



---

## **CONNECTING IN THE ONLINE ENVIRONMENT: STUDENT PREFERENCES FOR COMMUNICATION WITH FACULTY**

*Jill Buban, Online Learning Consortium, United States of America*

---

### **Summary**

Whether it be in the online or blended modality, learning and teaching in these formats includes a heightened use of technology. The focus of this paper is a study that examined undergraduate adult students' experiences in academic faculty mentoring relationships that use technology for communication. Through an exploratory mixed methods study, a questionnaire of 273 students and six case studies revealed students' preferences for technology use and their preferences for communication with their faculty mentors. The findings provide insight into how students, faculty, and administrators can begin a conversation about best practices for student-faculty communication in the online environment.

### **Introduction**

Communication between the faculty mentor and student is an important variable related to persistence among learners in both traditional and virtual environments (Stein & Glazer, 2003). A benchmarking study, *Best Practices in Adult Learning* (Council for Adult and Experiential Learning – CAEL, 1999), found that communication is a top priority in adult learning focused institutions and is instrumental in meeting the needs of adult learners. One-to-one communication, as demonstrated by the academic mentoring model, is crucial to adult learners' successes. This type of communication is evident in student-staff communication, student-faculty communication, and student-peer communication (1999; p.44). In examining undergraduate adult students' experiences using online technology for communication with their faculty mentors, the study explored how factors such as students' age, gender, and culture impacts their preference for a form of technology with which to communicate with a faculty mentor.

### **Background**

A 2008 study (Jones, Johnson-Yale, Millermaier, & Perez, 2008) assessed U.S. college students' Internet use for academic work, and explored how the Internet has affected both their academic and social lives. The researchers' literature review identified advantages of Internet use for student-professor interactions including speed, the ability to record correspondence, and to communicate asynchronously; the disadvantages include misinterpretation of email messages and excessive quantity of email messages, which can be time consuming for faculty

and students. Faculty and students disagreed on the preferred communication method. Faculty preferred face-to-face communication while students preferred email. A previous study completed by Jones in 2002 revealed that 46% of students stated that “email allows them to express ideas to professors that they otherwise would not express in person” (As cited by Endres & Tisinger, 2007). In a pilot study conducted in 2012, two emerging adult (18-25 years old) interview participants stated the same feelings in regards to email use. In this study, students were asked their preference for communication with their faculty mentor. In one of six interviews conducted for this study, a 26-37-year-old female expressed the same opinion; that email allowed her to express what she might not say in person. The topic of preference for email communication with a mentor is further discussed in the findings section of this paper.

Dahlstrom et al., (2011) found that 60% of undergraduate students agree that a major benefit of technology is that it makes them feel connected to professors and other college/university staff. The findings from the study that serves as the basis for this paper contribute to the earlier Dahlstrom study in that 50% (n = 3) of interview participants discussed how the use of social media sites such as Facebook and LinkedIn made them feel more connected to their faculty and peers in their classes. Dahlstrom et al. (2011) also offered insight into technologies that students value and want on campus. One student responded that she wished “instructors emailed more so that students and teachers could communicate easier, faster, and more efficiently” (p.17) while 79% of students reported that they use email to communicate with their professors.

Other communication technologies that students would like their instructors to utilize or include are online forums or bulletin boards; online chats, chat events, text messages; and Wikis (p.17). These student preferences for technology use suggest that Faculty mentors and advisors need to discuss communication preferences with their students in order to find a common tool that both are comfortable using to communicate. According to Dahlstrom et al. (2011), the *Millennial* and *Generation X* age groups, prefer and are used to communicating via email, social networking sites, and text messaging, while the baby boom generation (mainly the teachers and mentors) tend to communicate solely via email. Generational differences surrounding technology preferences for communication are discussed further in the findings section of this paper.

## **Research design**

The study was conducted at a public higher education institution that has served adult learners since 1971. The institution began offering distance learning courses 25 years ago as correspondence courses which have since evolved into online courses. Online students account for roughly 50 percent of the institution’s enrolment and, while the average student age is 36 (Benke et al., 2012), the availability of online degrees has attracted younger students in more recent years to now include 18 year-olds to sexagenarians.

Phase One of the study consisted of a questionnaire that was adapted from the ECAR National Study of Undergraduate Students and Information Technology Survey that was widely distributed to undergraduate students ( $n = 2000$ ) while Phase 2 consisted of a multiple case study approach guided in-depth interviews with six students. Each student provided information about the role communication technology played in their experiences with their mentors and their academic mentoring relationship. In both phases, study participants provided information about their ownership of various communication technologies and usage of communication technologies with their faculty mentors and with others (i.e., family, friends).

