

# TEACHING WRITING WITH TWITTER: AN EXPLORATION OF SOCIAL MEDIA USE IN ENHANCING BUSINESS COMMUNICATION SKILLS

Lajuan Davis

L. Roger Yin

## Introduction

The advent of social media led by Facebook, Twitter, YouTube, Wikipedia, Google, and LinkedIn, to name a few, has become a phenomenon among Internet user groups, especially individuals at the post-secondary and higher levels. The social media scheme is more bottom-up, grass roots, flat, and thus more user friendly than the top-down, executive-decision-driven, and hierarchical scheme of conventional organizational communication. Because of the popular appeal of social media in particular to the generation Xer's and millennials, also known as *generation next* or the *digital generation*, wise educators are searching for methodologies to use to integrate social media into the classroom in an effort to engage students in learning while maintaining quality instruction and student learning outcomes.

## Research Questions

This study attempted to address the following questions:

1. Does a difference exist between the grades of business communication students who use the social media Twitter to complete weekly free-writing assignments in the course and those students who do not use Twitter in the class?
2. Does a difference exist between the grades of male versus female business communication students who use Twitter and males/females who did not use Twitter in the business communication class?
3. What are students' perceptions of using the social media Twitter in a business communication class?

## Purpose

Social media has a presence that educational institutions must acknowledge, explore, and embrace. Social media formats such as text messaging, Facebook, and Twitter have invaded the workplace, the classroom, and the world. The question

---

Dr. Lajuan Davis is an assistant professor in the Department of Management, Marketing, and Information Systems at the University of Tennessee Martin. Dr. Davis can be contacted at ldavis91@utm.edu.

Dr. L. Roger Yin is an associate professor in the Department of Information Technology and Business Education at the University of Wisconsin-Whitewater. Dr. Yin can be contacted at YINL@uww.edu.

arises then of how to effectively harness the power of social media and transform it into a teaching tool. Since numerous studies have suggested that students enjoy learning and consider their learning more valuable when technology is infused into the learning environment, merging that technology with social media use into the present-day classroom seems reasonable and feasible (Davis & Fisher, 2009; Huffman & Huffman, 2012; Shafer, 2002). Additional research revealed a 2012 study that students' acceptance of technology is based on perceived ease of use and perceived need of technology (Huffman & Huffman, 2012). Therefore, linking the concepts of technology acceptance with the results of the 2012 study led to the expectation that students would embrace integration of a social media such as Twitter in the classroom because of its ease of use and the students' perceived need to use technology. Social media experts describe Twitter as a user-friendly social media format categorized as a micro-blogging social media that allows users to send messages that are limited to 140 characters (Galagan, 2009), which would provide students with the opportunity to exercise the business communication methodology of writing in a brief, clear, and concise manner. Utilizing social media to give students additional practice in writing in a business communication course was the springboard for this cutting-edge research project.

### **Literature Review**

While an abundance of research and information can be found concerning social media and its use in educational settings (Galagan, 2009; Martinez, Kock & Cass, 2011; Moody, 2010; Pennay, 2009; Waller, 2010), the empirical research on the use of Twitter in the classroom is much more limited and, to date, non-existent. However, Dittmar (2011) suggested that certain interactive technologies (i.e., Twitter) can be used as part of a "learning community" in which students keep in touch with one another and the instructor to assist the students in remaining engaged in their learning. Because Twitter has been defined as a micro-blogging social media that limits users to sending 140-character messages, the choice of using Twitter to teach students in a business communication course to reinforce the concepts of writing in a brief, clear, and concise fashion seems appropriate. In another study conducted in 2009, Dawley admonished that new pedagogies that integrate social media into educational environments are needed. In a 2010 article, Moody discussed some of the advantages of using social media such as Twitter in the classroom. The author states that because students are using various social media sites throughout the day, allowing students to send questions to an instructor via Twitter can be a very efficient, time-saving practice. Additionally, Morris (2012) reported that students who are hesitant to talk or ask questions in class have an opportunity to exercise their voices when using social media, which offers a certain degree of anonymity. "Because of Twitter's easy access and quick response time, it also has become more common for students . . . to address business-related questions to a business school's Twitter handle, instead of using traditional outlets such as e-mail and phone" (Morris, 2012, p. 36). Lastly, President Barack Obama's

recent presidential race victory was celebrated by the President sending a thank-you Twitter message to his supporters as soon as the elections results were publicized because, as Nicholas Carr, author of *The Shallows* explained, Twitter is a social media technology that fits the way Americans live and learn (Carr, 2011; “Obama photo a social-media sensation,” CNN.com, 2012).

