A Pilot Study of Community College Student New Media Instructional Preferences

Loretta Beavers
Southwest Virginia Community College

Wally Guyot
Fort Hays State University

Robert Meier
Fort Hays State University

James (Skip) Ward
Fort Hays State University

Xiangyu Xiao
Fort Hays State University

Abstract: Literature concerning the instructional use of new media is limited to four-year institutions of higher education. This pilot study was conducted at a community college in the United States to determine student preferences for the use of various types of new media for instructional purposes. Specific media included in the pilot study were Blackboard, blogs, Facebook, LinkedIn, photo sharing, podcasts, QR codes, Skype, SlideShare, smartphones, social bookmarking, Twitter, virtual worlds, Wikis, and YouTube.

While research exists on new media learning preferences for students enrolled in four-year institutions of higher education, little to no research exists that examines the new media preferences of students enrolled in two-year institutions. Thus, the purpose of this pilot study is to open a dialog concerning community college student preferences in the use of new media for instructional purposes.

A Likert scale was used to determine the likelihood of using various types of new media for instructional purposes. The choices were (5) very likely, (4) somewhat likely, (3) not very likely, (2) not likely at all, and (1) not familiar with. The findings regarding Facebook usage revealed that females had a significantly

greater mean (4.260) than males (3.841). With respect to smartphone usage, no significant gender or age differences were found. No significant age difference was found for YouTube usage; however, students under 21 years of age (mean = 3.993) had a significantly higher mean than students greater than or equal to 21 years of age (mean = 3.601).

Key Words: Facebook, net generation, new media, social media, smartphones, YouTube

Introduction

Current college, as well as community college, students are considered digital natives. Many students use laptops, tablets, and/or smartphones to connect with media such as Blackboard, blogs, Facebook, LinkedIn, photo sharing, podcasts, QR codes, Skype, SlideShare, smartphones, social bookmarking, Twitter, virtual worlds, Wikis, and YouTube. Two and four year institutions of higher learning need to both determine how to communicate and instruct current students. This pilot study was undertaken to determine current student preferences regarding communication media for instructional purposes. According to Barelka, Jeyaraj, and Walinski (2013), "New Media is conceptualized as an umbrella class of information and communication technologies that is intended to connect individuals in novel and meaningful ways" p. 56. The popular view is that the communication expectations of students can be fundamentally different from other generations. Therefore, the researchers sought to determine if generational and gender differences existed in a community college regarding the use of new media tools for instructional purposes.

Review of Literature

A General Overview--Current Use of New Media

More research in the use of social media technology in the academic environment has focused on the traditional four-year college student populations than on the diverse community college student populations. Community colleges are domains for the commuter student population. Minimal research has been conducted about the effects of social media use in the community college environment. Social media can have broader uses than for just socializing. Academicians should determine the most productive way to use social media technology in the academic setting (Davis, Deil-Amen, Rios-Aguilar, & González Canché, 2012).

The prevalence of new media usage was reported in a recent study by the Pew Research Center when they compared responses of whites, African-Americans, and Latinos. The Pew Research Center's Internet & American Life Project Survey (2013) showed that Facebook was used by two-thirds of those surveyed. In addition, young adults (ages 18 to 29) were more likely than others to use major social media. Twitter, Pinterest and Instagram generally showed the same level of usage (13 to 16%). Tumblr was the least used.

In another study, Gerlich, Browning and Westermann (2010) created a Social Media Affinity Scale and concluded that

. . . no significant differences exist between males and females in their internet usage, social media usage, and also beliefs about social media sites in general. We propose that there is now an opportunity to leverage social media in college courses to deliver content and engage students in ways not previously possible. (p.35)

Social media technology has changed the way many people stay connected. Because of the exponential growth of the use of social media in the personal sector, studies are now being conducted to evaluate how valuable the use of social media would be in the academic setting. Most studies on this topic have concentrated on universities or four-year colleges that have student bodies made up largely of traditional students and many who live on campus. However, community colleges have more diverse student bodies and commuter campuses. Our pilot study fills the void on the use of social media for instructional purposes at community college level.

Although access to social media is easy, there are barriers to its transition into the academic environment. There are demographic differences in the acceptance of social media usage, and security and generational differences are also concerns. Determining students' preferences of which form of social media to use in meeting academic responsibilities is one of the first steps in analyzing the beneficial use of social media in the academic environment.

