Chapter 4
The Communication Preferences of Collegiate Students

Joan Ann Swanson, Susan L. Renes, and Anthony T. Strange

4.1 Introduction

An estimated 22.2 million students will enrolled in degree-granting postsecondary institutions in the United States in the fall of 2018 (National Center for Education Statistics 2017; Duffin 2019). Each of these individuals will communicate in some fashion for academic-related purposes with educational administrators, faculty, and students and communicate with others for personal purposes. A majority of students in institutions of higher education today were born into a generation immersed in technology and thus are referred to as digital natives, digital learners, and digital residents (Gutiérrez-Porlán et al. 2018; White and Le-Cornu 2011; Prensky 2001).

Today's technological environment has not only influenced how society communicates; technology has also redefined learning and educational opportunities in many ways. In the academic realm, it is essential to recognize and reconcile college student communication needs and preferences and how they are likely to impact corresponding educational practices.

For the purposes of this chapter, communication is defined as the collaborative transmission of information between individuals through a common verbal or nonverbal system based upon an understanding of their strengths and limitations (Munodawafa 2008). This collaborative process can be accomplished in a multitude

J. A. Swanson (✉)
Skidmore College, Saratoga Springs, NY, USA
e-mail: jswanson@skidmore.edu

S. L. Renes
University of Alaska Fsirbanks, Fairbanks, AK, USA
e-mail: slrenes@alaska.edu

A. T. Strange
Wayland Baptist University, Plainview, TX, USA
e-mail: stranget@wbu.edu

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of ways and may be enhanced through the use of technological tools. In learning situations, communication is the key venue with which messages are disseminated, whether written, spoken, or through nonverbal means. With the rapid proliferation of technological communication tools, colleges and instructors can potentially connect with students anytime and anywhere. The quality of a college's ability to effectively communicate internally and externally impacts their ability to survive in a world where many college doors are being closed (Boyer 2016). Colleges need to stay abreast of the most effective ways to communicate.

Following this introduction, the literature review describes the nature of communication and the significance it has in the academic realm. The literature review delineates the significant role of student communication preferences and patterns. The chapter then discusses technology's impact upon communication in light of continued technological advancements. The importance of competence with and purposes for communication is then addressed. Additionally, theory for understanding the role of preferences and choices in communication is highlighted. As illustrated in the literature review, academic and nonacademic settings reveal differing preferences and patterns for communication. The method section details the descriptive comparative methodology utilized for this study including information about the research tool and participant demographics. Finally, the chapter concludes with the results and a discussion explaining the significance of the revealed patterns of preferred college student communication and how those preferences affect communication practices.

4.2 Literature Review

With the onslaught of potential ways to communicate, administrators and instructors struggle to know the most effective means by which to relay messages and important details to collegiate students. The famous playwright, George Bernard Shaw, said "The single biggest problem in communication is the illusion that it has taken place." The key element in communication is not only disseminating information but knowing it has been received. Boyer (2016) notes effective communication is more than sending a message; it must also foster dialogue. Collegiate students represent individuals who most likely own and use mobile devices, yet utilize a multitude of platforms from which messages could potentially be disseminated, and may or may not receive those messages. Collegiate communication specialists state that relying on only one method of communication to college students can result in messages not being received; thus a growing trend now is to additionally utilize Facebook, Twitter, Pinterest, and other forms of social media (Mangan 2012). Some studies have taken on the task of researching collegiate students' communication preferences (Cassidy et al. 2011; Kvavik 2005; Lightfoot 2009; Robinson and

Stubberud 2012); however, considering the rapid pace at which technological advances are occurring, Robinson and Stubberud (2012) recommend periodically revisiting the moving target of collegiate communication preferences.

Not only do preferences and patterns for use of communication devices vary a great deal among college students and additionally; it is possible that collegiate communication preferences may change over time. Even though most have grown up in a digital age, their competencies may vary. As this study seeks to understand communication preferences and patterns of college students, it also acknowledges that not all students are the same, and adjustments may be needed for varied levels of competence related to communication tools and methods, as well as students' locations.

