Teaching Public Speaking to Business Students in the Digital Age: Updating our Methods

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ABSTRACT

Few would disagree that public speaking is an important skill for business graduates and is critical for career success. With an increasing number of online courses, in addition to organizations expanding the use of technology to facilitate communication, we posit that students should focus on learning public speaking skills in a digital setting. In this article, the authors propose the use of synchronous online discussions to develop the important skill of effective online professional communication and ameliorate students' fear of digital public speaking. We present the results of a survey of MBA and undergraduate students that indicate the importance of online learning and a desire to learn more about how to effectively conduct a business presentation in an online setting. We then present an explanation of how instructors can incorporate synchronous online discussions into a course. Moreover, findings from a qualitative survey of MBA students are presented, for the purpose of demonstrating how synchronous online discussions reduce fear of digital public speaking. By teaching our students skills to improve their public speaking ability in online settings, we could better prepare our graduates for career success in the digital age.

INTRODUCTION

The progression towards distance learning, virtual discussion, and online communication is postulated herein as a means to not only better prepare students for the digital communication requirements in business today (Ward, 2016) but also diminish students' fear of public speaking in online settings. Hence this paper seeks to describe how to most effectively utilize synchronous online discussions in business courses to teach business students this important skill, in addition to overcoming students' fear of public speaking.

LITERATURE REVIEW

Public speaking is an important skill for business graduates (Carnegie, 2017; Leeds, 2007). In fact, 70% of respondents to a *Forbes* survey believe that presentation skills are critical for career success (Gallo, 2014), and corporation's use of virtual meetings has dramatically increased (Dunshee, 2018; Olson, 2010).

Furthermore, with technology becoming ubiquitous, the knowledge of how to effectively present technical information is a skill that should be incorporated into information management courses (Marchis, 2010). The ability to present in a professional manner, by utilizing a digital format is unfamiliar to most information management students, although this ability is essential in the digital business environment (Marchis, 2010; Alavi et al., 1997). However, many students exhibit fear of public speaking in online settings.

Glossophobia, or extreme speech anxiety, affects about 10% of the population, with another 80% of the population experiencing nervousness related to public speaking (Morgan 2011). In Information Technology courses and other business classes, students are often required to speak in front of a class (Marchis, 2010). Unfortunately, some of these students would rather fail a class than be faced with an in-class discussion. However, most Information Technology instructors generally realize that this skill is vital for their graduates. Furthermore, by reducing a student's fear of public speaking, researchers indicate that these students can be prevented from dropping out of the university or becoming underachievers (Tillfors et al., 2008). In the 1970s, some researchers

referred to this fear as "Communication-bound anxiety" (McCroskey, 1970).   With the increasing number of communication modes enabled by technology, we suggest that public speaking can now take many forms in an educational setting. Beyond the traditional in-class presentations and discussions, professors now engage in virtual discussions (Ward, 2016) or digital public speaking, which is due in part to the increasing number of distance learning (DL) courses.

With the trend towards increasing the number of DL courses offered at the university level (Carraher Wolverton & Guidry Hollier, 2019), instructors have begun investigating various methods for teaching effective public speaking skills to DL students. Research indicates that individuals with fear of public speaking respond with similar anxiety when speaking in virtual settings (Leeds, 2007; Slater et al., 2006). Therefore, instructors in DL courses with public speaking components in the course will likely encounter a number of students who will experience anxiety regarding online public speaking.

Nonetheless, there exists disagreement over how to design a DL course that effectively teaches a student public speaking skills in online settings. Some researchers attempt to replicate the face-to-face course in an online setting, declaring that the DL courses are perceived to be equally as effective as face-to-face courses in improving public speaking skills (Linardopoulos, 2010; Clark & Jones, 2001).   However, research has suggested that DL instructors must redesign their pedagogical approach to teaching digital public speaking in order to align it with the digital context of today's business environment (Schwartzman, 2007). As business students in the 21st century will need to be familiar with web conferencing and online communication, it stands to reason that DL courses should reflect these needs instead of merely replicating the traditional course online (Ward, 2016; Lind, 2012).

Synchronous Online Discussions

With over 5.8 million students enrolled in online courses (OLC, 2016), the ability to effectively communicate online is a valuable skill, which will become more valuable as organizations continue to move towards a more global and digitized system of communication. Beyond adding a beneficial skill to our graduates, it is herein proposed that online discussions should be incorporated into IT business courses as a method to teach students how to properly communicate utilizing a digital platform.

