

An Investigation of the Use of Digital Video Technology as a Teaching, Learning and Delivery Tool in an Undergraduate Business Communication Course

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Abstract

This study examines digital video as a substitution for in-class oral presentation delivery to determine the impact on communication apprehension. A quasi-experimental study will use digital video technology as a treatment on a control and an experimental group in undergraduate business communication education. A digital video presentation exercise is used to examine the impact on communication apprehension and oral presentation delivery skills. The experiment uses a purposive sample of students in two intact classes of business communication students taught by the researcher [15]. The classes enroll 80 students per section creating a composite sample of 160 participants. Results are expected to expand the field of business education, communication, and applied technology.

Introduction

Business education and communication research indicates communication apprehension (CA) is a significant problem in improving oral and written communication skills [1, 2, 44, 37, 24, 21, 20, 19, 38, and 25]. CA is described as “an individual’s level of fear or anxiety associated with either real or anticipated communication with another person or persons” [21]. The relationship between CA and academic success [26, 8, and 22] is substantiated in research. McCroskey et al [26], reveal that CA has a negative impact on academic achievement and retention according to the results of a four year study at West Virginia University. McCroskey and Sheahan [27] report that students with high CA are likely to avoid situations in which oral communication is required. Other studies link CA to an increase in student drop out rates [9 and 36].

Employers, students, academicians, and administrators name oral and written communication as the most critical skills needed by business students [30, 41, 33, 18, and 14]. Accrediting bodies are placing an increased emphasis on communication skills in the university setting [28] “as oral exchange of information occupies an increasingly important role in the function of today’s companies” [43]. The Association to Advance Collegiate Schools of Business (AACSB) recognizes the importance of communication skills in its Assurance of Learning standards [30]. Accordingly, CA is one of the most frequently investigated variables in written and oral communication.

Background

Presentation skill is one of the seven most important oral communication skills needed by entry-level workers [18]. “Most undergraduate business courses require students to perform oral presentations in an attempt to prepare for their future roles in the workplace” [4]. The 1995 study results of Curtis and others indicate that “oral and written communication skills were recognized as the most important in helping graduating college students obtain employment. Three of the top four, public speaking, listening, and enthusiasm” [45] were directly related to oral communication skills. In the 1997 update to their original survey of personnel managers, Windsor, Curtis, and Stephens found a continued emphasis on the need for oral and written business communication skills.

For communication skills to be successfully developed, a reduction in CA is necessary [13]. CA is considered a learned condition that stems from the early stages of life. CA may result from a bad interaction or experience involving others [10], and is not something that can be unlearned easily. While “the current research empirically suggests that GPA, gender, job status, and number of years of experience affect communication apprehension of business students” [1], there are other treatments that can be applied to reduce existing levels of CA. Pribyl, Keaten, and Sakamoto [34] recognize that CA can be reduced through a skills based training program. Their research describes a presentation development process to systematically reduce communication apprehension. This process however requires small class sizes and available time for multiple presentation delivery, analysis, and feedback. These time consuming elements are not possible in all curricular designs and delivery modalities.

Many universities adopt the large lecture class model to accommodate increases in class size and content obligations [12]. The volume of students makes individual participation unlikely, leaving little opportunity to devote time to the improvement of business communication skills and practice. According to Wardrope and Bayless [42], “the degree to which oral communication skills are taught in the business classroom is contingent upon class time constraints.” While class size has direct bearing on communication skills instruction, curricular and content pressures limit the time instructors can devote to individualized attention, open comments, discussion, and feedback [12]. As a result, students cannot address issues related to CA and systematically improve oral business communication skills because they lose the opportunity for practicing delivery of oral presentations with constructive feedback. “As business schools experience increased competitive pressures, information technology is one area that schools might use to differentiate or compete with, or, more importantly, use as a catalyst for transforming educational processes” [16].

The emerging solution to these problems adapts technology and innovation to oral communication and presentation instruction. Digital Video (DV) technology, as a teaching, learning, and delivery tool, offers an alternate means for participation in oral communication delivery activities within large-enrollment classes. It is a technological alternative to live in-class presentation that may offer a suitable technological alternative if it can positively affect levels of CA and oral presentation delivery skills.