4.2.1 Communication and Technology

The history of communication methods reaches back to clay tablets and smoke signals and then fast forwards to today to the use of smart phones and virtual realities. Technology has not only influenced communication; it has also redefined learning and educational opportunities. The use of technological tools has become so widespread that these tools permeate daily functioning. Technological communication tools not only impact our daily functioning but also our perceptions and preferences. "Neuroscientist now tell us that we constantly integrate what we are stimulated by and it changes our brain: we then perceive the world differently because of how our brains have changed" (Levy-Warren 2012, p. 1164). The Pew Research Center reports (2018) that 95% of American adults own a cellphone and 77% own a smartphone. This trend of mobile device ownership has become a key factor in communication modes today, not only for simple conversation but as a means to access the Internet and its accompanying vast variety of communication avenues including social media outlets. Perrin and Duggan (2015) report 96% of 18–29 year olds use the Internet daily. Additionally, Pew reports three quarters of adults in the United States own desktop or laptop computers. With the increase in technological devices with which to communicate, there are continuous shifts in how communication is taking place. Knowing these technological tools are at our fingertips affects how and what we think. Farber et al. (2012) suggest technology-enhanced communication has become convenient, resulting in both advantages and disadvantages that vacillate with technological trends. Such emerging technology trends were investigated by Cassidy et al. (2011, 2014), who also indicate an increasing variety of student usage related to technological tools in higher education as well as the dependence on technology. These technologies then expand the options for choosing modes of communication.

4.2.2 Communication Competence and Purpose

Communication often occurs in contexts that may overlap. Lightfoot's (2009) research indicated students choose technology with which to communicate that best carries the message in the particular context. There are also ramifications when communication is unsuccessful, such as embarrassment, disruption in a relationship, and misunderstandings. When technological tools enter the communication equation, Conole et al. (2008) found students select technologies they feel comfortable with to meet their learning needs and rely upon those technologies for their interactions as well. This supports the concept that personalization and a sense of control build communication competence while using familiar tools for communication purposes. Some researchers suggest comfort level with technology, which in turn impacts preference and use of technology, is closely associated with student age as well as their familiarity with the technology (Oblinger and Oblinger 2005; Prensky 2001; Waycott et al. 2010).

Often communication choices, even if they are influenced by available tools, are also dependent upon the purpose for such communication. In an educational setting, the way a course is delivered (face to face, blended, or online) happens through some form of communication (speaking in a classroom, online with live videos or chat, or through information disseminated via a computer). In each of these instructional situations, communication between the instructor and the students is key in the learning process. While patterns develop for communication between the instructor and students, additional patterns of communication also develop for communication between student to student within the context of the academic course. Conole et al. (2008) remark about the extent to which students are now capitalizing on the social affordances of technology to communicate and build peer support. Students will have some opportunity to choose how to interact and communicate, but it may be also be dictated to them by the instructor for course purposes.

4.2.2.1 Academic Situations

Recent technological developments provide students with a rich variety of alternatives for interaction and communication in relation to learning and a flexibility of use which enables them to take control of their learning (Conole et al. 2008). However, the purpose of the communication may impact the preferred method of communicating. When examining communication preferences of students involved in massive open online courses (MOOCs), Zhang et al. (2016) found students overwhelmingly preferred asynchronous text-based posts (45%) to text-based chats which were synchronous (38%) or video- and audio-based conversations (15%). Chang et al. (2015) additionally sought to understand student preferences related to instructor communication in online courses in light of new technological developments. They found 97% of their study participants preferred communication through email and secondly (77%) through a course learning management system. These studies demonstrate students preferred communication in computer-mediated

courses to be more distant, and they especially valued communication with the instructor the most. However, these studies reflect investigation involving online course delivery. There seems to be a lack of such investigation for blended and traditional course formats.