The literature suggests that synchronous online discussions can be utilized to reduce an individual's fear of public speaking. For example, in an effort to treat fear of public speaking, researchers have employed virtual reality to expose students to public speaking (Söyler et al., 2017; Anderson et al., 2005; Harris et al., 2004). While the results were positive, the cost and time to implement this approach for most students is too high. However, this paper proposes that similar results can be achieved in a more realistic setting – specifically an online discussion.

METHODOLOGY

With extant literature indicating the importance of professional online speaking, we conducted a survey to examine the need to update our public speaking training of business students in the digital age.   Specifically, we sought to examine student beliefs about the evolution of business communication. Our research problem involves determining whether students desire to learn how to effectively communicate online in order to conduct a business presentation in the online setting, and whether they believe they are effectively prepared to communicate a business presentation in an online setting. We posit that if students desire this knowledge, but are not being exposed to updated methods to communicate in the future, this important skill may be missed in their educational endeavors.

We therefore designed an online survey to collect data. The survey was sent to 112 MBA (Master of Business Administration) and undergraduate students.   We received 94 responses, for a

response rate of 84%. SPSS (version 24) was utilized to analyze the results. To determine the reliability of the instrument, Cronbach's alpha was calculated with a result of .867, which demonstrates good internal reliability and consistency (Schwarz et al., 2014; Gliem & Gliem, 2003). Frequencies (Amato et al., 2016; Leech et al., 2013) were calculated to provide the percentage of respondents in each category. Furthermore, t-tests were employed to determine if there were statistically significant differences between the average responses of male and female respondents, between respondents aged 22 years old or younger, and those older than 22, and between graduate and undergraduate respondents.

Hypotheses

We sought to determine whether undergraduates and graduates perceive the importance of online presentation skills differently. This leads to our first hypothesis:

> **Hypothesis 1:** Graduate and undergraduate respondents will have about the same average level of agreement or disagreement related to their perceptions of the importance of online presentations and presentation skills.

We then sought to determine whether males and females perceive the importance of online presentation skills differently. This leads to our second hypothesis:

> **Hypothesis 2:** Male and female respondents will have about the same average level of agreement or disagreement related to their perceptions of the importance of online presentations and presentation skills.

We then sought to determine whether age impacts one's perception of the importance of online presentation skills. This leads to our third hypothesis:

> **Hypothesis 3:** Respondents who are 22 years old or less will have about the same average level of agreement or disagreement as respondents older than 22 years of age, to Likert-type questions related to their perceptions of the importance of online presentations and presentation skills.

Further, we hypothesized that synchronous online discussions can be utilized to reduce an individual's fear of public speaking. After empirically demonstrating the importance of incorporating online communication in today's business courses, the first author implemented synchronous online discussions within an MBA Management Information Systems course. A qualitative online survey was conducted among twenty-three (23) MBA students. The survey required the respondents to compare how they feel about public speaking in front of a face-to-face class versus speaking during online synchronous case discussions.

RESULTS

Table 1 displays the responses to four Likert-type questions, as well as responses to three questions that were related to demographics. With respect to gender, 53.7 percent of the respondents were males, and 46.3 percent were females. In addition, 53.7 percent of the respondents were 22 years old or younger (the median age), and 46.3 percent were older than 22 years old. Also, 66.7 percent of the respondents were undergraduate students, and 33.3 percent were graduate students. Twenty-eight percent of the respondents stated that they had taken five online courses or more (in fact, 24.4 percent stated that they had taken more than five online courses), with 63.4 percent stating that they had taken between one and four online courses.

With regard to their level of agreement or disagreement with the four Likert-type questions, 79.5 percent of the respondents either agreed or strongly agreed with the statement that learning to effectively communicate online is an important skill. Further, 63.8 percent agreed or strongly agreed that in the future, more presentations will be delivered online than in person. The high levels

Table 1: *Percentage of Student Responses to Likert-type Questions Related to Synchronous Online Presentations and Demographic Questions*

