation, ratings were inconsistent between the Finance professor and the external audience (Table 2). According to the Finance professor, the best team presentation was delivered by the team that had previously taken the Managerial Communication course. He found their conclusions to be valid and the best supported of the four teams. But the outside rater liked Team 3's presentation best – a team that had not yet taken the Communication course. His rationale was that Team 3 appeared to understand the financial data more than the other teams and based their recommendation on that understanding. He also found their presentation style to be more professional.

Table 2: Rankings of Teams' Presentations

Team	**Presentation Rank (External Audience)**	**Presentation Rank (Finance Professor)**
1 - Currently enrolled in MC	3	4
2 – Previously took MC	4	1
3 - Have not taken MC	1	3
4 - Have not taken MC	2	2

The fourth research question was:

> *Among students who have taken or are taking a Managerial Communication course, which strategies and principles from the course did they apply to a financial analysis oral presentation task in another course?*

The students who had taken or were currently taking Managerial Communication were asked on the survey which, if any, oral presentation strategies taught in the Communication course were used by their teams in the *design and development* of their presentations. The most frequent responses were "supporting main points with facts and data," "organizing main points according to your purpose," and "creating a PowerPoint slideshow" (Table 3). These results are similar to the results for transfer of report writing strategies in that the most frequently mentioned strategies involved best practices for organization of ideas (Table 1).

Table 3: Strategies Applied to Developing Team Presentations

Presentation Development Strategy	**Frequency**
Creating a PowerPoint slideshow	9
Supporting main points with facts and data	9
Organizing main points according to your purpose	8
Analyzing the audience	7

Rehearsing	6
Developing graphics	4
Supporting main points with examples and illustrations	3
Using transitions	2

A related survey item asked the students who had taken or were taking the Managerial Communication course which strategies covered in the course they had used during *delivery* of their team presentations. Results appear in Table 4 below.

Table 4: Strategies Applied to Delivering Team Presentations

Presentation Delivery Strategy	**Frequency**
Body language	9
Facial expression, eye contact	9
Handling visuals, PowerPoint	9
Use of notes	6
Vocal variety	4
Breathing deeply to manage anxiety	3

As the results in Table 4 show, the most frequently used delivery strategies were best practices for the speakers' appearance -- body language, facial expressions and eye contact, and handling of visual aids.

Teamwork Strategies Applied

The fifth research question was:

> *Is there a difference in <u>teamwork skills</u> between graduate students who have taken a Managerial Communication course and those students who have not?*

Previous research on team dynamics suggests that teams that know how to function smoothly will produce superior products. Thus, we were interested in a possible connection between the students' level of satisfaction with the teams' deliverable –the presentation -- and the teams' dynamics. Our results show that satisfaction with the team presentation was generally high across teams, with one exception -- Team 1, where four of the five students said they were "dissatisfied" or "very dissatisfied" with the outcome (Table 5). Team 1 consisted of students concurrently taking Managerial Communication and Finance.

Table 5: Overall Satisfaction with Team Presentation

Team	Very satisfied	Satisfied	No opinion	Dissatisfied	Very dissatisfied
1		1		3	1
2	3	2			1
3	2	3			
4	2	2	1		

A closer examination of Team 1's dynamics seemed justified in an attempt to explain their relatively low levels of satisfaction with the deliverable. All teams were asked to rate their team's effectiveness on a range of factors as they worked together to analyze the financial case and plan their presentation. Results for Team 1are displayed below (Table 6).

Table 6: Team 1's Ratings of their Team Dynamics

	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
My input was encouraged	2	2		1	
My input was taken seriously	1	3		1	
Everyone else's input was encouraged	1	3		1	
Everyone else's input was taken seriously		4	1		
The tasks were evenly distributed		1	1	3	
Conflict was managed effectively		4			1
The group sought consensus		3			1
Everyone contributed equally to the final presentation		1	1	3	
Everyone contributed equally to the final report		1	1	3	

Data in Table 6 indicate that three of the five members of Team 1 felt that the tasks were not evenly distributed and that team members' contributions to the final products were unequal. Furthermore, one member felt strongly that the team did not manage conflict effectively and did not seek consensus. One can conclude from these findings that at least one person in Team 1 failed to do their fair share in the eyes of the other members, leading to low ratings of satisfaction with the deliverable. The team members' dissatisfaction with their presentation is consistent with the audiences' evaluations – both the Finance professor and the outside evaluator ranked Team 1's presentation as weak (Table 2).

The sixth research question was:

> *Among graduate students who have taken or are taking the Managerial Communication course, which teamwork strategies and principles from the course did they apply during planning meetings for a financial analysis task in another course?*

Students who had taken or were currently taking Managerial Communication were asked on the survey which, if any, team strategies learned in the Communication course they had applied during their team planning meetings. Results appear in Table 7 below.

Table 7: Teamwork Strategies Applied

Teamwork Strategy	Frequency
Listening	10
Problem solving	10
Asking questions	10
Synthesizing ideas	8
Impromptu speaking	7
Paraphrasing	7
Accommodating	5
Compromising	5
Managing conflict	4
Avoiding	2

The survey results show that students who had taken or were taking the Managerial Communication course used a range of strategies during their team's planning discussions. The most frequently mentioned strategies were listening, asking questions, and problem solving. Strategies for managing conflict were applied very infrequently, by comparison, although they are emphasized as key strategies in the Managerial Communication course.

Discussion

This study attempted to estimate the extent to which students carry knowledge, skills, and attitudes learned in one course to assignments in another course in their MBA program. Findings indicate that students applied a range of strategies and principles learned in a Managerial Communication course to two projects in a Finance course. The most frequently mentioned strategies that were applied focused on principles of organization. These strategies were used, according to the students, in both their oral and written assignments. On the other hand, attitudes toward writing did not seem to differ between students who had and had not taken a course in Managerial Communication. Finally, teamwork strategies learned in Managerial Communication were not always applied effectively in their team meetings.

There was inconsistent evidence that the quality of the assignment deliverables – a written report and a team oral presentation – was affected by the students' application of their previously-learned communication KSA's. In this specific study environment, one might argue that the differences in product quality may have been influenced by the team dynamics. In particular, the team presentation evaluated as the poorest of the four was produced by a team that experienced an unequal distribution of work and that had not sought consensus. Thus, our findings indicate that a dysfunctional team created poor quality products.