4.2.2.2 Nonacademic Situations

After completing a systematic review of communication technology, Hessel and Dworkin (2017) note research gaps in the manner in which emerging adults communicate. However, there is no argument or lack of evidence that today's college student is operating in a fast-paced, media-saturated environment with unlimited options for communication. Research conducted by Chang et al. (2015) revealed that many collegiate students do communicate frequently via social media but more frequently check email. Regardless of the mode, one outstanding finding concerning college students is that staying connected is central (Robinson and Stubberud 2012). Mobile devices are a key part of that connection; however, the mode for the communication may vary (e.g., texting, messaging, talking, chat, social networking, emailing). Communication methods have now been found to be influenced by immediacy and mobility (Baskin and Barker 2004; Robinson 2011) with the most preference given to modes where communication can be accomplished quickly. Despite being in a technologically rich environment, when surveyed, researchers report many college students indicate a preference for face-to-face communication especially involving personal relationships (Morreale et al. 2015).

4.2.3 Theory for Communication Preferences and Choices

The construction of communication preferences and communication choices can be viewed from several theoretical lenses. According to Hoeffler and Ariely (1999), two aspects of experience impact preferences – their intensiveness and extensiveness. As college students have an increased amount and breadth of experience with any given mode of communication, they will naturally have a propensity to prefer that mode. However, Glasser (1999) contends that our behavioral choices are based upon meeting certain needs (power, love and belonging, freedom, fun, and survival). In this sense, students will choose to communicate in manners that will accomplish what they need given that particular situation. Often times this looks differently in academic and nonacademic situations because the purpose for the communication differs. Learning is often socially mediated (Vygotsky et al. 1980). Communication is a key part of social interactions and occurs within multiple cultural contexts. Communication is additionally influenced by opportunities afforded by choice (Glasser 1999) such as a technological tool. Individuals can then choose how they communicate in any given situation. In summary, preferences for communication will be chosen because they align with a particular purpose within a

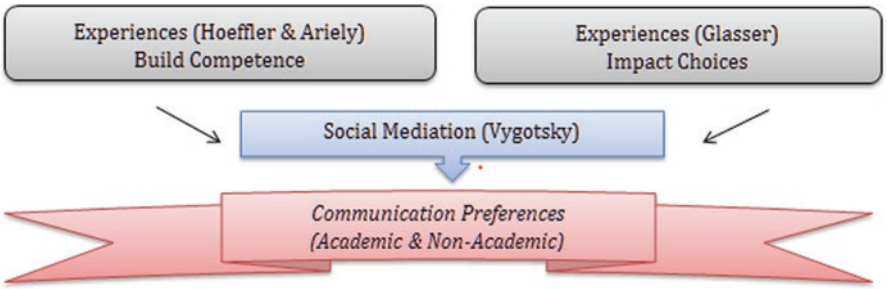

Fig. 4.1 Theoretical lenses for communication preferences

given context and will be based upon experiences and needs, as well as involve social mediation (Fig. 4.1).

The purpose of this study is to better understand the communication-related preferences of collegiate students and how those preferences and use patterns are affected by student interactions with technological tools. The importance of this understanding of student communication is to then provide awareness to educators of preferred and enhanced communication and learning opportunities. The following research questions guided this study:

1. What are the patterns of preferred communication for college students?
2. Do the technological preferences of college students affect their communication preferences and practices?

4.3 Method

This study was descriptive comparative and utilized survey methodology in which a sampling of the college student population in the United States was gathered through a cross-sectional design (Shaughnessy et al. 2011) to study the prevalence of college student communication patterns and preferences. This chapter is part of a larger study that expanded upon previous work comparing college students' academic and nonacademic technology use (Swanson and Walker 2015). The study follows survey methodology suggestions of Busha and Harter (1980) seeking representative samples of collegiate experiences but also had the goal of increased demographic data enhancing comparative analysis.