 The social media divide that often exists between students and educators is a barrier to the potential connection between tools preferred by students and those used by faculty. Creating and maintaining a social media connection apart from course management systems enables faculty and students to access the course discussions via smartphones and other computers, thus creating a class with fewer boundaries (Gerlich et al., 2010). A study by Quan-Haase and Young (2010) found that 82% of college students reported logging into Facebook several times daily. A study by Sponcil and Gitium (2012) found that nearly all college students use a form of social networking; however, earlier studies listed the principal reason reported for using social media websites was to maintain existing relationships. For students to benefit from the full use of social media in academics, faculty and college personnel need to initiate the academic decision to use social media tools for instructional purposes. Our study, however, focuses on community college students rather than four-year institutions.

The prevalent assumption is that the current traditional college-age student is a member of the first cohort to have grown up fully wired and technologically fluent. These digital natives are attracted to social networks for personal news and photo sharing. One goal of guardians of this generation of digital natives is to create a safe, engaging, social network experience. Creating such a social media environment provides an opportunity for educators and counselors to offer this generation a means of communicating and building relationships by using social media that is attractive and familiar. Both Positive Youth Development theorists and Relational-Cultural theorists agree that positive outcomes are cultivated through experiential learning and relationships. It is not a matter of students' acceptance and/or preference of the use of social media for academic purposes; their participation in part, depends on the environment in which they are asked to participate. (Liang, Commins, & Duffy, 2010).

Some studies suggest that the integration of social media in the academic environment does not always produce positive results. A study by Jacobsen and Forste (2011) supported the hypothesis that students' use of electronic media has a negative association with grades. This

negative association was attributed to multitasking using electronic media while attending to academic tasks. Prior research also indicated that multitasking increased distraction, which was detrimental to student academic performance. However, in the social interaction sphere, the study's findings indicated electronic media usage had a positive influence on students' social interaction and development of social networks. These findings indicate that students voluntarily used social media, but they have to learn to focus on enhancing academic requirements with social media technology instead of using it as distractions (Jacobsen & Forste). Again, our study focuses on community college level's students rather than four-year institutions.

Silius, Kailanto, and Tervakari (2011) conducted a study to determine the most important characteristics and functions in social media that enhance learning in higher education. Results indicated that students were concerned about the skill level requirement of social media and privacy and security issues. Students wanted to provide only the information necessary to participate in the course. Students also emphasized that social media services need some particular purpose and should clearly add value to the learning environment.

Specific New Media for Classroom Learning

This section will review the use of the following tools in the classroom: learning management systems, Facebook, smartphones and YouTube. As noted, current literature is limited to four-year institutions.

Use of Learning Management Systems

Educational learning and content management systems such as Blackboard, Desire2Learn, Moodle, and WebCT are not designed to be classified as social media technology because the primary purpose is not to support user-generated content of exchanges and interactions. They are limited to an audience of students and college personnel. However, such systems provide a platform for exchanges and interactions through discussion boards, blogs, and wikis, and are, therefore, often studied in the context of social media use in higher education.

Social media technologies such as Facebook, Twitter, and YouTube allow students to engage in educational contexts beyond the traditional classroom environment. Learning can be achieved if the informal social networks were properly facilitated and agenda driven. These are more easily controlled if the social media followed the construction and guidelines of course content management systems. The use of social media technologies in education has the potential to blur the line between formal and informal learning.

Use of Facebook for Learning Activities

Facebook, currently one of the most popular social media, was created for Harvard students and was adopted by millions for non-educational purposes. College students were the initial and primary users of Facebook, which was created in 2004. Expecting their audience to be fellow students and recent alumni, Facebook users were generally carefree about the

information they posted on their profile. Facebook is now being studied as an educational tool, delivering course content and enhancing student/instructor and student/student relationships. The challenge of using Facebook in an academic environment is students' reluctance to befriend faculty and faculty's reluctance to send the friend request. Both sides express the concern of crossing boundaries of sharing too much information. A faculty concern is creating an environment of unequal power, which may put students in awkward social positions. Selwyn (2007) studied the content of students' Facebook pages and found that very little content related to academic studies. Students used Facebook as a source of empowerment that provided them opportunities to be disruptive, challenging, and resistant—behavior that is uninvited in a traditional classroom course (Karl & Peluchette, 2011).