Statement of the Problem

The purpose of this research is to determine if the use of digital video technology as an oral communication delivery mechanism reduces oral communication apprehension and increases oral communication delivery skills in undergraduate business communication students in a large southeastern state university. Communication apprehension literature shows that apprehension is a negative factor in oral presentation skill mastery. This study examines the influence of DV delivery on apprehension and skill by using DV technology as a substitution for in-class oral presentation. McCroskey's [1] Personal Report of Communication Apprehension (PRCA-24) assessment tool measures CA in a pre-treatment and post-treatment methodology. The methodology appraises the difference in oral presentation delivery skills of students who deliver presentations via DV as compared to students who deliver real-time, in-class presentations. Scoring of students in the control group uses in-class presentations, while scoring of students in the experimental group uses archived digital video presentation files. The criteria for scoring consists of five identified primary traits associated with oral presentation delivery.

Origins

Assessments by the 1970 Speech Association of America Ad Hoc Committee on Evaluation in Speech Communication address problems in speech communication pedagogy related to evaluation and measurement [19]. Results indicate that problems in oral communication may stem from student inhibitions rather than ability [19]. Research of the 1930s examines the affect of an individual's fear of communication on the individual's communication behavior [7, and 21]. In McCroskey's historical summary of theory and research [21], the author states:

From the early work of Lomas (1934) and Henning (1935) to the more recent work of Phillips (1965, 1968) and McCroskey (1970, 1975, 1976c, 1976e) it has been consistently observed that some people are more apprehensive orally than are other people and that this apprehension has a negative impact on their communication behavior as well as on other important aspects of their lives

Early research examines oral communication anxiety under a variety of different terms. It is most commonly and somewhat incorrectly, termed stage fright. Stage fright is the fear or anxiety a person experiences when communicating in a situation that allows other people to be in a position to observe and evaluate the communication attempt [21]. The measure of stage fright by definition is dependent upon the observer's evaluative rating, the speaker's introspection, and the associated physiological change that results from the anxiety-producing situation [5]. The literature concerning stage fright suggests that this term refers to anxiety in a public speaking situation, making it one-dimensional [19]. Of note, Friedrich [10] challenges the single-factor component of public speaking anxiety associated with stage fright. His research produces three factors associated with stage fright for males (speech anxiety, exhibitionism, and reticence) and four factors for females (speech anxiety, exhibitionism, reticence, and physical manifestation). While McCroskey [21] later produces conflicting results, both McCroskey and Friedrich conclude that as the field advances, multidimensionality will be a major concern for any accepted measure of communication bound anxiety [24].

An examination of other works introduces several terms or constructs that broaden the original concept of stage fright. These introduce the multidimensionality sought by pioneers in the field. The constructs, “reticence (Phillips, 1968), shyness (Zimbardo, 1977), audience sensitivity (Paivio, 1964), and communication apprehension (McCroskey, 1970, 1975) [21]” expand the context of oral communication anxiety. Reticence represents the most global of the constructs relating to an individual’s fear of communicating. Phillips [31] defines a reticent individual as someone “for whom anxiety about participation in oral communication outweighs his projection of gain from the situation.” Reticence refers to the trait “which results in that individual characteristically remaining silent rather than participating in communication [21].”

Phillips [31] initially identifies anxiety as the causative agent behind the behavior characteristic of reticence. Later research combines anxiety with many potential causative elements that could lead toward a predisposition to avoid communication [7]. These elements can include apprehension, alienation, low self-esteem, and introversion [21]. CA, in the early phases of its development, represents a sub construct of reticence [19]. It is primarily an unwillingness to communicate. Later research extends CA to differentiate trait apprehension from state apprehension [21].

Trait apprehension is characterized by fear or anxiety with respect to many different types of communication encounters, from talking to a single person or within a small group to giving a speech before a large crowd. State apprehension on the other hand, is specific to a given oral communication situation, such as giving a particular speech to a group of strangers or interviewing with an important person for a new job at a given time and place [21].