4.3.1 Participants

Participants in this study included a cross section of college students (N = 1986) from four coeducational institutions in the northeastern, southeastern, southwestern, and northwestern regions of the United States (Table 4.1). One of the institutions

Table 4.1 Comparison of survey respondents' enrollment by percent

Institution	Gender		International	Emer. adult	Coursework			
	M	F			Traditional	Blended	Online	Other
A – private	25.5	72.8	[a]	100	99	1	0	0
B – public	21.1	75.7	2[b]	74	73.9	30.9	14.1	5.9
C – private	40.7	58.7	2[b]	22	31.5	40.4	35.4	0.6
D – public	32.2	65.7	5[b]	48	48.4	28.7	31.9	4.8
Total	31	65	≥9	53	63.2	25.3	81.4	2.8

Note: [a]Citizenship was not asked for at this institution
[b]Estimate as some preferred not to answer this

was a private college only serving undergraduates with the other three institutions enrolling students in undergraduate through doctoral programs. Of the latter three institutions, one was private and the other two public. Males in this study represented 31% of the total participants, while females made up 65%, and another 4% indicated other or preferred not to answer. The participant age range in years varied from students under 18 years (1%), 18–26 years (53%) to over 27 years (44%), and an additional 2% preferred not to answer. While most traditional undergraduate institutions target emerging adults who are considered to be 18–26 years of age, many institutions serve students well beyond the defined emerging adult age range.

The cultural and ethnic diversity of these participants was broadly composed of African American (8%), Asian (5%), European American (68%), Hispanic (11%), American Indian/Alaskan Native (8%), other (4%), and 6% preferring not to answer. Students reported citizenship representing 40 difference countries; however, 89% were from the United States, 3% international, 2% of dual citizenship, and 5% preferring not to answer. Lastly, students identified 33 languages as their first language, in addition to English, but 54 students, 3% of the total respondents, did not choose to share their first language.

4.3.2 Survey

The data collection instrument for this project was a self-report, anonymous Internet survey administered using Survey Monkey (Survey Monkey 1999) following approval of Internal Review Boards from all four institutions. Email invitations to participate in the survey were sent to students at all four institutions with a 9% return, providing a yield of 1986 participants. The survey was comprised of 21 questions which sought both demographic information about the students and their technological preferences and use patterns. Students were asked to indicate time spent using technological devices and for what purpose. They were also asked specifically to rank their preferences for academic and nonacademic communication. The format of these questions included check-off boxes, ranking for Likert-type scale responses, and open-ended response boxes.

4.4 Results

Based upon the survey results of a cross-sectional sample of college students in the United States, the following research questions were addressed regarding communication preferences and patterns. A more precise analysis was achieved by collecting data about communication preferences separately from technological tool use. These are related but different points of analysis.

4.4.1 What Are the Patterns of Preferred Communication for College Students?

The survey results indicated that collegiate students preferred the following technological devices: the mobile/cell phone, the personal computer, an institutional computer, and an iPad/tablet (Fig. 4.2). The use of these devices was then broken down into segments and analyzed for frequency of use: daily, weekly, and never used. Additionally, presentation and storage or sharing tools were used almost exclusively for academics. YouTube, online news, and TED talks were frequently used both academically and nonacademically. Social media, blogs, Google Maps, and games were utilized mostly for nonacademic purposes.

One factor that impacts both academic and nonacademic-related communication is the comfort level students have using technology. When experiences increase in breadth with a particular technological tool, their comfort level and competence are likely to increase. The more students use a tool, which meets a particular need, the more likely they are to utilize that same tool for other purposes. For example, they will be more likely to transfer communication skills utilizing particular technology for both nonacademic and academic situations. Students completing the survey reported up to 75% of nonacademic time involved technology, and their technology

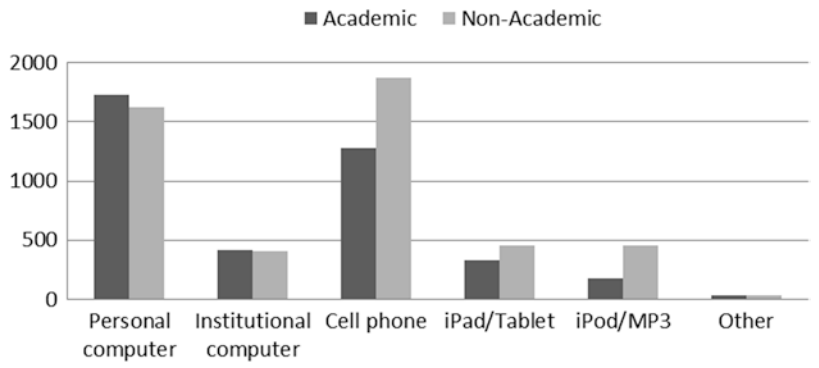

Fig. 4.2 Preferred technological tools by collegiate students

use for academic purposes ranged from 50 to 100% of their time. These students claim at least 50% of their current academic work is connected to technology in some way.