Implications for Education and Business

This study is not about team teaching or "writing across the disciplines." Rather, it is an attempt to determine the extent to which students recall and apply the principles learned in one course (Managerial Communication) to assignments in another course, in another discipline, but in the same degree program -- MBA. Our study identified a number of principles that carried over and traced the extent to which the students were successful in applying those principles. Further study of this knowledge transfer, which calls for collaboration among professors in different departments within a College of Business, may result in improved transfer of learning and a more integrated program of study.

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Students' Preferred Means of Communication: Convenience or Effectiveness?

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Abstract

The increased usage of communication technology in the workplace not only facilitates communication but also requires employees to communicate more effectively and efficiently. Therefore, choosing the best medium to communicate messages is even more paramount. Moreover, the need to communicate effectively is critical to enhancing and maintaining employee morale. The purpose of this study was to ascertain students' preferred means of communication relative to the convenience or effectiveness of the medium chosen for message delivery. In communicating messages, a concern exists to balance the need for human interaction based on communicating effectively rather than for convenience.

Literature Review

Effective communication is the glue that binds an organization together. All employees, regardless of their status in the organization, have information that others need to perform their work tasks. Transmitting the information to the right person using the right communication medium at the right time is a real challenge. With wireless technology significantly impacting communication in the workplace, two people in close proximity should not communicate solely by electronic means because of convenience to the sender. The chosen medium should fit the purpose of the message for effectiveness—not for convenience.

Today's students are tech-savvy; they spend a great deal of their time communicating by wireless technology. Raines (2002) calls them millennials—those born between 1980 and 2000. Other literature suggest that millennials range in age from 12 to 27 (Cameron, 2007) or 18 to 31 years old. Grinter and Palen (2002) state that IMing (instant messaging) may be reconfiguring friendship networking and expectations for social commitment among young people in the United States. They talk on cell phones in cars, when walking on the street, when at restaurants, when waiting for class to start, etc. Cell phones are everywhere and in great demand. To not have a cell phone is to be outdated in a progressively technological, mediated communication environment.

Turner and Reinsch (2006) suggest that we are living not only in a multimedia environment but in a truly multicommunicating environment. According to Wethe (2007), he reports that four phone calls are made for every text message sent; however, that ratio is shrinking as more people resort to using instant messaging (IM). Using text

messaging requires using a new language, a shorthand form (abbreviations) language that is tailored for text messaging, chat rooms, and IM (Text Messaging Abbreviations, 2006). In fact, text messaging has produced what is an insatiable demand for interaction among the millennials. Text messaging and IM will continue to increase in usage because of convenience and are making inroads in the workplace, but the question is "What is the impact of their effectiveness in message content delivery?"

According to Barrett (2008), the communicator should select the medium best suited for the context and the message. Text messaging may be fast, immediate, synchronous if IM, informal, and conversational; however, it is too abbreviated for complex communication, informal, and uses shorthand not understood or appropriate in all situations. Additionally, she stated that text messaging and IM are frequently used informally, but they are not yet that common in professional communication. Text messaging and IM, although fast and convenient, may not become as common as e-mail. Nor are they face-to-face communication.

On the other hand, with numerous concerns expressed about students' inadequate skills in writing and communication, questions arise if shorthand and abbreviations used in text messaging and IM are not adding to these inadequate skills.

Genn (2005) states that IM and text messaging are contributing to communications breakdown; additionally Baron (2005) questions whether cell phone messaging is degrading the English language.

Comunication purposes are to inform, persuade, entertain, or collaborate (Lehman & Dufrene, 2008, and Joyce, 1997). We communicate basically to develop, maintain, or nurture relationships. Thus, the context of the message is important in selecting the right medium for delivery. Convenience should not be the sole determinant for message delivery. People have feelings and that should be another consideration in selecting the medium for communication.

Numerous newspaper articles feature employees receiving lay-off notices by e-mail rather than face-to-face communication. In another example, employees at a private university in Texas received an e-mail from the president at 8 a.m. informing them that the campus was closing that day and that their services were no longer needed. Such instances of medium choice for message delivery tend to dehumanize the situation as well as damage relationships. Poor choice of medium chosen for message delivery has an impact on employee psychic and morale and could be a precursor to workplace violence.

Methodology

A questionnaire instrument was designed based upon research questions posed to garner information concerning students' preference for means of communication. The instrument was refined after critiques by other faculty before administering to business students in intact courses. The research questions posed were as follows:

1. What types of electronic devices do you own?
2. What types of electronic devices do you use on your job?
3. What is your preferred means of communication?
4. What do you consider first in delivering a message or communicating?

Percentage statistics were used to analyze the findings.

Findings

Data were collected from 71 junior and senior students enrolled in business courses at a southern university. Forty-two percent of the students were female, and 58 percent of the students were males. Sixty-eight percent of the students were juniors; senior students made up 32 percent.

The results of the research are presented as follows:

Table 1 contains the analysis of technology devices owned by students. Nearly all students had a cell phone; the Other category included PDA, DVD, I-Pod, MP3 Player, Box 360, and Xbox.

Table 1

ELECTRONIC DEVICES OWNED BY STUDENTS		
Cell Phone	66/71	93%
Desktop Computer	43/71	61%
Laptop Computer	42/71	59%
Other	6/71	8%

*Students selected all devices owned.

It is not surprising that almost all of the students had a cell phone due to their desire for social networking conveniently.

Table 2 presents the types of electronic devices used on their job.

Table 2

ELECTRONIC DEVICES USED ON THE JOB		
Cell Phone	40/71	56%
Desktop Computer	45/71	63%
Laptop Computer	14/71	20%
PDA	9/71	13%
Other	15/71	21%

*Students selected all devices used.

A desktop computer was used by over sixty percent of the students in the performance of their job, followed by a cell phone. Other electronic devices used on the job included a pager, switchboard, and a cash register or a landline phone or no electronic devices used.

Table 3 contains the data regarding students' preferred means or mediums of communication.

Table 3

STUDENTS' PREFERRED MEANS OF COMMUNICATION			
Cell Phone	Text Messaging	Email	Other
1st choice	1st choice	1st choice	1st choice
50/71	8/71	6/71	7/71
70%	11%	8%	9%

Other choice included landline phone, face to face, and online message board.

It is interesting to note that human interaction had little effect on choice of means or medium for communicating.

Lastly, students were asked what factor did they consider first when having a need to communicate. Table 4 presents that data.