Smith and Vanevenhoven (2011) explored the issue of professionalism in the age of social media. The authors reinforced that because students are using social media on an everyday basis, pedagogy must be developed by educators to incorporate instructing students about how to properly use social media in the classroom. Students often are not cognizant of the fact that future employers can view their social media activities, which may harm these individuals’ employment or advancement opportunities in business and industry (Smith & Vanevenhoven, 2011; Szul & Woodland, 2010).

Other research suggests that using social media in various aspects in the classroom can serve to teach students how to properly use the media in the work world as many businesses and industries have been incorporating social media into marketing campaigns and communication channels for years (Cardon & Okoro, 2010; Dyrud, 2011;). Researchers Looney and Ryerson (2011) also reported that, “Graduating millennials entering the workforce will find their new employers presume them to be competent navigators with social media” (p. 157), and employers will depend on these new hires to lead the *social media charge* into worldwide markets. Thus technology skills are “taking on increasing significance in the workplace and beyond, and students will benefit from exposure to a variety of technologies and a thoughtful consideration of sources of information and their validity” (McKeachie & Svinicki, 2009, p. 231). Finally, in another research article “findings suggested that technology use . . . was related to academic success (i.e., final grade in class)” (Huffman & Huffman, 2012, p. 583).

In a study cited in a 2008 *Delta Pi Epsilon Journal* study (Perreault, Waldman, Alexander & Zhao) researchers determined that students who enrolled in technology-rich courses consistently overestimated their expertise with technology. The use of Twitter for this current research study, however, requires very little technological expertise and is very user friendly as is evidenced by students in elementary and middle schools using the technology in previously published educational articles (Barack, 2009; Pennay, 2009). Furthermore according to a recent online article, Twitter was listed as the second most popular social media site in the nation, second only to Facebook, due to Twitters’ ease of access and use (Strickland, 2012). As in any research study that purports curricular changes, care must be taken to ensure that the technological variable utilized in the study (i.e., Twitter) be used to enhance the face-to-face communication, not replace it; moreover, curricular changes and additions should be designed to further prepare students for entry into today’s workplace because future employers expect students to be competent writers in addition to being “experts” in social media use (Cardon & Okoro, 2010; Davis & Yin, 2011).

Some educators have completed research studies that address issues of gender with technology use that warrant being examined for this study. Hite (2011) discussed the fact that females are perceived as more productive in online classes than males, and females are more vocal in online rather than traditional classes due to their comfort level with online technologies (Anderson & Haddad, 2005). Additionally, research reports that males' brains are more geared toward working with computers (Gurian & Stevens, 2004); however, females usually spend more time on computers than males (Bain & Rice, 2006), and females may initially experience more discomfort with technology use (Lewis, Shea & Daley, 2005). Therefore, gender factors could affect the success of a study utilizing social media and will be considered in this study.

Finally, when teaching writing with technology, the literature reveals that educational experts purport that "integration of technology [into the classroom] frequently relates technology to the improvement of writing" (Shafer, 2002, p. 42). Bean (2001) and Johnson (2011) supported giving students practice writing to increase writing skills without overloading instructors with additional grading, "Grades are not given for writing style, just participation" (p. 161). Speck (2000) and Bean (2001) admonished that students' writing skills can be increased via repeated practice of the skill and that instructors need not grade the practice for students' writing skills to improve. Hence, the study of the use of Twitter in the classroom to assist students in improving writing skills by providing students with additional practice will provide valuable and interesting information for educators considering integrating curricular additions involving social media.

### **Methods and Procedures**

A mixed research method of gathering qualitative data in addition to quantitative calculations was used in this study (Fraenkel & Wallen, 2003). Approval to conduct this research project was secured from the researchers' Institutional Review Board. Business majors in a medium-sized university enrolled in six in-tact, undergraduate traditional business communication courses (N=201) volunteered to participate in this study. These college juniors and seniors were required to complete three credit hours of courses in information technology to ensure their proficiency in technology use. These business majors took the business communication course from the same instructor in six different class sections taught in three regular semesters between Spring 2011 and Spring 2012.

The first semester the study was conducted served as a pilot study for the remainder of the study. After the results of the first semester of the study were analyzed, the project was refined to reflect the following changes.

- The free-writing assignments used for the Twitter project were integrated into the students' class schedules, which they received on the first day of class with assignment due dates, test dates, etc. outlined.