LIKERT-TYPE QUESTIONS	Percent of Respondents
I believe that in the future, more presentations will be delivered online than in person	
Strongly Disagree	1.2
Somewhat Disagree	3.6
Neither Agree nor Disagree	9.7
Somewhat Agree	21.7
Agree	33.7
Strongly Agree	30.1
I believe that learning to effectively communicate online is an important skill	
Disagree	1.2
Neither Agree nor Disagree	4.8
Somewhat Agree	14.5
Agree	26.5
Strongly Agree	53.0
I would like to learn more about how to conduct a business presentation in an online setting	
Disagree	2.4
Somewhat Disagree	3.6
Neither Agree nor Disagree	9.7
Somewhat Agree	26.5
Agree	33.7
Strongly Agree	24.1
I have taken courses at the University that have prepared me to effectively conduct a business presentation at an online setting.	**Percent of Respondents**
Strongly Disagree	9.6
Disagree	10.8
Somewhat Disagree	16.9
Neither Agree nor Disagree	13.3
Somewhat Agree	27.7
Agree	13.3
Strongly Agree	8.4
How many online courses have you taken, including the courses you are currently taking?	
None	12.2
1	12.2
2	19.5
3	17.1
4	11.0
5	3.6
More than 5	24.4
GENDER:	
Female	46.3
Male	53.7
Are you a GRADUATE STUDENT OR an UNDERGRADUATE STUDENT?	
Undergraduate	66.7
Graduate	33.3
AGE CATEGORY (based on the Median age of 22 years old)	
22 Years of age or younger	53.7
Older than 22 years of age	46.3

of agreement serves to underline the importance of online presentations, and the students' acknowledging this importance. This is further emphasized by the fact that more than 57.8 percent of the respondents agreed or strongly agreed, that they would like to learn more about how to conduct business presentations online. Lastly, only 21.7 percent of the respondents agreed or

strongly agreed that they had taken courses at their university which have prepared them to effectively conduct business presentations in an online setting. Table 2 illustrates the results of significance tests of the respondents' average responses to the Likert-type questions, plus one other question, when compared by classification (that is, graduate vs. undergraduate classification).

Hypothesis 1: *Graduate and undergraduate respondents will have about the same average level of agreement or disagreement related to their perceptions of the importance of online presentations and presentation skills.*

The objective was to determine if there were statistically significant differences between the average levels of agreement or disagreement between graduate students and undergraduate students on the Likert-type questions, plus one other question. The results are shown in Table 2 below. Both graduate and undergraduate students exhibited the same average level of agreement that in the future, more presentations will be online than in person.   However, graduate students showed a significantly stronger level of agreement that learning to effectively communicate online is an important skill than did undergraduate students. Moreover, graduate students had a significantly stronger level of agreement that they had taken courses at the university that would prepare them to effectively conduct business presentations in an online setting. When asked how many online courses they had taken, respondents from both groups had, on average, taken about the same number of online courses.

Therefore, these results indicate that graduate students were better able to discern the importance of learning to effectively communicate online. Moreover, graduate students were also more likely to desire additional training in the conduct of business presentations online.

Table 2: *Comparisons of Student Perceptions of the Value/Importance of Online Presentations and Presentation Skills by Graduate vs. Undergraduate Status*

Likert Statements and One Other Question	Undergraduate Students		Graduate Students			
	Means*	Std. Devs.*	Means*	Std. Devs.*	t-stat	p-value
I believe that in the future, more presentations will be delivered online than in person	5.64	1.29	5.87	1.07	-0.81	.32
I believe that learning to effectively communicate online is an important skill	6.09	1.11	6.50	0.73	-1.79	.03**
I would like to learn more about how to conduct a business presentation in an online setting	5.40	1.31	5.90	0.92	-1.86	.04**
I have taken courses at the University that have prepared me to effectively conduct a business presentation at an online setting	3.87	1.69	4.57	1.79	-1.77	.70
How many online courses have you taken, including the courses you are currently taking? **(NOTE: this was NOT A Likert-type question,)**	3.65	2.13	4.90	1.71	-2.73	.17

*1=Strongly Disagree; 2=Disagree; 3=Somewhat Disagree; 4=Neither Disagree nor Agree; 5=Somewhat Agree; 6=Agree; 7=Strongly Agree; **Significant at   = .05

Hypothesis 2: *Male and female respondents will have about the same average level or agreement or disagreement related to their perceptions of the importance of online presentations and presentation skills.*

Table 3 shows the results of significance tests when the average responses to the Likert-type questions, plus one other question, were compared by **gender.** As the data in the table indicates, both male and female respondents exhibited the same average level of agreement that in the future, more presentations will be online than in person. Both genders also responded with the same average level of agreement that learning to effectively communicate online is an important skill, and they also agreed that they would like to learn more about how to effectively conduct online business presentations. Both genders showed the same level of neutrality about whether they had taken courses at their University which would have prepared them to conduct online presentations, and they had taken about the same average number of online courses, including the course they were all currently taking. Therefore, gender did not impact the results.