Table 4

WHAT FACTOR DO YOU CONSIDER FIRST IN MESSAGE DELIVERY?		
Convenience	59	83%
Effectiveness	12	17%

These results indicate students' preference for convenience in communication. This is most likely due to the mediums of communication at their fingertips.

Summary

From the results of this study, it appears that today's students or millennials are choosing cell phones and text messaging to communicate for convenience. Communication skills involve managing or working with others, from one-on-one contact to interacting with groups or a broader organization as well as interacting successfully with all internal audiences and external audiences.

With a huge workforce of baby boomers moving to retirement, today's students or millennials should be trained in the importance of human interaction in the workplace and that communication tasks must be done by choosing the right medium of communication for the message. Not all messages should be delivered by cell phone or text messaging. Students should be prepared for the communication tasks of the real workplace and know that the context of the message is just as important if not more so than the convenience of the medium for message delivery.

Many workplace communication tasks must be done face to face. Too often students choose the medium that is at their fingertips. Naturally, choosing the right communication medium for effective message delivery will be key to students' success in the business world.

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Text Messaging Acronyms and Shorthand – What Do Our Students Know and Think?

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Abstract

A shorthand pseudo-language has emerged, tailored to the compactness of instant messaging and text messaging. This study investigates what business students at Nicholls State University know about text messaging acronyms and shorthand and think about their use. Findings reveal that female students are more likely to send text messages, and to send them more frequently, compared to male students. The use and frequency of text messaging was negatively correlated with age. All respondents were in general agreement that the use of acronyms or shorthand is not appropriate when communicating with colleagues, supervisors, customers, or teachers. There was a significant positive difference in the mean percentage of students in the youngest age group correctly identifying text messaging acronyms and shorthand, compared to the oldest age group.

Introduction

According to the International Association for the Wireless Telecommunications Industry, wireless users sent more than 64.8 billion text messages in the first six months of 2006, and over 158 billion text messages in all of 2006 in the U.S. (a 95% increase over 2005) (100 Wireless Quick Facts, 2007). Maney (2005) noted that in 2005 over 90% of the mobile phones in use in the U.S. had screens and could handle text messages. Since recent developments in the U.S. now allow people to text message across previously incompatible wireless networks, rapid growth in text messaging is expected to continue. Wethe (2007) reports that four phone calls are made for every text message sent, but that the ratio is shrinking.

It is not just cell phone text messaging that is booming. Businesses are reporting productivity gains are possible by using computer instant messaging (IM) instead of email. A 2003 article by MacSweeney suggests that while instant message usage often starts as a grassroots movement within an organization, IM is pervading the corporate workplace. Jones (2004) noted that the business community now generally accepts the idea of sending a business message via text, especially the travel industry. An article titled, "Instant messaging applications expand," (2006) reports that close to one-third of U.S. banks use some form of IM and that numbers such as this prove IM is a big deal.

Numerous websites provide lists of IM and text messaging acronyms and shorthand. Netlingo ("Shorthand," 2006) describes acronyms and shorthand as being most popular

with millennials, and that they are commonly seen in instant messaging, text messaging, newsgroup postings, and on blogs. Millennials were born between 1980 and 2000 (Raines, 2002). Mistupid.com ("Chat Abbreviations," 2006) reports that a shorthand language has been spawned to help text messagers communicate via the keyboard. Webopedia.com ("Text messaging abbreviations," 2006) refers to "the emergence of a new language tailored to the immediacy and compactness" of instant messaging, chat rooms, and text messaging. Pulpchat.com ("What does all this," 2006) states that communication in such media "has evolved into its own pseudo-language." Netlingo.com ("Shorthand," 2006) states that any shorthand or abbreviation online is commonly referred to as an acronym, although acronyms have typically been pronounced as a word (such as SNAFU) and shorthand pronunciations say the letter one by one (such as B-R-B for be right back).

Baron (2005) questions whether text messaging on cell phones degrades the language. She further suggests that the language may be degraded if teachers in K-12 are tolerating IM acronyms and shorthand in classroom written assignments. Despite all the media attention given to text messaging, Genn (2005) suggests instant messaging and text messaging do not work well in the workplace and are contributing to communications breakdown. For example, unless the recipient knows that "I am OOTO for the next week" means, "I am out of the office for the next week," miscommunication will occur. Text messages riddled with too many acronyms or shorthand may create real problems.

While the number of text messages exchanged annually is indeed expected to keep growing, the impact of text message shorthand and acronyms on communications is yet to be determined. Further research on use and knowledge of the shortcuts is therefore justified.

Purpose

Because literature suggests that millennials are the biggest users of text messaging via cell phones and that acronyms and shorthand are used in their messages, the researchers wanted to explore their students' use and knowledge of text messaging acronyms and shorthand. The following specific research areas were identified:

- Determine how many students do use text messages and how frequently
- Determine why students use acronyms and shorthand in text messages, and how they perceive acronyms and shorthand impact communication
- Determine in what types of communications students believe acronyms and shorthand are appropriate
- Determine whether students can correctly identify the meaning of various often-used acronyms or shorthand when presented as stand-alone entries
- Determine whether responses of males and females to any of the above are significantly different
- Determine whether responses of traditional college age students versus nontraditional college age students are significantly different

The project does not research students' use of punctuation in text messaging or chatting.

Methodology

The researchers designed a questionnaire to gather information concerning the above research areas. A pilot survey was conducted and some modifications made prior to distributing the instrument to 140 students enrolled in Business Communications classes at Nicholls State University. Survey findings were analyzed using statistical calculations available through Microsoft Excel.

In addition to questions related to how often students sent text messages, why they used acronyms and shorthand, and in what types of communications they viewed them as appropriate, 49 acronyms were listed on the survey. Of these 49, twenty were identified by Omnipod.com (2003, 2004) as top workplace acronyms. The remaining acronyms were some of those commonly appearing on lists at websites such as webopedia.com ("Text messaging abbreviations," 2006), mistupid.com ("Chat abbreviations," 2006), pulpchat.com ("What does all this chat room slang mean?," 2006), netlingo.com ("List of acronyms," 2006), and studentslackers.com ("Dictionary of instant messaging acronyms," 2006).

Findings

Data was collected from 140 juniors and seniors enrolled in sections of the business communications course required for all business majors at the researchers' institution. Surveys were administered in July and September of 2007. Research results for the total number of respondents as well as various subgroups are discussed in the subsections that follow.