- Students were allowed to help choose some of the topics used in the Twitter study to assist in securing students' *buy-in* to the project.
- The Twitter project commenced *after* the grammar and proofreading units had been completed so that information from these units would be in the forefront of students' minds.
- Since the students using Twitter were limited to writing in 140-character format, the decision was made not to grade the Twitter/traditional free-writing assignments according to the traditional writing criteria stated in the class syllabus. Rather, students were given the topic for the assignment and asked to adhere to the business communication concepts of writing in a brief, clear, and concise manner and to use as few abbreviations and acronyms in their writing as possible.
- A special *hash-tag* or *handle* (e.g. #bc353 or @drlld) was created for students to key when submitting Twitter assignments. Using the hash-tag or handle helped the instructor easily find and read the students' responses to questions/statements posed for the assignments.
- Finally, the Twitter/traditional free-writing assignments were aligned more closely with the business communication units being covered in the class prior to the beginning of each unit. The following questions are some examples of the Twitter/free-writing assignments used in the classes:
  1. As an introduction to the good-news writing unit, the students were asked to respond to the follow statement and question: "You have just won \$1 million and you have 24 hours to spend it. How will you spend your money?"
  2. To introduce the bad-news writing unit and reinforce the notion of offering a counterproposal, the following questions were posed: "What is some bad news you have received lately? What do you intend to do about it, or what action will you take as a result of this news?"
  3. To introduce the persuasive writing unit, the following question was asked to elicit students' responses: "Why should I hire you?"
  4. To introduce the unit on using electronic communications, students were told to, "Google yourself. What would future employers think about the information you discovered?"
  5. To prompt class discussion on the proper uses of social media, the students were shown a current social media YouTube video and asked, "What aspect of the video most impressed you?"

In this study, half of the students submitted weekly free-writing assignments via Twitter (Twitter users,  $n = 101$ ) while the other half of the students submitted the assignments in the traditional keyed hardcopy paper format (non-Twitter users,  $n = 100$ ). The Twitter/non-Twitter assignments (on the same topic) were given to students to provide forms of additional practice in writing not to add to the

instructor's grading workload. The total number of females in the study was  $n = 35$ , males  $n = 148$ . Additionally, the students in each section were asked to write a short reflection paper (limited to one page in length) to discuss their perceptions of using Twitter in the classroom setting as well as their general observations/opinions about social media.

All writing assignments, tests, as well as Twitter/traditional free-writing assignments for the classes were administered and graded by the same instructor. Again, Twitter/traditional free-writing assignments were not graded, but rather used for practice to assist students in improving their writing skills. Students were cautioned to proofread all free-writing assignments and to resist using abbreviations and acronyms in their writing. At the conclusion of the semester, students' grades in each of the classes were analyzed between Twitter users and non-Twitter users and between male and female Twitter users and non-Twitter users, to determine if a difference existed between the two groups' grades. In addition, information was gathered through the qualitative research method of content analysis by conducting personal interviews and assessing students' short reflection papers about the Twitter project.

### **Research Question 1 Results**

Research Question 1 that was formulated for this research study is reiterated as follows:

1. Does a difference exist between the grades of business communication students who use the social media Twitter to complete some writing assignments in the course and those students who do not use Twitter in the class?

The results concerning Research Question 1 comparing grades of students using Twitter versus the grades of students not using Twitter are given. As shown in Table 1, the mean grades of each of the two groups of approximately an equal number of students were calculated and the Twitter users' grades were 3.546/4.0 scale (closer to an A-) compared to the non-Twitter users' scores of 3.398/4.0 scale (closer to a B+).

**Table 1**

Twitter Use	n	Mean	Variance	Std. Dev.	Std. Err.	Median	Range	Min	Max	Q1	Q3
Non-Twitter User	100	3.3989	0.36814323	0.60674804	0.06067481	3.66	4.00	0	4	3.33	3.66
Twitter User	101	3.5463	0.12758344	0.35718825	0.03554156	3.66	2.34	1.66	4	3.33	3.66

Summary Statistics for Grade

The boxplot in Figure 1 depicts a more widespread grade distribution among non-Twitter users (with 0 the lowest and 4.00 the highest) compared to the grade distribution of Twitter users (with 1.66 the lowest and 4.00 the highest) though the two groups have grades equally concentrated.