State apprehension in CA is most closely associated with stage fright. It has a one-dimensional flavor even though experience of state apprehension can occur across a broad array of contexts. Fear associated with communicating orally in a public setting with observers who critically evaluate the communication performance is a normal experience for most people [7, 21, and 20]. Therefore, state CA is not the primary concern of researchers. It is a form of situational CA expected in oral communication and public speaking.

Trait CA is more prevalent in research as it is not thought to be characteristically normal in well adjusted individuals [24, and 21]. Initially, trait CA is presented “as a relatively enduring, personality-type orientation toward a given mode of communication across a wide variety of contexts” [24]. Individuals with high levels of trait CA experience high levels of apprehension about any form of communication, not just public performance. CA at this stage of development views trait-like CA as a true trait; “an invariant characteristic of an individual, such as eye color and height” [24]

Like Phillips [31] concept of reticence, CA continues to expand in its conceptualization. McCroskey [25] moves CA away from pure trait analysis and into generalized contexts to better capture the continuum on which trait CA operates. “No element of personality yet isolated by psychologists or others has been found to have universal predictability across all situations for all individuals” [25] Generalized-Context CA “recognizes that people can be highly apprehensive about communicating in one type of context while having little or no apprehension about

communicating in another type of context” [25]. From this extension, our current understanding of CA develops. Four generally accepted communication contexts are established: dyadic, group, meeting, and public speaking [17, 24, and 38].

The study of communication anxiety continues as an area of interest to communication and business education scholars [1, 2, 44, 37, 24, 21, 20, 19, 38, and 25]. The phenomenon refers to a variety of different names or constructs [10, 19, and 31] over time, each of which has specific nuances, yet consistent underlying ideology. “The different terminologies used all illustrate the belief that certain individuals suffer from anxiety that is produced through a degree of fear of communicating with others [44].” The effects of this fear have far-reaching consequences in business education and other fields. A review of the associated literature on these consequences and their affect on business education is a future component of the research.

Proposed Methodology

An Investigation of the Use of DV technology as a teaching, learning and delivery tool in an undergraduate business communication course is a quasi-experimental study that combines both qualitative and quantitative research. The experiment uses a purposive sample of business communication students in two intact classes taught by the researcher [15]. The classes enroll 80 students per section creating a composite sample of 160 participants. The use of DV technology as a teaching, learning, and presentation delivery method represents the treatment in the study. The study uses a control group and an experimental group. Students from the control group receive the same training, direction, and resources as students in the experimental group. Control group students deliver a live, oral communication presentation to peers and assessors. Students from the experimental group use University resources to record presentations onto DV, using high-speed processing DDV recording equipment, and DV editing software. Peers and assessors view the presentations on WebCT VISTA, a password-protected web based content management system.

The Researcher uses the WebCT VISTA assessment tool to administer McCroskey’s PRCA-24 to students in both classes prior to the treatment. The previously validated instrument determines the level of CA in the study participants prior to their exposure to course materials and training. Students also report Grade Point Average, gender, experience of previous oral presentation delivery, and job status. CA is the dependent variable for study, used to assess delivery skills affected by treatment. Students also self-assess skill level in oral presentation delivery using the PRCA-24 through the VISTA assessment tool. Skill in oral presentation delivery contains five dependent variables: vocal variety, purposeful gestures and movements, eye contact, the absence of nervous mannerisms, and confidence, as according to the Literature Review. These dependent variables create the basis for examining the affect of treatment on delivery skills.

The study design includes the use of nonprobability sampling. The sampling does not ensure inclusion of each element in the undergraduate business population of the large southeastern state university [15]. For example, samples from under represented groups, such as first generation college students, minorities, students with disabilities, students with low English-language proficiency, or students enrolled in developmental math, English, or reading courses may not be isolated for assessment according to the respective group characteristics. In general,

researchers prefer probabilistic or random sampling to nonprobabilistic sampling methods. While the chosen sampling method may limit study applicability, the application of random sampling to the specific circumstances of the study is not practical or theoretically sensible [40]. Participants may later be sub-classified to examine the impact on particular groups within the purposive sample for future research

Significance of the Study

Business education and communication research recognizes CA as a significant problem in improving oral and written communication skills [1, 2, 44, 37, 24, 21, 20, 19, 38, and 25]. It “continues to demonstrate that communication apprehension can seriously impede skills attainment [3],” thus affecting student performance and retention [26, 8, and 22]. The study investigates the possibility of decreasing CA and increasing oral presentation delivery skill using technology. A decrease in CA can create positive social change by affecting student oral presentation delivery skills, learning, and retention. This study may also contribute a new skills-based methodology to reduce CA, thus affecting student performance in communication-based courses, and affecting the body of knowledge.