Table 3: *Comparisons of Student Perceptions of the Value/Importance of Online Presentations and Presentation Skills by Gender*

Likert Statements and One Other Question	Males		Females		t-stat	p-value
	Means*	Std. Devs*	Means*	Std. Devs*		
I believe that in the future, more presentations will be delivered online than in person	5.49	1.15	5.89	1.26	-1.48	.70
I believe that learning to effectively communicate online is an important skill	5.97	1.14	6.43	0.85	-2.07	.27
I believe that I am knowledgeable about how to conduct a business presentation in an online setting	5.43	1.35	5.25	1.64	0.54	.16
I would like to learn more about how to conduct a business presentation in an online setting	5.62	1.06	5.57	1.27	0.20	.48
I have taken courses at the University that have prepared me to effectively conduct a business presentation at an online setting	4.14	1.75	4.14	1.80	0.00	1.00
How many online courses have you taken, including the courses you are currently taking? **(NOTE: this was NOT A Likert-type question,)**	3.84	2.05	4.34	2.08	-1.09	.48

*1=Strongly Disagree; 2=Disagree; 3=Somewhat Disagree; 4=Neither Disagree nor Agree; 5=Somewhat Agree; 6=Agree; 7=Strongly Agree; **Significant at   = .05

Hypothesis 3: *Respondents who are 22 years old or less will have about the same average level of agreement or disagreement as respondents older than 22 years of age to Likert-type questions related to their perceptions of the importance of online presentations and presentation skills.*

Table 4 shows the results of significance tests of the average responses to the Likert-type questions, plus one other question, when compared by **age category.** The median age for these respondents was twenty-two (22) years, and thus the significance test was to determine if there were any significant differences between the average level of agreement or disagreement between those respondents aged 22 years old or younger, and those respondents older than age 22. As illustrated in the table, respondents in both age groups exhibited the same average level of agreement that in the future, more presentations will be online than in person. Also, both age groups had the same average level of agreement that learning to effectively communicate online is an important skill, and both groups agreed that they would like to learn more about how to effectively conduct such presentations. Both age groups indicated the same level of neutrality (or slight disagreement, as exhibited by the respondents in the younger age group) about whether they had taken courses at their University which would have prepared them to conduct online presentations, Likewise, when asked how many online courses they had taken, respondents from both age groups had, on average, taken about the same number of online courses. Thus, age did not impact the results.

Table 4: *Comparisons of Student Perceptions of The Value/Importance of Online Presentations and Presentation Skills by median age (Median = 22)*

Likert Statements and One Other Question	22 Years of Age or Less		Older than 22 Years of Age		t-stat	p-value
	Means*	Std. Devs.*	Means*	Std. Devs.*		
I believe that in the future, more presentations will be delivered online than in person	5.49	1.35	5.95	1.01	-1.71	.12
I believe that learning to effectively communicate online is an important skill	5.05	1.13	6.42	0.83	-1.68	.11
I would like to learn more about how to conduct a business presentation in an online setting	5.35	1.19	5.87	1.56	-2.03	.34
How many online courses have you taken, including the courses you are currently taking? *(NOTE: this is NOT A Likert-type question,)*	3.66	2.06	4.63	1.98	-2.17	.89

*1=Strongly Disagree; 2=Disagree; 3=Somewhat Disagree; 4= Neither Disagree nor Agree; 5=Somewhat Agree; 6=Agree; 7=Strongly Agree; **Significant at = .05

Implementation of Synchronous Online Discussions – Qualitative Survey

The first author implemented synchronous online discussions within an online MBA Management Information Systems course at a university in the southeastern United States. Two synchronous

online case study discussions and one face-to-face[1] case study discussion were assigned to students. The synchronous discussions were designed in a manner that facilitates student engagement (Schwarz & Zhu, 2015) through the discussion (Carraher-Wolverton, 2018). First, participation contributed to a significant portion of each student's grade, which provided a motivation for them to transcend their fear of public speaking. Moreover, the instructor systematically called upon the students to answer semi-structured questions relating to the case study, ensuring that each student had at least one opportunity to participate in the discussion. Finally, the instructor facilitated an encouraging environment (Muirhead, 2004) and mitigated verbal aggressiveness (Myers, 2001). One-on-one discussions with the instructor also provided valuable feedback to the students.