Descriptive Statistics for Total Respondents

The descriptive statistics for the complete sample of 140 students are illustrated in Table 1 below. Of the total surveyed, 48% were male and 52% were female. In addition, 84 percent of those surveyed were in the 18-24 age group. The remaining 16 percent surveyed were equally split between the 25-31 age group and those older than 31 years of age.

As expected, the vast majority of respondents, 98 percent, own cell phones. Of the respondents who own cell phones, 90 percent indicated that they have sent text messages. Regarding the frequency of text messaging, 51 percent of respondents indicated that they send messages several times a day, followed by 25 percent who send messages several times a week, 15 percent who send messages several times a month, and 9 percent who send messages several time a year. According to the students surveyed, the main reason (86 percent) for using acronyms or shorthand when sending text messages is speed and efficiency. Only 12 percent indicated the 160 character limit as a reason to use acronyms or shorthand, and just 2 percent indicated that they use acronyms or shorthand for the fun of it.

Several questions on the survey were devoted to the appropriateness of the use of acronyms or shorthand for instant messaging, email, and text messaging. In general, the survey findings indicate that acronyms or shorthand are appropriate for communication with family and friends but not for communication in a business setting. More than nine-tenths of all respondents indicated that the use of acronyms or shorthand is appropriate when sending *text messages* to family and friends (94 percent), and for *emails* to family and friends (92 percent). The percentages are significantly lower, however, regarding the use of acronyms or shorthand when communicating to colleagues at work. Only 42 percent thought that the use of acronyms and shorthand was appropriate when sending *instant messages* to colleagues at work, followed by 37 percent for *text messages*, and 34 percent for *email*. In addition, the vast majority of respondents indicated that the use of acronyms and shorthand when communicating with supervisors and outsiders at work, as well as student and teacher communications, are inappropriate.

The findings regarding how acronyms and shorthand impact communication were mixed. The results indicate that 38 percent believe that acronyms and shorthand save time for the sender and are easily understood by the receiver. Yet, 28 percent believe that although acronyms and shorthand save time for the sender, they are frequently misunderstood by the receiver. Furthermore, 34 percent indicated that acronyms and shorthand were infrequently misunderstood by the receiver.

Table 1

Descriptive Statistics for Total Sample			
Age:	%	Reasons for using acronyms/shorthand in texting:	%
18-24	84	Fun to use	2
25-31	8	Speedier keying of message	86
32+	8	More message in 160 characters	12
Gender:		When are acronyms appropriate?	
Male	48	Instant messaging (IM) at work to colleagues	42
Female	52	IM at work to supervisors	3
		IM at work to outsiders (Customers, etc.)	4
Have cell phone?		Email at work to colleagues	34
Yes	98	Email at work to supervisors	6
No	2	Email at work to outsiders (Customers, etc.)	4
		Email to family and friends	92
Send text messages?		Email from student to teacher	6
Yes	90	Email from teacher to student	4
No	10	Text messaging (TM) to family and friends	94
		TM at work to colleagues	37
Texting Frequency:		TM at work to supervisors	2
Several times a year	9	TM at work to a customer	1
Several times a month	15		
Several times a week	25	Impact of acronyms:	

Descriptive Statistics for Total Sample				
Several times a day	51		Save time and easily understood by receiver	38
			Save time but infrequently misunderstood by receiver	34
			Save time but frequently misunderstood by receiver	28
N = 140. Data expressed as percentages.				

Comparison by Gender

The results of the survey are broken down by gender in Table 2. Recall from Table 1 that 48 percent of respondents were male and 52 percent were female. As illustrated in Table 2, slightly more females send text messages compared to males (95% versus 85%). In addition, the females surveyed send text messages more frequently than males. Furthermore, whereas males appear to use acronyms and shorthand primarily because of speed, women also indicated that they use acronyms because they are fun to use, and one can get more information in the 160 character limit. Regarding the appropriateness of acronyms and shorthand, the opinions of males and females differed regarding *emails* and *text messaging* to work colleagues. More men thought acronyms and shorthand were appropriate in these situations compared to women (41% versus 27% regarding *emails* and 44% versus 30% regarding *text messaging*). Finally, men appear to be less confident in the receiver being able to understand acronyms and shorthand in text messaging instances, compared to women.

Table 2

Descriptive Statistics by Gender					
	% Male	% Female		% Male	% Female
Age:			When are acronyms appropriate?		
18-24	81	88	Instant messaging (IM) at work to colleagues	43	41
25-31	12	4	IM at work to supervisors	4	1
32+	7	8	IM at work to outsiders (Customers, etc.)	4	4
			Email at work to colleagues	41	27
Have cell phone?			Email at work to supervisors	9	3
Yes	96	100	Email at work to outsiders (Customers, etc.)	7	1
No	4	0	Email to family and friends	90	95
			Email from student to teacher	7	5
Send text messages?			Email from teacher to student	4	3
Yes	85	95	Text messaging (TM) to family and friends	91	96

Descriptive Statistics by Gender						
	% Male	% Female			% Male	% Female
No	15	5		TM at work to colleagues	44	30
				TM at work to supervisors	4	0
Texting Frequency:				TM at work to a customer	0	3
Several times a year	10	6				
Several times a month	17	13		Impact of acronyms:		
Several times a week	23	26		Save time and easily understood by receiver	35	39
Several times a day	50	55		Save time but infrequently misunderstood by receiver	24	30
				Save time but frequently misunderstood by receiver	41	31
Reasons for acronyms:						
Fun to use	2	15				
Speedier keying of message	93	81				
More message in 160 characters	5	17				
Males: N = 68. Females: N = 73. Data expressed as percentages.						

Comparison by Age

The survey results according to age groups are illustrated in Table 3. As previously mentioned, 84 percent of survey participants were ages 18-24, 8 percent were ages 25-31, and 8 percent were 32 and older. The findings indicate that text messaging is less common among the older age groups. Specifically, 92 percent of respondents in the youngest age bracket send text messages. This percent drops to 82 for the middle age bracket, and to 80 for the oldest age bracket. For those individuals who engage in texting, the frequency of sending text messages is similar for the youngest and middle age brackets; however, there is a significant drop off in the older age bracket. Approximately one-half of individuals in the two younger age brackets send text messages several times a day, and one-fifth send text messages several times a week. Conversely, none of the respondents in the oldest age bracket reported sending text messages daily or weekly. The majority of individuals in this age group send messages several times a month (57%). In addition, 43 percent of individuals in the oldest age bracket reported sending text messages several times a year.