In-class presentations, with focus on business presentation skills, monopolize end of term class time in face-to-face meeting environments, limiting the time available to devote to skill improvement and CA reduction. Increased emphasis on oral communication skills by employers and accrediting bodies [1, 3, and 4] suggests that an alternate means to address the time constraint may add benefit to students, faculty, and academies of higher education. For students constrained by distance, these benefits may become increasingly important. If the presentation skills resulting from assessment of the DV application exhibit comparisons to live presentation, the study may have a significant bearing on the field.

The time needed to assess student public speaking skills may become more efficient by using DV technology when partnered with a course management system. Faculty assessors may also benefit directly from the study as participation in a DV oral presentation delivery assessment offers new technology exposure, new pedagogical practice exposure, and if adopted, may result in more available class time.

Summary

The study introduces CA and its impact on student oral presentation delivery skills. It presents the problem statement to determine if the use of DV technology as an oral communication delivery mechanism reduces, increases, or renders unchanged, oral communication apprehension. Individuals with high levels of CA typically avoid, withdraw, or disrupt communication [24], thus affecting academic and career potential. The study elaborates on the nature of the problem and the background of Literature-based Research, and describes the theoretical framework and nature of the experiment.

REFERENCES

- [1] Aly, I., & Islam, M. (2005). Factors Affecting Oral Communication Apprehension Among Business Students: An Empirical Study. *Journal of American Academy of Business*, Cambridge, 6(2), 98-103.
- [2] Aly, I. M., & Islam, M. (2003). Audit of accounting program on oral communications apprehension: a comparative study among accounting students. *Managerial Auditing Journal*, 18(9), 751-760.
- [3] Bline, D., Lowe, D. R., Meixner, W. F., & Nouri, H. (2003). Measurement Data on Commonly Used Scales To Measure Oral Communication and Writing Apprehensions., *Journal of Business Communication* (Vol. 40, pp. 266-288).
- [4] Campbell, K. S., Mothersbaugh, D. L., Brammer, C., & Taylor, T. (2001). Peer versus Self Assessment of Oral Business Presentation Performance. *Business Communication Quarterly*, 64(3), 23-42.
- [5] Clevenger, JR., T. (1959). A synthesis of experimental research in stage fright. *Quarterly Journal of Speech*, Vol. 45, pp. 134-145.
- [6] Cole, J. G., & McCroskey, J. C. (2003). The Association of Perceived Communication Apprehension, Shyness, and Verbal Aggression with Perceptions of Source Credibility and Affect in Organizational and Interpersonal Contexts. *Communication Quarterly*, 51(1), 101-110.
- [7] Daly, J. A. (Ed.) (1984). *Avoiding Communication: Shyness, Reticence, and Communication Apprehension*. Beverly Hills, California: Sage Publications.
- [8] Davis, G. F., & Scott, M. D. (1979). Communication Apprehension, Intelligence, and Achievement Among Secondary School Students. *Communication Yearbook*, 2, 457-472.
- [9] Ericson, P. M., & Gardner, J. W. (1992). Two Longitudinal Studies of Communication Apprehension and Its Effects on College Students' Success., *Communication Quarterly* (Vol. 40, pp. 127-137).
- [10] Friedrich, G. W. (1970). An Empirical Explanation of a Concept of Self-Reported Speech Anxiety., *Speech Monographs*, (Vol. 37, pp. 67-72).
- [11] Friedrich, G. and Goss, B. (1984). Systematic desensitization. In J. Daly and J. McCroskey (Editors), *Avoiding Communication* (pp. 173 – 188). Beverly Hills, California: Sage Publications.
- [12] Geske, J. (1992). Overcoming the drawbacks of the large lecture class., *College Teaching* (Vol. 40, pp. 151): Heldref Publications.

