

## **Impact of technology based instruction on speech competency and presentation confidence levels of Hispanic college students**

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### **ABSTRACT**

One of the main goals of universities is to graduate students who are capable and competent in competing in the workforce. As presentational communication skills are critical in today's job market, Hispanic university students need to be trained to effectively develop and deliver presentational speeches. Web/technology enhanced training techniques are one way to accomplish this. However, prohibitive costs of technology means that higher education leadership must be convinced that this form of instruction is effective before purchasing equipment. Thus this study investigates the effect of web/technology enhanced training techniques on Hispanic university students' confidence and on their ability to become better communicators when giving presentations. The Hauser Lab, a technology-based speech-tutoring center was utilized. Students first use web-connected computers to view famous, effective and correctly formatted presentations. Then they write their own presentations which they present in a mocked-up classroom outfitted with video cameras and microphones. The final step is for the student to watch the recorded presentation with the Lab staff providing critiques. A survey was given both to students who attended the Lab and students who did not. A one-way analysis of variance was conducted to evaluate the difference between the students on their perceived readiness to give a presentation. Students who attended the Lab scored significantly higher than those who did not attend the Lab. The effect size suggests that 44% of the variance was accounted for by the Lab. This is considered a strong relationship.

Keywords: communication, Hispanic, higher education, Hauser Lab, technology-based training, ANOVA

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## **INTRODUCTION**

To state that Hispanics are now the majority minority in the United States is no longer news. However, the lack of success Hispanic students are achieving in higher education is an important area of discussion. University Business notes that 41% of students in the United States earn a bachelor or associates degree (2008). For Hispanic students that number drops to 19% (University Business, 2011). This lack of educational success will place Hispanic students behind when searching for employment. Studies, such as this one, must be conducted to develop best methods for educating Hispanic students.

This study is an investigation into methods of improving Hispanic student higher education success rates. Specifically, this study will consider the role technology and tutoring play in improving Hispanic college students' confidence and ability when delivering speech presentations. Being able to create and deliver speech presentations, communicate effectively and understand audiences are skills valued by employers, professors and society as a whole (Waldeck, Kearney, & Plax, 2013). The literature has for the most part ignored this underrepresented, yet critical, area of study (Cortez, 2011; Docan-Morgan & Schmidt, 2012).

## **PROBLEM**

It appears that Hispanic university students have not been trained to effectively develop and deliver presentational speeches. This is an issue because presentational communication skills are critical in today's job market (Docan-Morgan & Schmidt, 2012; West, 2011). West (2011) states, "There is less patience than ever for boring speakers and more competition for audience members' attention"(p.26). Garner (2012) writes, "Unrefined speech can torpedo your chances without your even knowing what you've done wrong". Clearly, a student who is not trained in effective public speaking techniques will have difficulty in both class work and after graduation.

## **SIGNIFICANCE OF STUDY**

One of the main goals of universities is to graduate students who are capable and competent in competing in the workforce. Certainly, most university administrators would spare little expense to ensure students had access to the best technology and instructional methods. But in a time when budgets are limited, instituting a technology-based speech tutoring solution may result in prohibitive costs. The cost of cameras, connected control units, cables, software and computers, not to mention remodeling costs as well as hiring staff needed to run this technology may end up costing thousands of dollars. Therefore, higher education leadership must be convinced that this form of instruction is effective before purchasing equipment. Understanding web enhanced instruction will lead to higher education institutions being better prepared to decide if the purchase of advanced technology and software for the instruction of speech is a priority.

## **STATEMENT OF PURPOSE**

This study investigates the effect of web/technology enhanced training techniques on Hispanic university students' confidence and on their ability to become better communicators when giving presentations. Hispanic students who have undergone training sessions in the Hauser Lab will be compared to Hispanic students who were not able to receive this training.

## RESEARCH QUESTION

Utilizing technology and web-based instruction to aid in training students in public speaking skills is an evolving area of instruction and thus little study has been conducted on the effectiveness of public speaking technology. For that reason, this study puts forth the following research question:

Does the inclusion of web/technology-enhanced instruction in university speech classes create greater public speaking ability and confidence in Hispanic college students when compared to traditional university speech course instruction?

## IMPORTANCE OF PRESENTATIONAL SPEAKING

Communication is a skill highly valued by employers. Waldeck, et al (2013) illustrated that point, "Communication is important in all kinds of industries, from service-oriented fields like travel, hospitality, real estate and sales to highly technical fields like medicine and engineering" (p.3). These statements hold true throughout the literature (Docan-Morgan & Schmidt, 2012; Garner, 2012; West, 2011). Strong public speaking skills are nearly a requirement for paid leadership positions (West, 2011).

Further, the challenge of public speaking has evolved. Today, smart phones, wi-fi connected laptops and other gadgetry compete with a speaker for audience attention. West (2011) states, "While you're speaking, people in the audience can be texting each other about your presentation...the audience members have a way to talk to each other, and they can revolt" (p.25). Clearly, to be an effective presenter, the speaker must not only be factual but also entertaining.