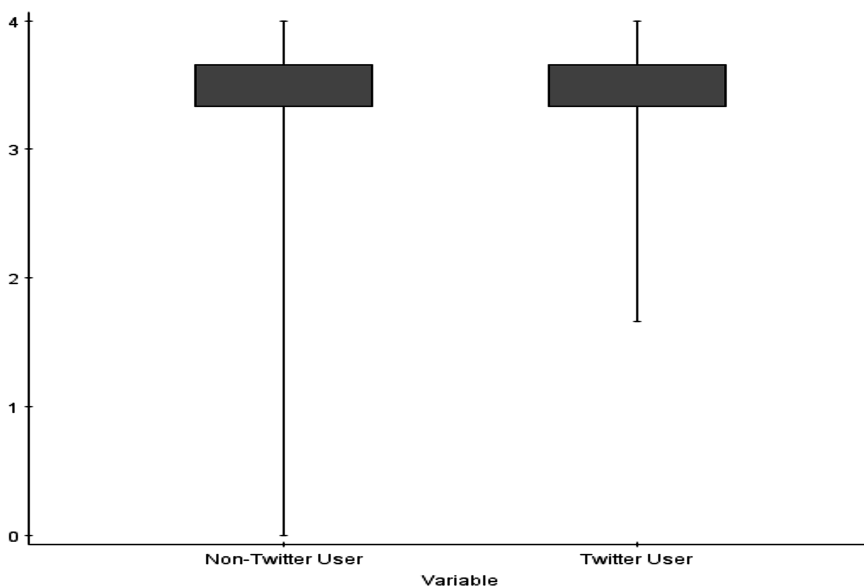


Figure 1. Boxplot of Grades of Twitter and Non-Twitter Users.

Table 2 shows the mean grade difference between Twitter users and non-Twitter users via t-test results. With a commonly accepted significance level at 0.05, the P-value of 0.0368 is apparently lower than 0.05. The data collected support the hypothesis that the mean grade scores between Twitter users and non-Twitter users demonstrates a statistically significant difference.

Table 2

*T-statistics with Grades of Twitter and Non-Twitter Users*

Difference	Sample Mean	Std. Err.	DF	T-Stat	P-value
$\mu_1 - \mu_2$	-0.14743663	0.07014768	199	-2.1018033	0.0368

(with pooled variances)

$\mu_1$  : mean of Non-Twitter User

$\mu_2$  : mean of Twitter User

$\mu_1 - \mu_2$  : mean difference

$H_0 : \mu_1 - \mu_2 = 0$

$H_A : \mu_1 - \mu_2 \neq 0$

## Research Question 2 Results

Research Question 2 that was formulated for this research study is reiterated as follows:

2. Does a difference exist between the grades of male versus female business communication students who use Twitter and males/females who did not use Twitter in the business communication class?

An interaction model was used for this analysis because no outstanding reason existed to assume the lack of interaction between gender and the usage of social media technology. Findings show that the interaction effect (between gender and Twitter usage) is not statistically significant. Likewise, the Twitter effect is not statistically significant at the .05 level. (See Tables 3 and 4.) However, gender plays an important role in determining students’ grades, and the analysis supports the finding that female students are more likely to earn a better grade than their male counterparts regardless of the usage of Twitter (Gurian & Stevens, 2004). Specifically, Figure 2 reveals an observable difference between grades of male Twitter users and male non-Twitter users. The male Twitter users earned a mean score of 3.50 on overall grades in the business communication class, while the male non-Twitter users earned a mean score of 3.33 (see Table 5). This gap in scores was not found among the female students as the female Twitter users earned an average score of 3.64 while the female non-Twitter users earned an average score of 3.63 in the class.

The results provide an insight to instructors concerning managing students’ use of Twitter while taking into account the gender differences of students. Male students may need to be encouraged to use Twitter as a communication tool to enhance their writing skills since the male Twitter users tend to have a slightly better average final grade than male non-Twitter users.