Regarding the appropriateness of acronyms or shorthand in various settings, individual opinions in the oldest age group were generally less favorable compared to the two younger age groups. Although the majority in all age groups are in agreement that the use of acronyms or shorthand is inappropriate when communicating to supervisors, customers, teachers, or students, younger individuals appear to look more favorably toward the use of abbreviations when texting to colleagues, family, and friends,

compared to individuals in the oldest age bracket. Interestingly, the majority of individuals in the middle age group indicated that they thought acronyms and shorthand were easily understood by the receiver. These results were mixed regarding the other two age groups.

Table 3

Descriptive Statistics by Age							
	% 18-24	% 25-31	% 32+		% 18-24	% 25-31	% 32+
Gender				When are acronyms appropriate?			
Male	46	73	45	Instant messaging (IM) at work to colleagues	43	45	27
Female	54	27	55	IM at work to supervisors	2	18	0
				IM at work to outsiders (Customers, etc.)	4	9	0
Have cell phone?				Email at work to colleagues	34	55	18
Yes	98	100	91	Email at work to supervisors	5	18	0
No	2	0	9	Email at work to outsiders (Customers, etc.)	3	18	0
				Email to family and friends	93	91	82
Send text messages?				Email from student to teacher	7	9	0
Yes	92	82	80	Email from teacher to student	3	9	0
No	8	18	20	Text messaging (TM) to family and friends	95	91	82
				TM at work to colleagues	36	55	27
Frequency:				TM at work to supervisors	1	18	0
Several times a year	6	11	43	TM at work to a customer	2	0	0
Several times a month	13	11	57				
Several times a week	26	22	0	Impact of acronyms:			
Several times a day	55	56	0	Save time and easily understood by receiver	35	64	36
				Save time but infrequently misunderstood by receiver	35	18	36
Reasons for texting:				Save time but frequently misunderstood by receiver	30	18	27
Fun to use	2	0	0				
Speedier keying of message	85	100	86				
More message in 160 characters	13	0	14				
Age 18-24: N = 118. Age 25-31: N = 11. Age 32+: N = 11. Data expressed as percentages.							

Acronym and Shorthand Meanings

The survey results regarding the meaning of the various abbreviations are summarized in Table 4. The most recognizable acronym is LOL (laugh out loud) with 93 percent of total respondents getting this correct. This is followed by b/c (because) at 89 percent, BRB (be right back) at 81 percent, and PLZ (please) at 80 percent. In addition, over one-half of respondents were able to identify B/F (boyfriend/best friend), CU (see you), CUL8R (see you later), GF (girlfriend), IDK (I don't know), JK (Just kidding), L8R (later), LMAO (laughing my ass off), MSG (message), RUOK? (are you o.k.), SRY (sorry), THX (thanks), TTYL (talk to you later), and UR (your/you're). Conversely, none of the respondents could correctly identify DHTB (don't have the band width). Less than 10 percent of total respondents could correctly identify BFO (blinding flash of the obvious), CTRN (can't talk right now), GAL (get a life), HTH (hope this helps), IAM (in a meeting), IHMB (I hate my boss), NCIH (no chance in hell), OOH (out of here), OTTOMH (off the top of my head), POS (parent over shoulder), RFL? (ready for lunch?), SLAP (sounds like a plan), TMB (text me back), WFM (works for me), and WRUV4? (Who are you voting for?).

Overall, the differences in knowledge of text messaging acronyms and shorthand between males and females are not significant. The females surveyed tended to have slightly more correct answers in more categories. The only items of note are the categories in which the percentage of females answering correctly differed by more than 10 percentage points. These are BF (boyfriend/best friend), CU (see you), LMAO (laughing my ass off), MYOB (mind your own business), SUL (see you later), and WRUD (what are you doing?). In addition, men answered IMO (in my opinion) correctly by a margin greater than 10 percentage points, compared to women.

When the percentage of correct answers per item is compared by age groups, the youngest group had the greatest number of correct responses, followed by the middle and oldest age groups. Indeed, more individuals in the 32+ age group correctly identified just four of the items surveyed. The 25-31 age group was more successful in identifying 9 items, while more individuals in the 18-24 age group correctly identified 35 of the items.

The composite average correct for the entire sample is 33 percent. When broken down into subcategories, females and the youngest age group had the highest composite average at 35 percent. The oldest age group had the lowest composite average at 21 percent. Since the oldest age group reported the lowest text message usage, it is logical that this group would likewise have the lowest score for recognition of text message abbreviations.

Table 4

Acronyms and Shorthand							
		% Answering Correctly					
Abbreviation	Meaning	Ages 18-24	Ages 25-31	Ages 32+	Males	Females	Total
ATM	At the moment	19	9	0	13	21	17
B/F	Boyfriend / best friend	79	45	27	66	77	72
B4N	Bye for now	12	0	18	7	15	11
BBS	Be back soon	32	9	18	26	32	29
BC, b/c	Because	92	91	55	88	90	89
BFO	Blinding flash of the obvious	1	0	0	0	2	1
BRB	Be right back	86	64	64	79	70	81
CB	Call back	11	9	18	9	14	11
CTRN	Can't talk right now	3	0	0	3	3	3
CU	See you	58	45	45	50	60	56
CUL8R	See you later	68	45	64	66	67	66
DHT$	Don't have the budget/money	15	0	9	15	12	13
DHTB	Don't have the band width	0	0	0	0	0	0
F2F	Face to face	23	9	27	19	25	22
GAL	Get a life	3	0	0	3	3	3
GF	Girlfriend	71	73	36	71	68	68
HRU	How are you?	28	18	0	21	29	25
HTH	Hope this helps	2	0	0	0	4	2
IAM	In a meeting	2	0	0	0	3	2
IDK	I don't know	69	36	9	65	60	62
IHMB	I hate my boss	4	9	0	6	3	4
IMO	In my opinion	12	0	0	16	5	11
JK	Just kidding	79	64	18	73	73	73
L8R	Later	83	55	64	76	82	79
LMAO	Laughing my ass off	70	45	27	60	70	65
LOL	Laugh out loud	94	100	73	91	94	93
MorF	Male or female	40	73	18	44	37	41
MSG	Message	71	100	73	72	75	73
MYOB	Mind your own business	23	9	18	13	30	22
NCIH	No chance in hell	3	9	0	6	0	3
NP	No problem	32	18	9	29	29	29
OOH	Out of here	1	0	0	0	2	1
OTTOMH	Off the top of my head	2	0	0	2	2	1
PLZ	Please	82	64	73	76	84	80