Beyond the podium, the ability to communicate effectively is critical in gaining employment. Students looking for work must present themselves as confident, articulate and able to lead. These are all characteristics of effective public speaking. The fact is, employers want leaders who can communicate effectively. "You'll need to speak well if you want to be taken seriously" (Garner, 2012). Docan-Morgan and Schmidt (2012) continue this line of thought by writing, "competence in public speaking is paramount to student success in and out of the classroom as public speaking is a necessary part of both college and work responsibilities" (p.16).

However, Hispanic college students are at risk of not learning to effectively communicate as speech anxiety is heightened in students who learned English as a second language (Docan-Morgan and Schmidt, 2012). Furthermore, "...anxiety experienced in communication in English can be debilitating and can influence students' adaptation to the target environment and ultimately the achievement of their educational goals" ( p.16). In other words, a student's fear of speaking in English can cause him/her to choose not to communicate. Waldeck et al (2013) note that an unwillingness to communicate can cause others to believe the communicator is less intelligent, lazy or unknowledgeable.

## **TECHNOLOGY**

Kelsey, Mata-Claflin, Holland, and Castillo (2011) suggested that as we conclude the first ten years of this century people are surrounded by technology. According to Pensky (2001) technology such as “Computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives” (p.1). He also claimed that students are born knowing technology and digital language, labeling these students as native speakers. The National Center for Education Statistics (2008) reported that for every four students there is one computer with Internet connection and that nowadays the majority of schools have Internet connection. Technology is now widely utilized in the schools

Technology as an instructional tool has had an impact on student learning in the classroom. Kelsey, Mata-Claflin, Holland, and Castillo (2011) found that students in a south Texas elementary school obtained higher success when technology was available. Bebell, Rusell, and O’Dwyer (2004) claimed that teachers use technology to their advantage when creating instructional activities. Students do homework, searching for support and data on computers (Barron, Ivers, Lilavois, & Wells, 2006). Smolira (2008) studied student views of online homework in beginning finance classes and found that both students and teachers benefited from technology. Teachers benefit because it reduces the amount of work. Students found that when doing online homework, they had more time to understand the concepts and to study for class. The students liked online assignments because they were able to get fast feedback. However, students have to be receptive to technology and its tools in order for this to work (Smolira, 2008). Graduate students were happier with online homework compared to undergraduate students taking finance courses. “This study corroborates the potential value of technology in enhancing learning (Smolira, 2008, p. 94)

Park (2008) examined the impact of technology use on Hispanic students and their mathematics success in relation to school and home settings.

[They] indicate the importance of the micro-level use of technology in predicting the mathematics performance of Hispanic students. The considerable amount of variations in mathematics performance can be attributed to individual computer use after controlling the major factors in family and school context (p. 464).

Also, in a previous and similar study, Park et al (2007) found that minority students who were not native speakers of English obtained educational benefits from individual computer use including an increase in mathematics performance.

## **LAB**

The Lab that was utilized, a technology-based speech-tutoring center, is located in the Communication Department of a University in Southern Texas. The purpose of the lab is to help students develop, practice and deliver effective speech presentations. The lab provides instruction for presentations to be given to large and small groups. The lab is also available to provide tutoring focused on job interviewing techniques and other effective communication strategies. Ultimately, the Lab’s goal is to develop students who are effective, confident communicators.

A variety of techniques are utilized to achieve the Lab’s goal. Students are able to use web-connected computers to view famous, effective and correctly formatted presentations. With a deeper understanding of what a speech should sound like, the students are asked to outline and write their own presentations. After writing the presentations students present in a mocked-up

classroom outfitted with video cameras and ceiling mounted microphones. The student goes through the entire presentation a few times while being recorded. The final step in the tutoring process is for the student to watch the recorded presentation with the Lab staff providing critiques. The idea of this process is to have students leave the lab confident about developing and delivering effective presentations.

## **METHODOLOGY**

A survey was given to students who attended the Lab and students who did not. The question used from the survey was “How prepared do you feel to give a presentation?” and students had five answer choices: Not Prepared, Little Bit Prepared, Prepared, Very Prepared and Extremely Prepared. A one-way analysis of variance was conducted to evaluate the difference between students who attended the Lab and those who did not on their readiness to give a presentation. The independent variable, the group of students, included two levels: students who attended the Lab, and students who did not attend the Lab. The dependent variable was students’ readiness of giving a presentation.

## **RESULTS**

The ANOVA was significant  $F(1, 68) = 52.93, p < 0.01, \eta^2 = 0.44$ . Students who attended the Hauser Lab ( $M=4.89, SD= 1.33$ ) scored significantly higher than those who did not attend the Hauser Lab ( $M=3.51, SD=1.33$ ). The effect size suggests that 44% of the variance was accounted for by the Lab. This is considered a strong relationship.

## **RECOMMENDATIONS**

Results provided evidence that students’ readiness to present after attending the Lab were positive. It is essential students are aware of the services they can receive from the Lab so they can take advantage and improve their presentation skills. Further research needs to be completed using random samples of students to ensure that the difference does not depend on some other factor. The specific factors in the Lab that contribute to students’ readiness to present need to be studied.

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