**Table 3**  
***Between-Subjects Factors***

N		
M1F0*	0	53
	1	148
Twit1**	0	100
	1	101

\*M1F0 represents Females = 0; Males = 1

\*\*Twit1 represents non-Twitter users = 0; Twitter users = 1

**Table 4**  
**Tests of Between-Subjects Effects**

Dependent Variable: Final Grade					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.020a	3	1.007	4.195	.007
Intercept	1899.457	1	1899.457	7914.982	.000
M1F0	1.803	1	1.803	7.512	.007
Twit1	.310	1	.310	1.291	.257
M1F0 * Twit1	.252	1	.252	1.050	.307
Error	47.277	197	.240		
Total	2474.684	201			
<b>Corrected Total</b>	<b>50.297</b>	<b>200</b>			

a. R Squared = .060 (Adjusted R Squared = .046)

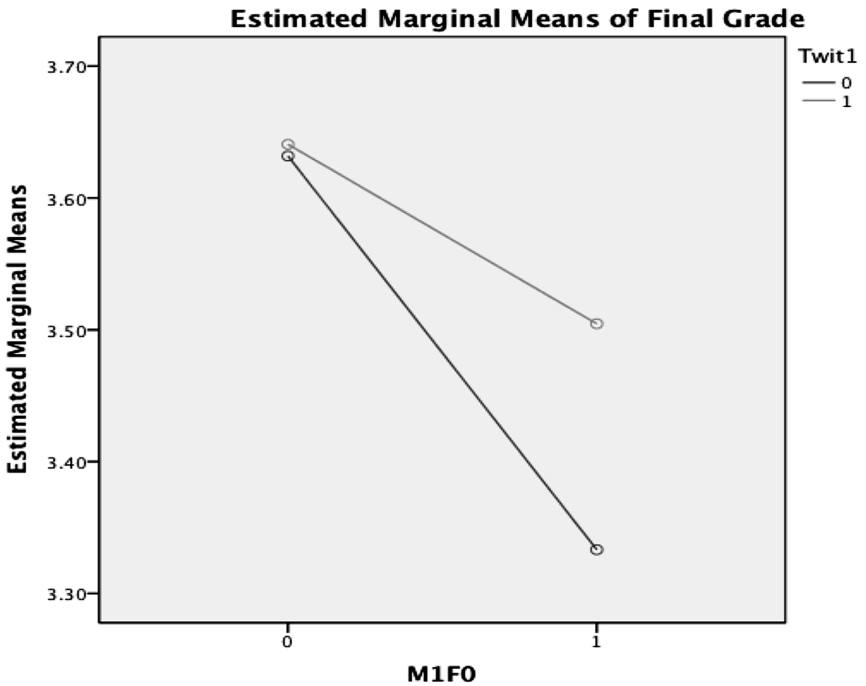


Figure 2. Estimated Marginal Means of Final Grades

\*M1F0 represents Females = 0; Males = 1

\*\*Twit1 represents non-Twitter users = 0; Twitter users = 1

**Table 5**  
**Report of Final Grade Tally**

<b>Final Grade</b>				
<b>M1F0*</b>	<b>Twit1**</b>	<b>Mean</b>	<b>N</b>	<b>Standard Deviation</b>
0	0	3.6318	22	.22869
	1	3.6406	31	.32202
	Total	3.6370	53	.28455
1	0	3.3332	78	.66271
	1	3.5046	70	.36613
	Total	3.4143	148	.54804
Total	0	3.3989	100	.60675
	1	3.5463	101	.35719
	Total	3.4730	201	.50148

\*M1F0 represents Females = 0; Males = 1

\*\*Twit1 represents non-Twitter users = 0; Twitter users = 1

**Table 6**  
**Twit1 \* M1F0 Crosstabulation**

		<b>M1F0*</b>			
		<b>0</b>	<b>1</b>	<b>Total</b>	
<b>Twit1**</b>	<b>0</b>	Count	22	78	100
		Expected Count	26.4	73.6	100.0
		% within Twit1	22.0%	78.0%	100.0%
		% within M1F0	41.5%	52.7%	49.8%
		% of Total	10.9%	38.8%	49.8%
	<b>1</b>	Count	31	70	101
		Expected Count	26.6	74.4	101.0
		% within Twit1	30.7%	69.3%	100.0%
		% within M1F0	58.5%	47.3%	50.2%
		% of Total	15.4%	34.8%	50.2%
<b>Total</b>	Count	53	148	201	
	Expected Count	53.0	148.0	201.0	
	% within Twit1	26.4%	73.6%	100.0%	
	% within M1F0	100.0%	100.0%	100.0%	
	% of Total	26.4%	73.6%	100.0%	

\*M1F0 represents Females = 0; Males = 1

\*\*Twit1 represents non-Twitter users = 0; Twitter users = 1

**Table 7**  
**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.956 <sup>a</sup>	1	.162		
Continuity Correction <sup>b</sup>	1.534	1	.216		
Likelihood Ratio	1.963	1	.161		
Fisher's Exact Test				.200	.108
Linear-by-Linear Association	1.946	1	.163		
N of Valid Cases	201				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.37.

b. Computed only for a 2x2 table

In Tables 6 and 7, the crosstabulation and Chi-Square tests outcome confirms the lack of interaction between gender and Twitter usage (as the two-sided p-value = .2, which is larger than .05 significance level). This crosstabulation reveals that male students are more likely to *choose* to use Twitter than their female counterparts. That result, though, may be limited by the fact that the number of female students (n = 53) is approximately one third the number of male students (n = 148) involved in this study. However, there is no significant interaction between observed and expected values in gender and Twitter usage.