## Findings

Findings from both phases of the study yielded information about the scope of experiences adult online students have using communication technology in their faculty mentoring relationships. Findings show that students prefer more communication with their faculty mentors and parameters for academic mentoring in the virtual world need to be prescribed. A cross-case analysis provided themes that spanned case include: communication patterns, communication preferences, and the mentor experience.

### ***Technology ownership and access***

The questionnaire responses revealed that nearly all students own a phone, computer and WiFi access which provides them with access to online education; a type of access that was a barrier to online education as recently as the past decade (Single & Single, 2005). This access provides many working adults the ability to complete their educational goals. These tools not only provide access, but they provide students with the ability to communicate with their mentors in a virtual environment.

The types of technology to which a student has access may also play a role in shaping communications between students and faculty mentors. All ( $n = 273$ ) respondents indicated they owned a computer; 97% own a phone, 62% own telephone-like applications, and one-third own an iPad/tablet (35%). Most respondents (82.4%) indicated that they have a WiFi connection, an Internet access feature that is typically a barrier to online learning for students in rural areas. Because ownership doesn't necessarily indicate use, information about usage of devices by students with their mentors was collected (See Table 1). While phone and computer are used with mentors and friends and family, telephone-like communication is used at a higher percentage with friends and family (See Table 2).

Table 1: Technology used with faculty mentor as categorized by percentage of sample age

Age	Phone	Computer	E-Reader	Telephone-like Communication
18-25 ( $n = 29$ )	75.9	100	-	6.9
26-37 ( $n = 100$ )	70	98	10	-
38-50 ( $n = 105$ )	64.8	97.1	-	6.7
51+ ( $n = 39$ )	66.7	94.9	2.6	1.3

Table 2: Technology used for personal communication as categorized by percentage of sample age

Age	Phone	Computer	E-Reader	Telephone-like Communication
18-25	100	100	-	62.1
26-37	99	93	3	57
38-50	98.1	98.1	5.7	53.3
51+	100	100	-	51.3

As Table 1 and Table 2 demonstrate, emerging adults, or 18-25 year-olds, are the age group that use the phone the most to communicate with faculty members. Phone communication increases with personal communication across all age groups, as does telephone-like communication. Telephone-like communication was analyzed more closely as it provides face-to-face synchronous communication.

### **Telephone-like communication**

Telephone-like communication, such as Skype, is not used as frequently for faculty mentor-student communication as it is with friends and families. Over the course of a 15-week academic term, 18% of respondents report using this technology application nearly once per week (13+ times) while another 17% report using it 1-3 times per term. Over the same time period, there is a much lower rate (4%) of use with mentors (see Table 3).

Table 3: Telephone-like communication use as categorized by frequency percentage

	1-3 Times	4-6 Times	7-9 Times	10-12 times	13+	N/A
Faculty Mentor	4	.7	.4	.7	.4	93.8
Friends & Family	17.2	10.3	3.7	1.8	17.9	49.1

### **Communication technology preferences**

Whether the preference for communication was phone, email, or, on the rare occasion, telephone-like communication, the responses didn't support societal stereotypes of the young yearning to use social media and email, as described in the Digital Divide (PBS, 2011), nor did they support the middle-aged or traditional adult learner being unsure of, or afraid of technology use. Contrary to this belief, emerging adults had the highest percentage of questionnaire respondents among all age groups that preferred to use the phone to communicate with their mentors. They were also the only age group that did not rank any social media application in the top five technologies they wished their mentor used to communicate, while the middle-aged and middle-to-late aged respondents preferred to use email to communicate and ranked social media applications in the top five technologies they wished their mentors used to communicate with them. Differences were also found between genders.

With the addition of many social media applications (Facebook, LinkedIn) and other Internet-enabled forms of communication (blogs, social studying sites) to choose from, email (85%) and phone (37%) ranked the highest among 11 technologies and computer applications that could be used for communication purposes. Not only were email and phone the overall

top choice, they were also the top choices for technologies they wished their mentors used more frequently in their relationship.

Social media applications rounded out the four lowest rankings in terms of usefulness in a mentoring relationship. Respondents from the 18-25-year-old age range are the only respondents who do not rank Facebook and LinkedIn in the top six technologies they would like to use in the mentor relationship while telephone-like communication and contributing to and reading blogs both rank in the top six across all age categories.