- [13] Hassall, T., Joyce, J., Ottewill, R., Arquero, J., & Donoso, J. (2000). Communication apprehension in UK and Spanish business and accounting students. *Education & Training*, 42(2), 93-100.
- [14] Hynes, G. E., & Bhatia, V. (1996). Graduate Business Students' Preferences for the Managerial Communication Course Curriculum. *Business Communication Quarterly*, 59(2), 45-55.
- [15] Leedy, P., & Ormrod, J. (2001). *Practical Research. Planning and Design. (7th Ed.)* New Jersey: Merrill-Prentice Hall.
- [16] Leidner, D. E., & Jarvenpaa, S. L. (1995). The use of information technology to enhance management school education: A theoretical view., *MIS Quarterly (Vol. 19, pp. 265): MIS Quarterly & The Society for Information Mgt.*
- [17] Levine, T. R., & McCroskey, J. C. (1990). Measuring Trait Communication Apprehension: A Test of Rival Measurement Models of the PRCA-24., *Communication Monographs (Vol. 57, pp. 62-72).*
- [18] Maes, J. D., Weldy, T. G., & Icenogle, M. L. (1997). A managerial perspective: Oral communication competency is most important for business students... *Journal of Business Communication (Vol. 34, pp. 67): Association for Business Communication*
- [19] McCroskey, J. C. (1970). Measures of communication bound anxiety. *Speech Monographs, Vol. 37. pp. 269-277.*
- [20] McCroskey, J. C. (1976). THE PROBLEM OF COMMUNICATION APPREHENSION IN THE CLASSROOM. *Communication, 4(2), 115-133.*
- [21] McCroskey, J. C. (1977a). Oral communication apprehension: A summary of recent theory and research. *Human Communication Research, Vol. 4, pp. 78-96.*
- [22] McCroskey, J. C. (1977b). Classroom Consequences Of Communication Apprehension. *Communication Education, 26(1), 27.*
- [23] McCroskey, J. C. (1978). Validity of the PRCA as an index of oral communication apprehension. *Communication Monographs, 45(3), 192-203.*
- [24] McCroskey, J. C. (1983). THE COMMUNICATION APPREHENSION PERSPECTIVE. *Communication, 12(1), 1.*
- [25] McCroskey, J. C., & Andersen, J. F. (1976). The Relationship Between Communication Apprehension and Academic Achievement Among College Students, *Human Communication Research.*

- [26] McCroskey, J. C., & Booth-Butterfield, S., & Payne, S. K. (1989). The impact of communication on college student retention and success. *Communication Quarterly*, 26, 41-50.
- [27] McCroskey, J. C., & Sheahan, M. E. (1978). Communication Apprehension, Social Preference, and Social Behavior in a College Environment., *Communication Quarterly* (Vol. 26, pp. 41-45).
- [28] Ober, S. (1987). The Status of Postsecondary Business Communication Instruction--1986 vs. 1982., *Journal of Business Communication* (Vol. 24, pp. 49): Association for Business Communication.
- [29] Ober, S., & Wunsch, A. P. (1983). The Status of Business Communication Instruction in Postsecondary Institutions in the United States., *Journal of Business Communication* (Vol. 20, pp. 5): Association for Business Communication.
- [30] Pittenger, K. K. S., Miller, M. C., & Mott, J. (2004). USING REAL-WORLD STANDARDS TO ENHANCE STUDENTS' PRESENTATION SKILLS. *Business Communication Quarterly*, 67(3), 327-336.
- [31] Phillips, G. M. (1968). Reticence: Pathology of the Normal Speaker. *Speech Monographs*, Vol. 35, pp. 39-49.
- [32] Plutsky, S. (1996). Faculty Perceptions of Students' Business Communication Needs. *Business Communication Quarterly*, 59(4), 69-76.
- [33] Plutsky, S., & Wilson, B. (2000). Study to Validate Prerequisites in Business Communication for Student Success. *Journal of Education for Business*, 76(1), 15.
- [34] Pribyl, C. B., Keaten, J., & Sakamoto, M. (2001). The effectiveness of a skills-based program in reducing public speaking anxiety. *Japanese Psychological Research*, 43(3), 148-155.
- [35] Pryor, B., Butler, J., & Boehringer, K. (2005). Communication Apprehension and Cultural Context: A Comparison of Communication Apprehension in Japanese and American Students. *North American Journal of Psychology*, 7(2), 247-252.
- [36] Rubin, R. B., Graham, E. E., & Mignerey, J. T. (1990). A LONGITUDINAL STUDY OF COLLEGE STUDENTS' COMMUNICATION COMPETENCE. *Communication Education*, 39(1), 1.
- [37] Ruchala, L. V., and Hill, J. W. (1994). Reducing Accounting Students' Oral Communication Apprehension: Empirical Evidence. *Journal of Accounting Education*, 1(1), 41-50.

