

## From Dorms to Cubicles: How Recent Graduates Communicate

David Choi, Judy Chen, Stephanie Wu, Debra Lauterbach, Aruna Balakrishnan  
Google, Inc.  
1600 Amphitheatre Parkway, Mountain View, CA 94043  
{dachoi, judyc, stephaniewu, dlauterbach, arunab}@google.com

### Abstract

*In a two-part field study, we studied the communication tool use of 29 college students and 20 recent college graduates. In comparing the two groups' communication choices, we explored how transitioning from attending college to working full time impacts communication. We discuss how communication changes for recent college graduates in terms of both the content of their conversations, as well as the communication methods they use. We found that convenience plays a major role in the adoption and usage of communication tools, with participants preferring methods that were easily accessible at work, at home and in transit. We identify life changes recent graduates experience as they transition into emerging adulthood: the effect of being on a computer at work all day, changing social circles and scenes, being geographically distant from friends and family, and the desire for a professional persona. We discuss the impact of these changes on communication.*

### 1. Introduction

The transition out of college can have a large impact on an individual's life. One of the major lifestyle shifts is moving from an academic environment to the workplace. Fresh college graduates moving into the workforce often undergo a degree of culture shock [17]. Academic and work environments differ along many attributes including goals, tasks, activities, rules, and organizational hierarchy [6]. As college seniors, students enjoyed relatively high social status, familiarity and comfort with academic schedules, regular opportunities for feedback via graded assignments and exams, and interactions with other individuals at a similar age and knowledge level [17]. When they become new members of the workforce, their environments are defined by meetings, inflexible deadlines, fewer opportunities for feedback, and interactions with colleagues whose age and industry expertise vastly vary. Previous research has examined the use of communication technologies among teenagers [5, 8, 9, 11, 12] and college students [11, 12, 16]. Smith et al. [16], in particular, examined

the impact on communication of going away to college. However, less is known about communication use during the transition that occurs directly after college graduation—the period known as “emerging adulthood” [14].

In this paper, we examine how three specific changes impacted communication practices: changes in schedule, proximity to social groups, and perceptions of self-identity. The objective of this research was to understand how communication changes as recent graduates transition from being college students and move into the workforce as emerging adults. To that end, we conducted a qualitative field study with 29 college students and 20 recent graduates to investigate how and what they communicated about. We identify the impact of working full time on recent graduates' communication behavior, focusing on the ecology of communication tools used. First, we describe our findings on the tools college students use to communicate. Then we describe lifestyle changes recent graduates experience and how they impacted communication behavior. Finally, we reflect on broader implications and end with concluding remarks.

### 2. Related Work

Previous work has examined the use of communication tools among college students. Smith et al. [16] focused on the communication tools first-year college freshman used when communicating with their parents. They found that convenience was the most common consideration for choosing a communication tool. Texting was perceived as the most convenient method because of its asynchronicity. Phone calls and text messaging were the most widely used tools for communicating with parents. Many students perceived email as formal and impersonal, using it exclusively for task-specific purposes. However, some college students occasionally used email to share photos or links because it was easier than via text. Email was preferred over Facebook for sharing pictures with parents because students did not want to be “Facebook friends” with their parents, thus maintaining control of (by segregating) their social and digital identities.

Other research has looked extensively at teen use of individual communication tools, comparing the differences in usage between high school and college students. Grinter & Palen [9] studied teen use of instant messaging (IM). They found that teens used IM for three primary activities: informal socializing, event planning, and schoolwork collaboration. However, the nature of IM conversations changed after high school. Grinter & Palen found that college students conducted more spontaneous event planning than high school students, which they attributed to a greater level of autonomy. College students had more freedom to meet with their friends. When college students engaged in IM conversations with friends, their communication tended to be about life updates and catching up, in contrast to teens' rapid-fire gossip about events they had collectively experienced. Birnholtz [4] highlighted the changes in perceived utility of IM between high school and college students. For high school students, restrictions on mobility and a desire for social interaction while at home made IM attractive, while college students had the ability to communicate face to face more and, therefore, less need for IM. Grinter & Eldridge [8] also studied how teens use text messaging, focusing on the purpose and nature of their conversations. They found that teens primarily had three types of conversations: chatting, coordinating communications, and planning activities. They also found that text messages were used to correspond with a small circle of regular contacts.