Acronyms and Shorthand							
		% Answering Correctly					
Abbreviation	Meaning	Ages 18-24	Ages 25-31	Ages 32+	Males	Females	Total
POS	Parent over shoulder	4	0	0	3	4	4
RFL?	Ready for lunch?	7	9	0	5	9	7
RUOK?	Are you OK?	57	55	27	57	52	54
SLAP	Sounds like a plan	3	0	0	0	6	3
SYR	Sorry	55	36	27	53	49	51
SUL	See you later	14	9	18	9	19	14
THX	Thanks	66	73	27	66	62	63
TMB	Text me back	7	0	9	3	8	5
TTYL	Talk to you later	85	45	36	79	77	78
UR	Your / you're	69	73	55	67	70	68
UW	You're welcome	12	9	0	11	10	11
WFM	Works for me / wait for me	7	0	0	2	10	6
WRUD	What are you doing?	35	45	55	36	46	37
WRUV4	Who are you voting for?	7	0	0	3	8	6
WTG	Way to go	27	9	18	24	26	25
Average % Answering Correctly		35	28	21	32	35	33

In Table 5, the summary statistics regarding the differences in average composite scores are presented. When comparing the mean composite of the percentage of correctly identified abbreviations between males and female, the researchers did not find a significant difference. Likewise, no significant difference was found in the mean correct percentage identified between the 18-24 age group and the 25-31 age group or between the 25-31 and the 32+ age group. However, when the youngest age group was compared to the oldest age group, a significant difference was found in the mean percentage of correctly identified abbreviations.

Table 5

Summary Statistics of Differences in Mean Composite Scores			
	z-Test	p-Value	Conclusion at $\alpha = 0.05$
Male vs. Female	-0.37	0.708	No Significant Difference
18-24 vs. 25-31	1.16	0.246	No Significant Difference
18/24 vs. 32+	2.46	0.014	Significant Difference
25-31 vs. 32+	1.19	0.233	No Significant Difference

Conclusions, Recommendations, and Implications

The findings of this study are consistent with current literature in that millennials are more likely to send text messages, as well as use acronyms and shorthand when doing so, compared to older individuals. Regarding the appropriateness of acronyms and shorthand, the students surveyed were in general agreement that the use of acronyms or shorthand is appropriate when communicating with friends and family, but not when communicating with colleagues, supervisors, customers, teachers, or students. Regarding the impact of the use of acronyms and shorthand on communication, the survey results indicate that nearly two-thirds of respondents believe there may be some difficulty in understanding such abbreviations for the receiver. This finding is consistent with a recent article by Genn (2005). The findings regarding respondents' recognition of particular acronyms or shorthand indicate a significant negative correlation between the ability to correctly identify various abbreviations and age. Conversely, no significant relationship was found between recognition and gender.

An interesting topic for future research would be to survey individuals in the business community to see if their opinions regarding the appropriate use of acronyms and shorthand differs compared to college students. In addition, business communication instructors may want to replicate this study in their own classes to determine similarities or differences among students in different geographical regions. The findings may help guide faculty in their coverage of text messaging acronyms and shorthand in their business communication classes.

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Student Satisfaction with Collaborative Writing (CW) Experience

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Abstract

A student questionnaire was administered to determine the extent to which students found helpful guidelines on activities, roles, and strategies of the collaborative writing (CW) process. Overall students reported satisfaction with the CW experience. Providing students with an understanding of collaborative writing group processes and encouraging them in effective group functioning resulted in reported satisfaction with the CW experience and reported usefulness of the strategies, roles, and activities; however, additional efforts may be warranted to help students move away from the parallel writing strategy and to move toward more effectively monitoring of the CW process. Suggestions are offered.

During group projects that required collaboratively written documents, business students were exposed to a collaborative writing model that included group writing strategies, common activities, and member roles. Students were provided with preliminary meeting planning advice, questions to evaluate document quality, and post meeting reaction evaluation forms to facilitate group effectiveness. After this exposure, student satisfaction with the CW experience and the usefulness of writing strategies and control modes was measured.

Model of Collaborative Writing, Collaborative Planning, and Team Effectiveness

Lowry, Curtis, and Lowry (2004) provide a definition of collaborative writing (CW) and a framework in the form of a model that outlines the process of collaborative writing. The authors define collaborative writing in an effort to provide a common understanding of CW. Their definition includes the concept of a group engaged in a social process focused on a common objective of document production. Extensive detail is provided on the writing strategies of collaborative groups, common CW activities, and roles of the CW group members. These concepts are clearly defined, well organized, illustrated, and assembled into a framework by the authors.

Burnett (1990) defines collaborative planning and discusses teaching collaborative planning. Advice is offered for preliminary meeting planning. Suggestions for collaborative writers during their meetings include responsibilities of collaborators to encourage better interpersonal interactions and questions to facilitate better quality documents.

A post meeting reaction evaluation form (Bogert & Butt, 1990) serves as a team effectiveness critique to stimulate group reflection. Assessment of the group's effectiveness is made on dimensions such as goals, conflict, leadership, communication, innovation, and decision making. These forms were developed and used at Pennsylvania State University. Mirroring the importance industry places on group projects, many assignments in the MBA program at Penn State were performed in task groups. During informal discussions, MBA students disclosed that often they do not experience satisfaction with the group interactions even though they successfully complete the assigned group task (Bogert & Butt, 1990). The post meeting reaction evaluation was compiled and adapted from existing planning literature contributed by Alexander, Brilhart, and Hengle (cited in Bogert & Butt, 1990). The post meeting reaction form was used at Penn State to measure student satisfaction with interactions on assigned group tasks.

Osland, Kolb, Rubin, and Turner (2007) provide forms and directions to facilitate student groups. These are in the form of reports and focus on providing specific information about group plans and tasks. Also, these reports require students to provide feedback on group functioning. Two report forms are offered and are designed to be administered sequentially, getting preliminary information with the first report and obtaining more detailed knowledge about group activities with the subsequent report.

Methods and Materials

During the course of the semester, students in an undergraduate business class at a small Midwestern university were exposed to a model of collaborative writing that included writing strategies of CW groups, common CW activities, and roles of the CW group members (Lowry, et al., 2004). In addition students were provided with preliminary meeting planning advice, questions to evaluate document quality (Burnett, 1990), post meeting reaction evaluation forms to facilitate group effectiveness (Bogert & Butt, 1990), and guidelines for submitting two progress reports (Osland et al, 2007).