    Because Facebook is the leading social media site for college students, academicians have considered using Web 2.0 tools to enhance education. The barrier is the evidence that a significant number of students are reluctant to befriend faculty members. Three main reasons were given for not using social networking software in academic pursuits – (1) Social and professional lives should be separate, (2) future employers and faculty/staff might respond negatively to information on social networking sites, (3) there was no perceived need to use social networking tools to meet course expectations or to enhance faculty/student relationships in academic settings. The report findings concluded that, due to issues of boundaries and privacy, undergraduate students were reluctant to use online social media tools to support their academic pursuits (Taylor, Mulligan, & Ishida, 2012).

    The purposes of a study by Duncan and Barczyk (2013) was to determine if Facebook-enhanced university courses fostered the development of communities of practice and enhanced students' sense of classroom community, and they concluded that the use of Facebook in courses helped create and foster a community of practice that was conductive to teaching and learning. Students preferred discussions in Facebook rather than in another instructional technology because they found it was easier to learn with social interaction. The study found that Facebook had greater impact on the students' sense of learning than on their sense of connectedness. Duncan and Barczyk recommended that instructors should make a concerted attempt to limit outsiders' access to the class group. Doing so would change the use of Facebook's technology to favor a course management system format.

    As the student population transitions to the truly digital native generation, younger generations are remaking the educational landscape with technology and a relatively new form of communication and these practices extend beyond graduation and into the professional world (Bakeron, 2013). A study by Davis et al. (2012) suggested that digital natives' brain developments favor constant communication and multitasking, which are characteristics of social media technology. This reshapes the way students communicate both generally and within their college communities. Research supports findings that this reshaping may increase students' use of social networking tools in the academic environment to increase their engagement in college. At the time of the Davis et al. study, very little research had been conducted with community college students. Findings in earlier studies indicated conflicting results.

    All of these studies concern use of Facebook for university-level instruction. Our study examined the use of Facebook for community college instruction.

Use of Smartphones for Learning Activities

Since the introduction of the iPhone in 2007, mobile devices have taken on a prominent role in communications. Members of the Net Generation use smartphones as a main instrument for communications and stay closely connected to their family and friends. Smartphones are used to send and receive emails, text messages, and photos. Students are also using mobile devices to communicate with their college faculty and administrators. Although students' personal and educational usage of their smartphone differs, the smartphone is still a major communication tool in both arenas.

Students have, or may expect to have, access to professors virtually around the clock through email, cell phones, and other new media devices. Behrens (2013) polled students to find out their opinions on faculty office hours. The students' responses indicated that they were more likely to use email to set up an appointment rather than just dropping in even during posted office hours. The technology integration between smartphones and emails enables students to request meeting times that can be scheduled immediately or within a short period of time due to students being within close proximity at the time of the request. Emails are received via smartphones and students are notified immediately of the received message, which allows near real-time communications.

 A study by Nam (2013) explained that students use their smartphone for much more than common telephone conversations. Students used their smartphones as a camera, mobile Internet connection, gaming device, and means to broadcast digital media. More than 96 percent of the respondents in Nam's study claimed they used their smartphones for real-time communications. His study focused on university students' use of smartphones. Although many studies have proposed the use of smartphones in education, Nam's research claimed that few studies have been conducted to determine the purposes of smartphone usage. His study identified university students' preferences for the use of smartphones; however, the study did not address to what degree students used their smartphones in reference to academically-oriented conversations.

Robinson and Stubberud (2012) conducted a study to determine university students' communication preferences. The study explained that the study's participants were students of the Net Generation. Technology is a given for this generation and staying connected is a central part of their lives. They have a need for speedy approaches and have mobile devices that will handle their demands. Over 60 percent of the respondents preferred to communicate using Short Message Service (SMS) texting through the use of a mobile device, either cell phone or smartphone. Synchronous phone calls were preferred over texting in managing work/school activities. Mobile phones make it possible for students to stay connected regardless of their location. Smartphones provide the means for students to text, email, and participate in synchronous or near synchronous dialogue.

Robinson and Stubberud's study (2012) introduced a new term, k-synchronous. The widespread adoption of mobile devices that allow communication almost constantly has altered the perception of synchronous and asynchronous communication. The new term, k-synchronous, defines the middle ground that feels like synchronous communication due to the low perceived time to respond but still is not received at the instant the message is sent. The k-synchronous mode of communications through mobile devices gives people the opportunity to

micro-coordinate their daily activities. Through this use of technology, people can manage their relationships in more flexible and fluid ways.