Both 18-25 year olds interviewed preferred the phone to communicate. When reviewed by gender, males (n = 2) prefer the phone and 75% of females (n = 3) prefer email to communicate. Both males interviewed are opposed to the use of social media to communicate with their mentors as they find social media applications unprofessional and only appropriate for use in personal relationships. Assumptions about online learning and the services, support and communication methods used in this environment are mentioned by 50% of the interview participants. This assumption spans age groups and includes both males and females.

### ***Gender and social media***

A recent study (Duggan & Brenner, 2013) suggests that Twitter is appealing to 18 to 29 year olds (emerging adults), African Americans, and urban residents while Facebook appeals to women and 18 to 29 year olds. Additionally, it describes women as being more likely to use social media sites than men. The study that serves as the basis for this paper supports the Duggan and Brenner (2013) findings in that there is evidence for both African American and female emerging adults' preference for social media. It differs from the study (Duggan & Brenner, 2013) in that the findings didn't show that emerging adults preferred to use social media in mentoring relationships.

The one African American interview participant was introduced to Twitter in a Massive Open Online Course (MOOC) that she took for credit at the institution that served as the site or the study. She enjoyed the ability to connect with others through the use of social media. This is an example of student preference to engage and connect to their peers and instructor in real time; a preference that was evident in the case studies of the females who wanted to use social media in their mentor relationships.

The four females who participated in the interviews saw social media as a possible way to communicate more effectively with their mentors, despite not currently using it in this context. This would enable modes of communicating, increasing the speed of response, and enhancing convenience. In continuing to support the Duggan and Brenner (2013) findings, neither of the two males interviewed thought social media should be used with their mentors. They didn't think it was a professional avenue. These findings suggest that females feel connected through communication. Women tend to look for attachment opportunities in their relationships.

### ***Emerging adult preference for phone communication***

One of the surprises in the findings is emerging adults' preference for the phone over such social networking modes as Facebook. Why might this be the case? While all age groups preferred the phone because it enabled them to engage in a two-way conversation, ask questions when needed, and avoid the need to follow a scripted email, 69% of the 18-25 age cohort used the phone—the greatest proportion of any age group. Virtual mentoring that lacks phone communication and that relies only on email and text forms of communication runs the risk of having machine-like characteristics (Scigliano, 2008). While students may not all prefer the phone or Skype for communication, they did not like to receive canned, or scripted emails that were sent to masses of their peers. This dissatisfaction speaks to a desire for more personalized communication, whether via email or phone. Sharing information in a personal manner, as opposed to through the use of mass emails, is a vital relationship-building component of e-mentoring (Scigliano, 2008).

### ***Expedience of phone communication***

Other respondents preferred the phone because they felt it was a more expedient way to communicate. Others mentioned that although they would have to set up and wait for a phone appointment, they preferred to do so rather than wait for an email response. The elapsed time allows for one to forget or to move on; for a topic to become less important. Overall, when they wanted to engage in conversation and feel connected to their mentor, students expressed a preference for communicating with their mentors by phone rather than email or forms of electronic communication.

### ***Email preference***

Others preferred email to phone because it allowed for a paper trail and didn't require an appointment, as phone calls often times require. The other respondents who supported email preferred the ability to compose their thoughts and proofread an email. By contrast, the —off the cuff nature of email made some uncomfortable. While students take initiative to contact their mentors, communication isn't a one way street. The findings of this study suggest that communication from mentors to students is critical, no matter the form of communication.

## **Conclusions**

The purpose of this exploratory mixed methods study was to better understand undergraduate students' experiences with faculty mentoring relationships that use technology for communication. Key conclusions include: female learners prefer different forms of communication than males, emerging adults prefer to use different technologies than older (26+) students and access to online learning is widespread.

### ***Female learners prefer different forms of communication than males***

In support of Belenky et al. (1987), Gilligan (1982) and Ferris (1996), females prefer relationships that build on personal communication, regardless of whether the communication is face-to-face or conveyed through technology. This is also true of online

communication. While their male counterparts need communication, brief informative conversations, regardless of the technology used are acceptable. The types of communication females prefer support the more relational forms of communication. Female interview participants (n = 4) discussed how social media could be useful in relationships and described social media as a way to connect to their mentors while males (n = 2) thought the use of social media in a mentor relationship would be unprofessional.