Students in the business course had three writing projects, one single authored assignment and two collaboratively written assignments. At the end of the course, students were asked to complete the "Satisfaction with Collaborative Writing Experience Scale". Haber (1994) developed the "Questionnaire About Collaboration" and used it in connection with a collaborative writing study that compared the satisfaction with CW activities in two classrooms of students, a newspaper reporting class, and an editing class. For this study, Haber's instrument was expanded and tailored to measure satisfaction and attitudes of usefulness regarding the CW processes including strategies, roles, and activities.

Findings

Of the 26 students in class, 17 completed the survey. The first part of the survey consisted of nine questions with responses ranging from strongly agree to strongly

disagree, on a five point scale. The questions address the satisfaction associated with the collaborative experience and the quality of the group work produced. Most of the responses were positive (strongly agree or agree) except for the responses on two questions. The question item that showed more variation in the direction of disagreement than the others was one that questioned whether the group had a procedure for compromising when members did not agree.

The second part of the questionnaire asked students to evaluate the usefulness of group writing strategies and document control modes. During the semester, these strategies and control modes were reviewed with the students and an accompanying descriptive handout was provided. To ensure that all definitions were clear, a summary of these in the form of an *illustrated help sheet* was part of the questionnaire. Most of the respondents marked that a parallel writing strategy was useful. This means that the writing tasks are divided and each group member becomes responsible for different sections of the paper. In addition, many students responded that the reactive strategy was useful too. The reactive strategy occurs as group members work together in real time. This strategy involves collaborative additions and adjustments to the group's document as individual members gain the benefit of conversation with the other members. It is not unusual for a group to utilize more than one writing strategy as they complete a document.

The final questions in the questionnaire ask about student satisfaction with the collaborative writing roles and activities. Students seemed to be clear about the roles they had filled and were satisfied with these roles. The same was true for the writing activities.

As the CW groups progressed through the semester, information gathered from groups offered little new understanding into effective group functioning. The only exception was a group that operated exceptionally well together and offered noteworthy insight. The group's initial strategy was to have each group member write the entire paper. Then the group met and discussed each section to review each group member's version of that section. They then selected the member's version they considered the best for each section to create one draft document. Additionally, their policy of expecting each group member to read and sign off on the final draft of the document worked very well for this group. This policy may be beneficial for teachers to include in the directions for a CW group project.

Summary and Implications for Education

Providing students with an understanding of collaborative writing group processes and encouraging them in effective group functioning resulted in reported satisfaction with the CW experience and reported usefulness of the strategies, roles, and activities; however, additional efforts may be warranted to help students move away from the parallel writing strategy and to move toward more effectively monitoring of the CW process. At this time I am experimenting with the use of writing portfolios to determine their benefit to the management student. One outcome of particular interest is whether the portfolio process will make student work available earlier to the teacher and to help

him or her identify writing problems in a more timely effective way. Another area to question is whether the portfolio process will make more transparent the contributions of individual members during a CW project and therefore improve the CW experience.

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Comparing Mailed Survey Methods: Response Rate, Cost, and Response Time

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Abstract

Email, telephone, mail, and personal interviewing are common methods researchers use to gather data. Even though research shows that email is becoming popular, of all these methods, U. S. Mail continues to be one of the preferred methods. The researchers used three mailed survey methods: (1) letters with an invitation to complete the survey on the provided web address only, (2) letters with a two-page paper survey without a return-paid envelope but with an alternative invitation to complete the survey on a website, and (3) letters with postage-paid return envelopes included with a two-page paper survey. When these three mailed-survey methods were compared, the web response method versus two mail-only return response methods revealed that while the web response method does not ensure a better response rate over the mail-only response methods, it is less costly and yields a faster response time.

Introduction

Of all the many data gathering methods researchers use to collect information; e.g., email, telephone, mail, and personal interviewing, mail continues to be one of the preferred methods. While email certainly has become more popular in recent years, researchers realize that there is still controversy surrounding randomization of contacts with email addresses in that they do not necessarily represent the entire population. Mailed surveys do allow the researcher to send the same request to a large population at the same time. However, when researchers use a mail-out survey as their method of collecting data, is there a difference in the response rate, cost, or response time that can be attributed to a particular method?

Purpose of the Study

The purpose of the study is to determine whether there are differences in response rate, cost, or response time based on the mode provided for questionnaire return or completion.

Related Literature

Before the electronic age brought ubiquitous availability of email and websites where survey data could be collected cheaper and faster, researchers gathered data through personal face-to-face interviews, telephone interviews, or mailed paper questionnaires.

Even though many would purport that electronic survey administration is the easiest, many would argue that traditional mailed paper questionnaires are still the best way to ensure valid responses.

Postal mail method

Even though researchers still use mail surveys, Al-Omri (2007) lists documented postal survey problems as: (1) a poor response rate, (2) slow responses, (3) no responses, and (4) the task of manually transcribing data from a hard copy questionnaire to an appropriate statistical analytical tool, which heightens the risk of data entry errors. Cui (2003) also lists four potential sources of error: (1) sampling error, (2) non-coverage error, (3) non-responsive error, and (4) measurement error. According to the SuperSurvey website (Mail surveys vs. web surveys: A comparison, 2005), surveying by mail is a recommended option when your desired sample consists of respondents with higher educational and literacy levels and people with an interest in the subject being surveyed. This is especially true when special mailing lists such as a list of recruiters on a university campus are available to reach the target population. However, using the postal mail method leads to low response rates and is subject to survey bias.

Electronic method

According to Sheehan (2001), email has been used since 1986 to distribute surveys and collect data from online users. Therefore, due to the limited access to email by the general public, this method has been tested mainly in closed populations where email technology is known to be readily available (Couper, Blair & Triplett, 1999). In spite of recognized restricted coverage, email surveys have become popular because they are comparatively cheap and do not require traditional paper response prepaid and pre-addressed envelopes. In addition, email surveys omit tedious tasks of folding envelopes and surveys and the postage costs. Although electronic text communication requires fewer resources and provides faster responses than traditional paper and pencil methods, they also generate problems involving sampling, response consistency, and participant motivation (Yun, 2000).