Use of YouTube for Learning Activities

The Net Generation of college students have embraced technology in their personal lives. According to a study by Sherer and Shea (2011), fewer than half of college students believe that most faculty members effectively use instructional technology in implementing their college courses. However, the greatest challenge faculty have in using YouTube in courses is finding the time to create the videos.

Today's YouTube uploader is, on average, 26 years of age. Eighty percent of YouTube videos are created by amateurs. Only 15 percent are created by professionals with the other 5 percent being commercially produced (Sherer & Shea, 2011).

The ability to share videos with others is the social component of YouTube. Haridakis and Hanson (2009) found that YouTube personal users have two primary motives for social satisfaction: social interaction and co-viewing. Some individuals use YouTube as a primary means of receiving information; therefore, YouTube can be used to enhance a user's social circles and social lives.

Sherer and Shea (2011) described three types of assignments for the instructional use of videos: listening and writing about current YouTube uploads, collecting and archiving existing YouTube videos, and producing videos and uploading to wikis, web sites, or YouTube.

Keisen (2009) reported on the use of YouTube as supplementary learning materials in Teaching English as a Foreign Language in Taiwan. Keisen concluded that "some students highlighted the importance of providing clear explanations regarding how to use this learning tool effectively" (p. 1).

Future Challenges for the Use of Social Media for Instructional Purposes

Social media usage continues to expand. As it gains a more prominent role in the business and academic environments, other media technology methods will emerge to meet the communication needs of Internet users. A study by Barelka, Jeyaraj, and Walinski (2013) defined "new media" as the term "conceptualized as an umbrella class of information and communication technologies that is intended to connect individuals in novel and meaningful ways" (p. 56). The conclusion of this research provided evidence that users focus more on the content of information rather than on the technology itself. This evidence opens opportunities for college personnel and students to use new media technology to communicate for academic reasons. Currently, the use of new media for academic communication and instruction is emerging. Once the methods of new media communication are adopted by all parties involved, bringing new media into the academic environment should be beneficial to all stakeholders (Barelka, Jeyarau, and Walinski, 2013).

Research Purpose

Community colleges, as well as universities, must be capable of effectively communicating with both face-to-face and on-line students. Lightfoot (2009) noted that a wide variety of communication options are available for communicating with students, and student preferences may differ based upon whom they are communicating with and the context of the communication. The results of Lightfoot's survey of 596 undergraduate business students indicated that a student's media preference varies depending upon the characteristics of the medium, the context of the message, and the target of the communication. One such challenge is determining which communication media to support and emphasize.

Based on the aforementioned research, our purpose for conducting this study was to determine community college students' preferences for the use of various types of new media for instructional purposes.

Methods and Results

Methodology

A survey was distributed to 179 community college students (122 males and 57 females) attending a two-year United States institution. Of these respondents, 112 students were less than 21 years of age, and 67 students were in the greater than or equal to 21 years of age category. Students were asked to select from five choices about the likelihood of using various types of new media for instructional purposes. Using a Likert scale, the choices were (5) very likely, (4) somewhat likely, (3) not very likely, (2) not likely at all, and (1) not familiar with. The new media included Blackboard, blogs, Facebook, LinkedIn, photo sharing sites, podcasts, QR codes, Skype, SlideShare, smartphones, social bookmarking, Twitter, virtual worlds, Wikis, and YouTube. Demographic questions were also included.

The research question was, "If the aforementioned new media tools were used for instructional purposes, how likely would you be to use the new media?"

Of the various types of new media listed in the survey, the three most popular new media were Facebook, Smartphones, and YouTube.

For each of the three mediums, a two-way factorial analysis of variance was conducted using SPSS 20.0. The dependent variable in each case was the likelihood of new media usage for instructional purposes, and the independent variables were age and gender. A significance level of 0.05 was used. As opposed to a study by Gerlich et al. (2010), a significant gender difference was found for Facebook usage. Additionally, a significant age difference was found for YouTube, which was inconsistent with Ruleman's study (2012).

Analysis of Facebook Usage

Table 1 shows the results of the two-way factorial analysis of variance. Using a 0.05 level of significance, the gender main effect was significant. Post-Hoc testing revealed that females had a significantly greater mean (4.260) than males (3.841).