### Research Question 3 Results

A preliminary content analysis of the students' interviews and reflection papers was conducted by the authors after the quantitative data were collected. The reflection papers were analyzed via content analysis techniques and personal interviews of students that were held in order to address Research Question 3 of this study concerning students' perceptions of the use of Twitter in the classroom as well as their perceptions of social media in general. Research Question 3 is as follows:

3. What are students' perceptions of using the social media Twitter in a business communication class?

To address the aforementioned research questions, students were asked to record their perceptions on the use of Twitter use in the business communication classroom. Students were asked to think of any issues that might arise when integrating social media into a learning environment.

The content analysis conducted on the students' reflection papers concerning the use of Twitter resulted in overwhelmingly positive comments from students. Some of the students expressed both positive and negative comments, and a small percentage of the students wrote about the negative aspects of using Twitter and social media according to their personal thoughts and opinions. The positive

perceptions from students will be addressed first, followed by the negative perceptions, as well as a brief discussion of the students who conveyed both positive and negative perceptions and opinions.

After reading, performing a content analysis, and counting the students' responses concerning their perceptions of social media use, approximately 72.3% (or 73 out of 101) of students had positive perceptions and comments about using Twitter and other forms of social media. During the content analysis, some very common threads and comments began to emerge from the students' reflection papers. A physical count of the most common comments was performed. The following items are the top seven most common positive elements that students wrote about in their reflections. The items are ranked with number one being the item mentioned most frequently, number two item being the item mentioned second in frequency, etc., and the comments have been paraphrased for the convenience of the reader.

Students' positive comments addressed the following elements:

1. The obvious rapid growth of Twitter and other social media and students' pleasure at being able to use Twitter in an educational setting
2. Prior to this research project, the students had primarily used Twitter to keep in touch with family and friends
3. Students were now becoming more aware of the [marketing] power of Twitter and other social media
4. Students were now aware of the affect that Twitter and social media has on present-day employment practices
5. Twitter and social media are becoming powerful communication tools in both business and personal arenas
6. The ease of use and access to Twitter make the social media a very popular form of communication
7. Twitter and other social medias can be used to serve as a major source of information as well as entertainment for global audiences

In addition to the items in the aforementioned list, several students (non-Twitter users) expressed their desire to participate in any future research studies involving Twitter or social media. The students also used the words *empowering*, *powerful*, and *revolutionary* to describe the use of Twitter and social media in a classroom setting.

After reading, performing a content analysis, and counting the students' responses concerning their perceptions of social media use, approximately 17.9% (36 out of 101) of students had negative perceptions of the use of Twitter and other social media. The majority of those concerns dealt with issues of security and privacy—or lack thereof—with social media use. In addition, students worried that the use of Twitter and other social media will lead to decreased face-to-face communication skills, which they noted are lacking in some of their peers even today.

Additionally, the students who had both positive and negative perceptions listed at least one or more of the comments in the list of positive perceptions (1 – 7) and one or the other of the negative perceptions concerning security/privacy and face-to-face communication issues. The students who did ponder the negative aspects of Twitter and social media use did concur that social media use is a phenomena that is now deeply rooted in today’s world of communication and is not a fad that will simply fade over the next few years.

### **Summary and Discussion**

The findings of this study show that a significant difference of average final grades exists between students who use Twitter for free-writing assignments and those who do not use Twitter. More specifically, the Twitter users on average received an A– (3.546) grade as opposed to a B+ (3.398) average of the non-Twitter users. This result is encouraging and consistent since one professor taught all sections of the business communication course and graded all writing assignments utilized for this research study. Of course, the argument can also be made that the students who volunteered to use Twitter to submit their free-writing assignments were the better writers/students in the classes.