The Internet has had beneficial effects of cost and speed on the field of survey research (Shannon & Bradshaw, 2002). However, access for the general population and user familiarity and comfort using technology remain as sampling limitations. The success of an email survey may depend on many factors such as the quality of the email addresses, technical issues related to specific email software or servers, the length and content of the survey, and the nature of the target population to name a few (Couper et al, 1999). In a study comparing response rates and response consistency between mail and web-based surveys, Idleman (2003, p. 8) found "the use of email to link potential respondents to a web-based questionnaire produced a response rate similar to a traditional postal survey." As evidenced in an analysis of response rates to email surveys undertaken since 1986, email response rates have significantly decreased due to influences such as how long ago the study was done, the number of questions in the survey, the number of pre-notification contacts, the number of follow-up contacts, and

survey topic salience (Sheehan, 2001). For the best response rate and speed and to match mail survey completion and error rates, a single page web-based survey is required (Smee & Brennan, 2000).

Decisions about which research method to use are determined by potential outcome desires. Each delivery method (postal mail or electronic mail) has its own advantages and disadvantages. According to Kwak & Radler (2002) mail as well as electronic surveys have advantages in that mail surveys generate a higher response rate and web surveys generate a faster response speed.

Methodology

The participants in this study included recruiters from businesses who recruit on the university campus of the researchers. The Office of Career Services provided the researchers a list of 1,500 recruiters. Recruiters with email addresses were eliminated and the remainder was randomly divided into three groups of 305. Using three different methods, letters were mailed requesting recruiters to complete a survey. The three methods used were: (1) letters with an invitation to complete the survey on the provided web address only, (2) letters with a two-page paper survey without a return-paid envelope but with an alternative invitation to complete the survey on a website, and (3) letters with postage-paid return envelopes included with a two-page paper survey. With any mailed survey, many of the addresses will prove to be erroneous. In this study, Figure 1 depicts the number of undeliverable letters out of 305 total letters mailed for each method with the resulting number not returned and assumed delivered.

Figure 1: Returned Undeliverable U.S. Mail

Method	Total Mailed	Total Undeliverable	Total Delivered
Method 1 - Letters with an invitation to complete the survey on the provided web address only	305	13	292
Method 2 – Letters with a two-page paper survey without a return-paid envelope but with an alternative invitation to complete the survey on a website	305	14	291
Method 3 – Letters with postage-paid return envelopes included with a two-page paper survey	305	15	290
Total	915	42	873

It is interesting to note that the returned undeliverable number was almost the same for the three mailed survey methods.

Findings

Response Rate

In Figure 2 below, each method is shown with the resulting participation and non-participation responses. In the first method where the recipient was asked to go to a web address and complete the survey, out of 292 delivered, 28 complied for a response rate of 10%. The Method 2 survey group was sent a printed copy of the survey but in the cover letter was, however, given the option of either going to the web address or returning the printed survey. They also were not provided a return envelope. A 10% response rate for the 29 returned included six (21%) who sent their own envelopes using their own postage and 23 (79%) that went to the website. In the third method where the recipient was sent a printed copy of the survey along with a postage-paid envelope and asked to return the completed survey, 32 returned the survey for a response rate of 11%.

Figure 2: Response Results by Method

Method	Delivered	Responses No. (%)	No Response No. (%)
Method 1 - Letters with an invitation to complete the survey on the provided web address only	292	28 (10%)	264 (90%)
Method 2 – Letters with a two-page paper survey without a return-paid envelope but with an alternative invitation to complete the survey on a website	291	29 (10%)	262 (90%)
Method 3 – Letters with postage-paid return envelopes included with a two-page paper survey	290	32 (11%)	258 (89%)

The researchers are aware that many other factors could have influenced the return rate of the survey instrument besides the mode of delivery and return methods including, but not limited to: (1) interest in the topic, (2) timing of receipt of survey, (3) getting to the intended recipient, and (4) no follow-up.

Cost

Since only one of the methods required a return postage-paid envelop, the main measurable difference in expenditure for different survey return methods was for postage. Methods 1 and 2 accounted for two thirds of the total 915 recruiters surveyed. These survey groups were not provided a postage-paid return envelope, so the only postage cost was for outgoing postage. The remaining one third of the recruiters surveyed required outgoing as well as return postage. As shown in Figure 3 below, web responses accounted for 65% of the total responses, and mail responses accounted for 35% of the total responses.

Figure 3: Response Methods and Percentage of Responses

Method	Responses	% of total responses
Web response	57	65%
Mail response	32	35%
Totals	89	100%

As shown, the web-only, response method combined with the web-choice, response method included 57 of the 89 responses, which accounted for 65% of the returns. The mail response method yielded 32 responses, which accounted for 35% of the returns. While mailed responses accounted for two-thirds of the cost, they yielded only one third of the responses. Conversely, web responses accounted for one third of the cost and yielded two thirds of the responses. In the case of this analysis, it could be assumed that the web response method would yield a greater return on investment.

Response Time

Out of the total 89 responses, only 70 could be evaluated as to the response time since some did not have an identifiable postmark. Figure 4 reveals that the website response accounted for 61% of the valid responses and exceeded the mail responses of 39% by 2.7 days.

Figure 4: Response Method and Response Time

Method	Valid Responses	% of Total Responses	Response Time
Mail Response	27	39%	10.1 days
Website Response	43	61%	7.4 days
Totals	70	100%	

It would appear that the website response method created almost two thirds of the responses and at a faster response rate. This observation would suggest that the website response method is preferred.

Conclusion

Three mailed survey methods were compared to see if there was a difference in the response rate, cost, and response time among the methods. The three methods used were: (1) letters with an invitation to complete the survey on the provided web address only, (2) letters with a two-page paper survey without a return-paid envelope but with an alternative invitation to complete the survey on a website, and (3) letters with postage-paid return envelopes included with a two-page paper survey. Analyses of the data were based on the method of responding to a two-page paper questionnaire or a web-based survey site. Each method was applied to a convenience, randomized sample of 305 out of a population of 915.

This research project provides anecdotal evidence that merely providing a postage-paid return envelope or providing an electronic response method does not necessarily ensure a high response rate. However, of the three methods, supplying a postage-paid return envelope did generate 1% more replies. But, the increased cost to return the survey instrument negated the advantage.

When these three mailed survey methods were compared, the web response method versus two mail-only return response methods revealed that while the web response method does not ensure a better response rate over the mail-only response methods, it is less costly and yields a faster response time.

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