Table 1 – Facebook Usage

Tests of Between-Subjects Effects

Dependent Variable: Facebook

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	13.266[a]	3	4.422	2.891	.037
Intercept	2351.242	1	2351.242	1537.142	.000
Gender	6.307	1	6.307	4.124	.044
Age	2.734	1	2.734	1.787	.183
Gender * Age	2.348	1	2.348	1.535	.217
Error	267.683	175	1.530		
Total	3169.000	179			
Corrected Total	280.950	178			

a. R Squared = .047 (Adjusted R Squared = .031)

Table 1a shows the results of student preferences for the use of Facebook for instructional purposes. The mean of 4.050 falls in the (4) "somewhat likely" category; therefore, a modest level of enthusiasm was exhibited by students for the use of Facebook for instructional purposes.

Table 1a – Facebook Usage

Grand Mean - Likelihood of new media usage

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
4.050	.103	3.846	4.254

Table 1b shows the results of student preferences by age and gender for the use of Facebook for instructional purposes.

Table 1b – Facebook Usage

Age by Gender - Likelihood of new media usage

Age by	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
>=21	Male	3.574	.180	3.218	3.931
	Female	4.250	.277	3.704	4.796
<21	Male	4.107	.180	3.825	4.389
	Female	4.270	.203	3.869	4.672

Females in both age categories (mean of 4.270 for age <21 and mean of 4.250 for age >=21) are clearly "somewhat likely" to prefer Facebook for instructional purposes. Males less

than 21 years of age (mean = 4.107) are clearly "somewhat likely" to prefer Facebook for instructional purposes. Males greater than or equal to 21 years of age (mean = 3.574) exhibited a modest level of enthusiasm for Facebook.

Analysis of Smartphone Usage

As with the previous analysis with Facebook, a two-way factorial analysis of variance for smartphones was conducted using SPSS 20.0, as shown in Table 2. The dependent variable was the likelihood of smartphone usage for instructional purposes. The independent variables were age and gender. A significance level of 0.05 was used. Again, consistent with a study by Gerlich et al. (2010), no significant gender differences were found. Additionally, no significant age differences were found. However, the results of the study did provide valuable information for instructional purposes.

Table 2 – Smartphone Usage
Tests of Between-Subjects Effects

Dependent Variable: Smartphone

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.075[a]	3	3.025	1.834	.143
Intercept	2340.104	1	2340.104	1418.645	.000
Gender	.001	1	.001	.000	.983
Age	2.526	1	2.526	1.532	.218
Gender * Age	2.982	1	2.982	1.808	.180
Error	288.669	175	1.650		
Total	3283.000	179			
Corrected Total	297.743	178			

a. R Squared = .030 (Adjusted R Squared = .014)

Table 2a shows the results of student preferences for the use of smartphones for instructional purposes.

Table 2a – Smartphone Usage
Grand Mean - Likelihood of new media usage

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
4.041	.107	3.829	4.252

The mean of 4.041 falls in the (4) "somewhat likely" category; therefore, a modest level of enthusiasm was exhibited by students for the use of smartphones for instructional purposes.
Table 2b shows the results of student preferences by age and gender for the use of smartphones for instructional purposes.

Table 2b– Smartphone Usage

Age by Gender - Likelihood of new media usage

Age by	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
>=21	Male	3.766	.187	3.396	4.136
	Female	4.050	.287	3.483	4.617
<21	Male	4.320	.148	4.027	4.613
	Female	4.027	.211	3.610	4.444

Regardless of age and gender, the level of enthusiasm was modest for the use of smartphones. The levels varied from a mean of 3.766 to 4.320. The highest level of enthusiasm was shown by males under 21 (mean = 4.320).

Females (4.027 for age under 21 and 4.050 for age greater or equal to 21) are "somewhat likely" to prefer the use of smartphones for instructional purposes. Males under 21 (4.320) were "somewhat likely" to prefer the use of smartphones for instructional purposes, and males greater than or equal to 21 exhibited a more modest level of enthusiasm (3.766) for the use of smartphones as an instructional tool.

Analysis of YouTube Usage

A two-way factorial analysis of variance for YouTube was conducted using SPSS 20.0, as shown in Table 3. The dependent variable was the likelihood of YouTube usage for instructional purposes. The independent variables were age and gender. A significance level of 0.05 was used. Again, consistent with a study by Gerlich et al. (2010), no significant gender differences were found; however, a significant age difference was found. Students under 21 years of age (mean = 3.993) had a significantly greater mean than students greater than or equal to 21 years of age (mean = 3.601).