4.4.2 Do the Technological Preferences of College Students Affect Their Communication Preferences and Practices?

Academic and nonacademic communication preferences patterns in college students can first be understood by analyzing the modes of communication most frequently utilized by this population. Individuals in this study who rated traditional landline phone use high for academic communication were 64% more likely to rate landline use high for nonacademic communication, 40% less likely to refrain from texting for nonacademic communication, 25% less likely to use social media for academic communication, 15% less likely to use social media personally, and 24% more likely to use postal communication. The use of a traditional landline phone likely reflects the varied demographic of the ages of today's college students. Increased numbers of students are beyond the traditional 18–21 years of age demographic and may have experiences with technologies rarely used today (i.e., landline phones).

Most participants in this study indicated daily use of a personal computer as well as a mobile phone for both academic and nonacademic use. A large number of students report using institutional-owned computers on a weekly basis for academic use, while half of the respondents never reported using an iPad or tablet. Communication involving a computer or mobile phone would then be supported most naturally as a communication preference for either academic or nonacademic use because of the depth and breadth that comes from using that tool daily, and it can serve to fulfill both academic and nonacademic needs. Communication then utilizing these devices supports email as the most preferred academic mode of communication, likely because it can be accessed with these commonly owned devices.

However, as indicated in the survey results, students across all four institutions and regions of the United States highly prefer in-person communication for both academic and nonacademic purposes (Fig. 4.3). This supports findings from previous research indicating preference for in-person communication for complex, formal and personal messages (Lightfoot 2009). It should be noted, however, that student preferences do not always reflect their practices, which was also noted in a similar study by Robinson and Stubberud (2012). The collegiate student demographics did have some additional impact on communication choices. For example, emerging adults were 13.8% less likely to want to use a landline for communicating academic purposes. Modes of communication involving the digital technology may be assumed to be preferred or favored by digital natives, yet, emerging adults who were 18–25 years of age, had a positive correlation with preference for in-person communication $r(1893) = 0.227$, $p < 0.01$, $R^2 = 0.052$.

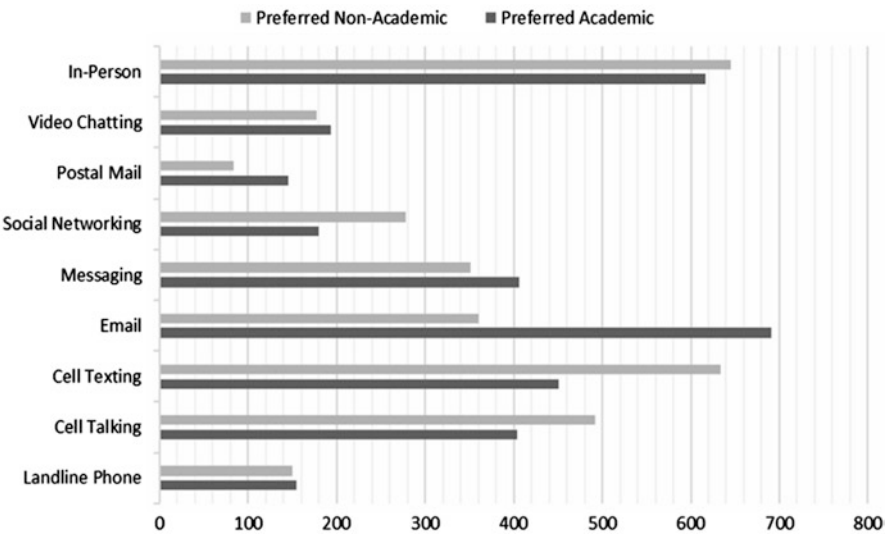

Fig. 4.3 Most frequently used collegiate communication disaggregated by academic and nonacademic purposes