***Emerging adults prefer to communicate using different technologies than older (26+) students***

More emerging adults prefer to communicate using the phone than any other age group (26-37, 38-50, 51+). This conclusion is evident in the findings from both phases of the study. This conclusion is in concert with recent studies (Dahlstrom et al., 2011; Arnett & Schwab, 2012) that found that though students are interested in “hot” new technologies but they rely on more traditional technologies (Dahlstrom et al., 2011) and that emerging adults use social media to communicate more with their friends and family (Arnett & Schwab, 2012). Overall, most emerging adults do not prefer to use social media with their mentors, as evident in this study’s questionnaire findings.

***Access to online learning is widespread***

Most participants (82%) have access to WiFi, meaning they have high speed Internet access and access to online learning. As this number increases, foreign, rural, and military students will gain increased access to education which increases equitable education. In other words, increased access to technology and online learning environments increases access to education and provides opportunities to students who otherwise wouldn’t have been able to do so. Online learning is doing for many what adult learning centred institutions did in the 1970s for adults and women.

The study found that emerging adults are the least likely age group to want to use social media with their mentors, while females are more likely to prefer this mode of communication as social media provides the capability to engage in a relationship that mirrors personal discussions. Findings show that students prefer more individualized communication, rather than formal group communication.

In conclusion, as the adult centred institutions of the 1970s provided education to adult learners, online learning environments continue to do so and have expanded to reach a wide array of students who otherwise would not have been able to continue their education in a post-secondary environment. Learning and teaching in these formats includes a heightened use of technologies that provide an array of opportunities for student-faculty mentor communication and should be uniquely considered with varying online student populations.

## References

1. Arnett, J. J., & Schwabb, J. (2012). *The Clark University poll of emerging adults: Thriving, struggling, & hopeful*. Worcester, MA: Clark University.
2. Barnes, K., Marateo, R., & Ferris, S. (2007). *Teaching and learning with the net generation*.
3. Belenky, M. F., McVicker Clinchy, B., Rule Goldberger, N., & Mattuck Tarule, J. (1997). *Women's ways of knowing: The development of self, voice, and mind* (10<sup>th</sup> anniversary ed.). New York: Basic Books.
4. Benke, M., Davis, A., & Travers, N. (2012). The learning focused institution as a game changer. In D.G. Oblinger (Eds.), *Gamechangers: Education and Information Technologies* (pp.145-155).
5. Dahlstrom, E., deBoor, T., Grunwald, P., & Vockley, M. (2011). *The ECAR national study of undergraduate students and information technology*. Boulder, CO: EDUCAUSE Center for Applied Research.
6. Dretzin, R. (Producer). (2010). *Digital Nation*. Boston, MA: PBS.
7. Duggan, M., & Brenner, J. (2013). *The demographics of social media users – 2012*. Washington D.C.: Pew Internet & American Life Project.
8. Endres, J., & Tisinger, D. (2007). Digital distractions: College students in the 21<sup>st</sup> century. Retrieved September 23, 2016, from <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Advising-the-millennial-generation.aspx>
9. Ferris, S. (1996). Women online: cultural and relational aspects of women's communication in online discussion groups. *Interpersonal Computing and Technology*, 4(3-4), 29-40. Retrieved from <http://www.helsinki.fi/science/optek/1996/n3/ferris.txt>
10. Gilligan, C. (1993). *In a different voice: Psychological theory and women's development*. Cambridge, MA.: Harvard University Press.
11. Jones, S., Johnson-Yale, C., Millermaier, S., & Perez, F. S. (2008). Academic work, the Internet, and U.S. college students. *Internet and Higher Education*, 11(3), 165-177.
12. Scigliano, D. A. (2008). Telementoring: Mentoring beyond the constraints of time and space. In L. Tomei (Ed.), *Encyclopedia of Information Technology Curriculum Integration* (pp. 894-901). Hershey, PA: IGI Global.
13. Scott, C. L., & Homant, R. J. (2008). The professional mentor program plus: An academic success and retention tool for adult learners. *Journal of College Student Retention: Research, Theory & Practice*, 9, 61-73.
14. Single, P. B., & Single, R. M. (2005). E-Mentoring for social equity: Review of research to inform program development. *Mentoring & Tutoring: Partnership in Learning*, 13(2), 301-320.



15. Stein, D., & Glazer, H. R. (2003). Mentoring the adult learner in academic midlife at a distance education university. *American Journal of Distance Education*, 17(1), 7.
16. Thomas A. Flint & Associates (1999). *Best practices in adult learning: A CAEL/APQC benchmarking study*. Canada: CAEL.