Table 3 – YouTube Usage

Tests of Between-Subjects Effects

Dependent Variable: YouTube

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.692[a]	3	1.897	1.340	.263
Intercept	2066.515	1	2066.515	1459.307	.000
Age	5.513	1	5.513	3.893	.050
Gender	.319	1	.319	.225	.635
Age * Gender	.416	1	.416	.294	.589
Error	247.816	175	1.416		
Total	2921.000	179			
Corrected Total	253.508	178			

a. R Squared = .022 (Adjusted R Squared = .006)

Table 3a shows the results of student preferences for the use of YouTube for instructional purposes.

Table 3a – YouTube Usage

Grand Mean - Likelihood of new media usage

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
3.797	.099	3.601	3.993

The mean of 3.797 is very close to the (4) "somewhat likely" category; therefore, a modest level of enthusiasm was exhibited by students for the use of YouTube for instructional purposes.

Table 3b shows the results of student preferences by age.

Table 3b – YouTube Usage by Age

Dependent Variable: YouTube

AGE	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
>=21	3.601	.159	3.288	3.915
<21	3.993	.120	3.757	4.229

The mean for students under 21 years of age (3.993) was significantly greater than the mean for students greater than or equal to 21 years of age (3.601).

Table 3c shows the results of student preferences by age and gender for use of YouTube.

Table 3c – YouTube Usage

Age by Gender - Likelihood of new media usage

Age by	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
>=21	Male	3.702	.174	3.360	4.045
	Female	3.500	.266	2.975	4.025
<21	Male	3.987	.137	3.715	4.258
	Female	4.000	.196	3.614	4.386

When age and gender were considered, a modest desire for the use of YouTube was evident. The levels varied from a mean of 3.500 to 4.000. Females under 21 years of age showed the highest level of enthusiasm (mean = 4.000).

Discussion of the Results

The researchers sought to determine if generational and gender differences existed among students in a community college. The results of the study provided valuable information for instructional purposes.

Facebook Usage

A modest level of enthusiasm was exhibited for the use of Facebook. Contrary to a study by Gerlich et al. (2010), a significant gender difference was found for Facebook usage. Females had a significantly greater mean (4.260) than males (3.841).

Smartphone Usage

No significant differences were found by age and gender, and a modest level of enthusiasm was exhibited for the use of smartphones. These findings are consistent with the results of the study by Gerlich et al. (2010).

YouTube Usage

When age and gender were considered, a modest desire for the use of YouTube was evident. A significant age difference was found for YouTube. The mean for students under 21 years of age (3.993) was significantly greater than the mean for students greater than or equal to 21 years of age (3.601).

Implications of the Findings for the Use of New Media for Instructional Purposes

Three areas should be considered--instructional challenges, communication, and training for faculty.

Instructional Challenges

Given the modest level of enthusiasm for the three new media--Facebook, smartphones, and YouTube--instructors will be challenged to design learning activities incorporating these new media. The instructional use of Facebook, smartphones and YouTube will also require additional pedagogical research. Emerging technologies that exist but have not become mainstream, such as Google Hangouts and Linoit, should be studied.

Communication

The following communication issues should be considered: (1) develop a formal written communication plan to implement the use of new media for instructional purposes; (2) secure the resources to implement and maintain an ever-green Facebook page, a YouTube channel, and a texting system for instructional purposes; and (3) alert students, faculty, and staff to any changes in communication strategies and tactics**.**

Training

The following training issues should be considered: (1) provide orientation and training as new media communication technologies are introduced for instructional purposes and (2) evaluate the effectiveness of the instructional usage of the new media tools as a part of the continuous improvement process.

Limitations of the Study and Future Research

The researchers were precluded from making generalizations to a broader population of community college students because this pilot study was limited to one community college. A much larger population of students across multiple community colleges could be sampled, which may provide results that could be generalized to the greater community college environment. Therefore, the findings could be used to further guide the implementation of new media for instructional purposes.

New studies should be conducted periodically because of the continuing emergence of new media. Additional quantitative and qualitative studies will be needed to enhance the review of literature for the use of new media for instructional purposes.

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