- [38] Scott, M. D., McCroskey, J. C., & Sheahan, M. E. (1978). Measuring Communication Apprehension. *Journal of Communication*, 28, 104-111
- [39] Scudder, J. N., & Guinan, P. J. (1989). Communication Competencies as Discriminators of Superiors' Ratings of Employee Performance., *Journal of Business Communication* (Vol. 26, pp. 217): Association for Business Communication.
- [40] Trochim, W. M. K. (2001). *The Research Methods Knowledge Base*. Atomic Dog Publishing, Cincinnati, OH.
- [41] Wardrope, W. J. (2002). Department Chairs' Perceptions of the Importance of Business Communication Skills. *Business Communication Quarterly*, 65(4), 60-72.
- [42] Wardrope, W. J., & Bayless, M. L. (1994). Oral Communication Skills Instruction in Business Schools. *Journal of Education for Business*, 69(3), 132-135.
- [43] Warlum, M. F. (1988). Improving oral marketing presentations in the technology-based company. *Professional Communication, IEEE Transactions on*, 31(2), 84-87.
- [44] Winiecki, K. L., & Ayres, J. (1999). Communication Apprehension and Receiver Apprehension in the Workplace. *Communication Quarterly*, 47(4), 431-440.
- [45] Winsor, J. L., Curtis, D. B., & Stephens, R. D. (1997). National Preferences in Business and Communication Education: A Survey Update. *Journal of the Association for Communication Administration (JACA)*(3), 170-179.

Appendix A

Personal Report of Communication Apprehension (PRCA-24)^[1]

Directions: This instrument is composed of twenty-four statements concerning feelings about communication with other people. Please indicate the degree to which each statement applies to you by marking whether you (1) strongly agree, (2) agree, (3) are undecided, (4) disagree, or (5) strongly disagree. Work quickly; record your first impression.

- _____ 1. I dislike participating in group discussions.
- _____ 2. Generally, I am comfortable while participating in group discussions.
- _____ 3. I am tense and nervous while participating in group discussions.
- _____ 4. I like to get involved in group discussions.
- _____ 5. Engaging in a group discussion with new people makes me tense and nervous.
- _____ 6. I am calm and relaxed while participating in a group discussion.
- _____ 7. Generally, I am nervous when I have to participate in a meeting.
- _____ 8. Usually I am calm and relaxed while participating in a meeting.
- _____ 9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.
- _____ 10. I am afraid to express myself at meetings.
- _____ 11. Communicating at meetings usually makes me feel uncomfortable.
- _____ 12. I am very relaxed when answering questions at a meeting.
- _____ 13. While participating in a conversation with a new acquaintance, I feel very nervous.
- _____ 14. I have no fear of speaking up in conversations.
- _____ 15. Ordinarily I am very tense and nervous in conversations.
- _____ 16. Ordinarily I am very calm and relaxed in conversations.
- _____ 17. While conversing with a new acquaintance, I feel very relaxed.
- _____ 18. I'm afraid to speak up in conversations.
- _____ 19. I have no fear of giving a speech.
- _____ 20. Certain parts of my body feel very tense and rigid while I am giving a speech.
- _____ 21. I feel relaxed while giving a speech.
- _____ 22. My thoughts become confused and jumbled when I am giving a speech.
- _____ 23. I face the prospect of giving a speech with confidence.
- _____ 24. While giving a speech, I get so nervous I forget facts I really know.