4.5 Discussion and Conclusion

These results support previous work which found that collegiate students prefer face-to-face communication in most situations (Morreale et al. 2015). However, most college students heavily use technological tools to communicate. For example, academic communication is most preferred via email (Fig. 4.3), followed by cell texting and messaging. Although many campuses are using Facebook, Twitter, and other modes of social media, these are not as highly preferred modes to receive message for academic purposes. The communication modes involving email, texting, talking, messaging, and social networking can all be accomplished via a mobile phone and often personal computer if it is a laptop, which allows for mobility. This explains why the computer, personal and institutional, ranked in the top three for most used technological devices. Another important aspect of these favored communication modes is that they allow for information sharing but also are able to solicit feedback, an aspect noted as very important for effective communication (Boyer 2016).

The purpose of this study was to investigate college student communication preferences, and one significant and unexpected finding relates to the hesitancy of students in sharing information that communicates ethnicity and country of origin. This finding may reflect a hesitancy to communicate for fear of repercussions surrounding the current political state in the United States relating to immigration. This finding reinforces the sociocultural role in interactions impacting student communication preferences and the role that the purpose for such communication may hold. A potential way to clarify communications may be to setup systems in which

differing types of communication, which have differing purposes, are consistently disseminated by particular mediums. For example, it would be useful for colleges and universities to establish their own app or website from which core communications would emanate. The next level down could involve emails and text messages to both groups and individuals for general housekeeping communications (announcements, reminders about assignments, sending brief updates, etc.). Additionally, videos could be created for tutorials, explanations, etc. and accessed via emails or texts.

With the understanding of how heavily mobile phones and mobile devices are being utilized by college students, it makes sense to consider more innovative ways to communicate and instruct using these tools. Instructors can help establish communication patterns that fit the flow of the technological use patterns of their students. However, it also makes sense to establish an understanding that there are preferred types of communication associated with such tools in which some academic activities are less productive when using mobile devices.

The reported lack of innovative academic uses of varied technological resources may relate to collegiate instructor's lack of incorporation of such technology into their courses. Similarly, students may not indicate a preference for certain tools or modes of communication in academic realms simply because of not having experienced the use of such tools for academic communication.

Students across all four institutions and regions of the United States who participated in this survey overwhelmingly indicated a preference for face-to-face communication. While there are some advantages of electronic communication, such as being able to correspond from a distance, and the communication being immediate, accessible, and affordable, there are also communicative disadvantages such as missing face-to-face cues like body language and voice tone (Carter and Werts 2015).

Many factors need to be considered when choosing communication modes involving college students. Traditional educational settings, where students and instructors are face to face, are not always feasible or optimal. However, because of technological developments, there are alternatives and possibilities involving bringing face-to-face types of experiences to academic communication. Students and instructors can communicate via a screen and still view the other person they are speaking with. This can be accomplished by web conferencing types of communication or even using applications that provide face time with a mobile device. Understanding the importance of this type of communication to learners should influence how courses, including online courses, incorporate elements where face-to-face conversation can occur.

Understanding that communication is an essential, socially mediated process for collegiate students should provide the impetus for instructors to seek to explore and understand communication preferences within the context of academic and nonacademic realms. Students indicate daily and weekly use for online resources yet still highly value face-to-face communication. Technology is here to stay and is continuously evolving. Educators and researchers need to value the importance of accessing and disseminating information yet understand the significance and role of in-person communications. Additionally, educators need to choose modes of

communication with students and technology that best meets the educational skills, competencies, and needs of their student's preferences for both academic and non-academic communications will be impacted by those students' breadth of experience, the competence they have built with particular modes of communication, and additionally the purposes for specific communications. Student communication preferences will continue to develop thus making continued investigation significant.

Even though there is a cross section of varied participants geographically, one limitation for this current study is the methodology. The particular methodology used in this study limits the ability to generalize the findings to the entire population of college students as the participants were not randomly selected nor was there a depth of international representation. Future investigations of collegiate communication might be enhanced by additionally utilizing a mixed method design that includes interviews which would provide more in-depth information. Further research may seek an even more diverse population by expanding the participant pool to include international representation from colleges across the globe. Lastly, future communication studies should reflect technological advancements.

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