Moreover, a significant difference does not seem to exist pertaining to gender between Twitter users and non-Twitter users in this study. However, the study supports the theory that gender plays an important role in determining students’ grades (Gurian & Stevens, 2004). The study analysis supports the finding that female students are more likely to earn a better grade than their male counterparts regardless of the usage of Twitter.

As seen via the students’ reflection papers, many students in the study were excited to be using Twitter because they and so many of their peers were also already using the social media, and the students see the Twitter use as an additional way to keep in constant touch with friends, family, and peers. Educators need to be aware of and willing to embrace any technology or teaching method that excites students about learning. Approximately 72.6% of the students in the research study expressed positive perceptions about the study, about using Twitter in the classroom, and about the use of social media in general. The negative perceptions about the use (or overuse) of Twitter and other social media were also noted by the students who seemed concerned with the issues of security, privacy, and lack of face-to-face communication skills in today’s generation. However, the class discussions generated about social media use assisted in giving students practice in using face-to-face communication skills.

Also noteworthy for discussion is the fact that since college juniors and seniors have not yet entered the formal workforce, these students may lack an appreciation of how possessing appropriate, technical business writing skills can enhance their job performance. However, the students’ reflection papers certainly demonstrated that they are now aware of the impact that social media use can have on employment practices. Furthermore, using social media in the classroom

may be an important avenue for educators to use to assist students in making the all-important cognitive transition from *learning* to *application* in the business environment. Therefore, educators must take care to use real-world simulations when utilizing Twitter or any social media as a learning tool in educational settings.

Today's educators, students, and businesspersons have powerful technological tools readily available to them to facilitate the teaching/learning and information-exchange processes. Although Twitter is only one of the social media sites available to technology users, Twitter can be an effective instrument to utilize in the classroom and in the workplace. With the 140-character limit on messaging, Twitter is compatible with the way people think and work within the contexts of being brief, clear, and concise in writing and communication. In addition, the popularity of the use of social media cannot be denied as the number of Twitter and social media users continues to grow exponentially throughout the United States and the world.

### **Recommendations**

The study conducted for this article is only the beginning point when contemplating the future implications for using social media as a teaching tool. A recommendation of a significant factor that requires future study, for example, would be whether the use of technologies such as social media can assist in reducing the anxiety that some individuals feel when faced with writing documents or sending messages given the anonymity that certain social media provides.

A second recommendation for research that needs to be conducted would be to determine which other social media technologies could be used to improve writing skills and perhaps other professional abilities. According to the current literature, numerous professional educators, writers, trainers, and businesspersons who utilize Twitter suggest that using Twitter improves an individual's writing skills, so the next logical research step would be to discover if other social media technologies can also improve individuals' skills.

A third recommendation is that as future research is conducted in the social media arena to determine success in business communication or writing-intensive courses, other variables should be incorporated into the studies. For example, perhaps students' ACT or SAT writing scores could be used to determine if the more proficient writers/students are volunteering to use the social media technology.

Finally, care should be taken in any research study, however, for educators to properly supervise students' Twitter use so that the media is utilized effectively and efficiently. Social media users need to become accustomed to framing their writing with brevity while giving thought to exactly what message needs to be conveyed and how that message needs to be encoded. When properly educated about Twitter use, educators will become comfortable with and more confident about integrating social media into the classroom.