After the case study discussions, a qualitative online survey of the students was conducted. Twenty-three (23) MBA students completed the survey. The survey required the respondents to compare how they feel about public speaking in front of a face-to-face class versus speaking during the online synchronous case discussions. With this item, the professor sought to understand whether the introduction of online discussions helped to mitigate their fear of public speaking. Therefore, the professor's specific focus was on the responses from the students with a fear of public speaking. More than half of the respondents[2] indicated that they felt less anxiety when speaking in the online synchronous case discussions.

In particular, one respondent stated the following:

"My biggest fear of public speaking is having everybody looking at me at once. When it's online, I am almost not nervous/tense/anxious/stressed at all."

The use of an online discussion component in the course enabled the student to participate in the class discussion without the anxiety of public speaking.

According to another student, the online discussions

"…take the edge off when you don't have any eyes or attention bearing down on you. It's as if [they were] giving a presentation blind folded but with access to all of the necessary tools to give a proper discussion on the topic."

For this student, the fear of public speaking stems from their classmates' "eyes…bearing down" on them when they are speaking. The utilization of an online discussion mitigates this fear, as no one can see them while they are speaking. Thus, we posit that synchronous online discussions could both provide experience with professional online communication, in addition to possibly reducing a student's fear of public speaking.

DISCUSSION

These findings demonstrate the importance of teaching students how to effectively conduct business presentations in an online setting. Specifically, the results indicate that students believe that in the future, more presentations will be delivered online than in person. With technology becoming ubiquitous, organizations will increasingly favor online communications, in order to reduce costs and reduce the amount of time it takes to communicate across dispersed work groups. This suggests that as we move further into the digital economy, instructors should aim to design courses that meet these changes in the business environment.

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[1] Since the course is listed as 100% online, we did not mandate attendance at the face-to-face case study discussion. Only two students were unable to attend the face-to-face session, and they completed another written assignment instead

[2] Two students did not respond to this item, so we did not include them in this calculation. Two students felt the same level of anxiety with public speaking and online discussions.

Our results also demonstrate that the respondents believe that learning to effectively communicate online is a very important skill, and they would like to learn more about how to conduct a business presentation in an online setting. Students realize the impact that technology is having on all areas of business, including communication, and their responses indicated a feeling that they have not been adequately prepared to effectively conduct a business presentation in an online setting, however they would like to learn this important skill.

Although some business classes currently prepare students for in-person presentations, it is evident that some business courses do not focus on updating their curriculum to incorporate online business communications. In this study, we have demonstrated the need for updating curriculum to include online discussions. Specifically, we propose synchronous online discussions to focus on developing digital public speaking skills.

While gender and age did not impact the survey results, graduate and undergraduate students responded differently on some items. Specifically, graduate students, who tended to have more professional work experience, were more likely to recognize the importance of effective online communication, and they were more likely to desire to learn more about conducting online business presentations. We posit that this difference may be related to the amount of professional work experience of the graduate students compared to the undergraduate students. The graduate students may be better able to recognize the importance of learning professional online communication as they have greater professional experience. Thus, as effective communication is critical in business settings (Quintanilla & Wahl, 2018), business instructors should consider the update of traditional communication courses by incorporating online communication throughout the business curriculum.

Our findings further indicate that by incorporating an online discussion component into a course, it could reduce a student's fear of digital public speaking. Furthermore, it enables an instructor to more effectively measure a student's level of knowledge of a subject, without the confounding effects of fear of public speaking undermining their participation in a class discussion.

Similar studies that have utilized technology to reduce fear of public speaking indicate that the effects last beyond the time of the treatment. For the period after exposure to virtual reality experiences with public speaking, the subjects exhibited lower levels of anxiety related to public speaking (Anderson et al., 2005; Harris et al., 2004).

By utilizing synchronous online discussions in the classroom, these authors sought to expand the important topic of business communication skills to incorporate online professional communication, in addition to possibly facilitating reduction of public speaking anxiety in order to better prepare our business graduates for career success in the digital age.

IMPLICATIONS FOR FUTURE RESEARCH

The authors of this paper encourage other researchers to examine whether students who become comfortable with this "treatment" of participating in online discussion experiences decreased fear of digital public speaking. By viewing this as a form of systematic desensitization for students who begin with a fear of public speaking, each synchronous case study discussion would facilitate their ability to become more comfortable with digital public speaking. The authors also encourage other researchers to longitudinally study whether becoming comfortable with digital public speaking impacts the student's level of anxiety with digital public speaking in future courses and after graduation.

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