## References

- Anderson, D. & Haddad, C. (2005). Gender, voice, and learning in online course environments. *Journal for Asynchronous Learning Networks*, 9(1), 1–13.
- Bain, C. D. & Rice, M. L. (2006). The influence of gender on attitudes, perceptions, and uses of technology. *Journal of Research on Technology in Education*, 39(2), 119–132.
- Barack, L. (2009). Twittering Dante. *School Library Journal*, 55(4), 14–15.
- Bean, J. C. (2001). *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. San Francisco, CA: Jossey-Bass.
- Cardon, P. W. & Okoro, E. (2010). A measured approach to adopting new media in the business communication classroom. *Business Communication Quarterly*, 73(4), 434–438.
- Carr, N. (2011). *The Shallows*. New York, NY: W. W. Norton & Company, Inc.
- Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly/September 1989*, 319–340.
- Davis, L. & Fisher, D. (2009). Teaching with technology to decrease writing apprehension and increase writing skills in a business communication course. *Business Education Digest*, 18(1), 1–12.
- Davis, L. & Yin, R. (2011). Tweeting toward high-performance business communication: The use of social networking tool Twitter to improve college students' business writing skills. *Issues in Information Systems*, XII(1), 401–406.
- Dawley, L. (2009). Social network knowledge construction: Emerging virtual world pedagogy. *On the Horizon*, 17, 109–121.
- Dittmar, E. (2011). Interaction in online education. In L. Gueldenzoph Snyder (Ed.), *Online business education, 2011 [NBEA] yearbook, No. 49*, (pp. 98–110). Reston, VA: National Business Education Association.
- Dryrud, M. (2011). Social networking and business communication pedagogy: Plugging into the Facebook generation. *Business Communication Quarterly*, 74(4), 475–478.
- Dryrud, M. (2012). Posting, tweeting, and rejuvenating the classroom. *Business Communication Quarterly*, 75(1), 61–63.
- Fraenkel, J. R. & Wallen, N. E. (2003). *How to design and evaluate research in education*. New York, NY: McGraw-Hill.
- Galagan, P. (2009). Twitter as a learning tool. Really. *Training and Development*, Retrieved from <http://web.ebscohost.com>
- Gurian, M. & Stevens, K. (2004). With boys and girls in mind. *Educational Leadership*, 62(3), 21–26.
- Hite, N. G. (2011). Research in online education. In L. Gueldenzoph Snyder (Ed.), *Online business education, 2011 [NBEA] yearbook, No. 49*, (pp. 16–28). Reston, VA: National Business Education Association.
- Huffman, W. H. & Huffman, A. H. (2012). Beyond basic study skills: The use

- of technology for success in college. *Computers in Human Behavior*, 28(2), 583–590.
- Johnson, B. S. (2011). Business communication courses. In L. Gueldenzoph Snyder (Ed.), *Online business education, 2011 [NBEA] yearbook, No. 49*, (pp. 156–166). Reston, VA: National Business Education Association.
- Lewis, D., Shea, T. & Daley, T. M. (2005). The effect of virtual team membership on attitudes towards technology usage: A study of student attitudes in the United States. *International Journal of Management*, 22(1), 3–10.
- Looney, B. A. & Ryerson, A. (2011). “So you’re a millennial—create us a Facebook presence.” *The Business Review, Cambridge*, 17(1), 157–163.
- Martinez, C. T., Kock, N. & Cass, J. (2011). Pain and pleasure in short essay writing: Factors predicting university students’ writing anxiety and writing self-efficacy. *Journal of Adolescent & Adult Literacy* 54(5), 351–360.
- McKeachie, W. J. & Svinicki, M. (2009). *McKeachie’s Teaching Tips*, 11th ed., Wadsworth, 183–185.
- Moody, M. (2010). Teaching Twitter and beyond: Tips for incorporating social media in traditional courses. *Journal of Magazine & New Media Research*, 11(2), 1–9.
- Morris, S. (2012). Social media: How tweet is it. *BizEd*, XL(6) 32–37.
- “Obama photo a social media sensation.” (2012, November). Retrieved from <http://www.cnn.com/2012/11/07/tech/social-media/obama-photo-twitter-facebook/index.html?iref=allsearch>
- Pennay, A. (2009). Techno-literacy: A boon for writing instruction in the classroom. *California English*, 15.1, 18–20.
- Perreault, D., Waldman, L., Alexander, M. & Zhao, J. (Winter 2008). Graduate business students’ perceptions of online learning: A five year comparison. *The Delta Pi Epsilon Journal*, L(3), 164–179.
- Shafer, R. (2002). Technology, business education, and young learners. In A. M. Remp (Ed.), *Technology, methodology, and business education, 2002 [NBEA] yearbook, No. 40*, (pp. 42–52). Reston, VA: National Business Education Association.
- Smith, J. C. & Vanevenhoven, J. (2011). Professionalism in the age of social media. *Wisconsin Business Education Association*, 59(1), 5–17.
- Speck, B. W. (2000). *Grading Students’ Classroom Writing: Issues and Strategies*. ASHE-ERIC Higher Education Report. (Vol. 27, No. 3). Washington, DC: The George Washington University, Graduate School of Education and Human Development.
- Strickland, J. (2012). Top 10 Social Networking Sites. *Discovery News*. Retrieved from <http://news.discovery.com/tech/top-ten-social-networking-sites.html>
- Szul, L. F. & Woodland, D. E. (2010). Social media in the classroom: Facebook and Twitter. *Business Education Forum*, 64(4), 16–18.
- Waller, M. (2010). ‘It’s very very fun and exciting—using Twitter in the primary classroom. *English, Four to eleven*. Retrieved from <http://web.ebscohost.com>