### 2.1. Life Changes Post-College

We build on this corpus of work by examining a different group of young adults, turning our attention to "emerging adults" [14] and the transitional period that occurs directly after college graduation. Recent graduates are, in some ways, very similar to college students with respect to their communication needs. Both groups want to stay in touch with friends and family, some of whom may be geographically distributed. However, recent graduates experience several major lifestyle changes that are likely to impact their communication behavior.

A major lifestyle shift experienced by college graduates entering the workforce is the restructuring of their daily schedules and routines. The Bureau of Labor Statistics compiled a series of charts comparing the activities employed people do during the day and how much they spend doing them with those of students [2]. As undergraduates, college students attend classes and may participate in extracurricular activities or hold part time jobs. However, this schedule is relatively flexible compared to one that includes a full-time work week. For a college student,

there are periods of the day that remain unstructured. Upon entering the workforce, the once-student now has to accustom to a structured daily schedule. For many recent graduates, this is the first time in their lives in which they can no longer define themselves as a student. As emerging adults, they are trying to understand their place in society and find a way to redefine their purpose and mission [14]. We build on this prior research by examining how recent graduates communicate, enabling us to better understand the ways in which a college-to-workplace transition impacts communication behavior.

### 3. Methodology

We conducted two sets of 90 minute, semi-structured interviews. From February to March 2011, we interviewed 29 college students from schools located in the San Francisco Bay Area and New York City. From April to May 2012, we interviewed 20 recent graduates who currently live in New York City, Houston, and the San Francisco Bay Area. Interviews were conducted in participants' dorms, apartments or houses. Each interview was conducted with a team of three researchers: a moderator, a notetaker and an audio/video recorder. The team of researchers who attended the interviews varied, as we took turns rotating through the different roles. All moderators followed the same interview script and protocol. The interviews were semi-structured and began with participants taking part in a social networking mapping exercise [1]. The exercise consisted of participants writing down on Post-it notes the names of people with whom they engaged in any form of communication (Figure 1). Participants arranged the Post-it notes on a large sheet of paper based on how personally close they felt to the person (Figure 2).

Participants were instructed to examine their communication history for the following methods: face to face, email, text messaging, phone calls, instant messaging, Facebook posts and updates, Facebook messaging, and video conferencing. Participants were prompted to recount their instances of outbound communication for each method over the past 24 hours or at least five conversations if there had not been five in the past 24 hours. An outbound communication is defined as the participant initiating or reciprocating communication with another person. For example, missed calls or unreturned text messages were not counted. For each instance of communication, participants were asked about whom they communicated with and the subject of the conversation. For selected conversations, participants were probed on why they chose to use a particular communication method, the origin of the conversation,

and their plans to follow up on a conversation. Recent graduate participants were also questioned on whether they noticed differences in their communication tool since they left college.



**Figure 1. A participant making her social communication map.**



**Figure 2. A completed social communication.**

### 3.1. Participants

College student participants were recruited through a Bay Area participant recruitment agency. We interviewed 15 female and 14 male students. College majors ranged from business to the arts to sciences. Participants were a mixture of freshmen (2), sophomores (5), juniors (9), and seniors (13). Students were recruited based on their self-reported usage of communication methods and involvement in extracurricular activities that would likely involve communicating with others.

Recent graduate participants were recruited through the same agency. We interviewed 10 female and 9 male recent graduates. Participants graduated from college in 2011 (10), 2010 (4), 2009 (4), and 2008 (2). Recent graduate participants were recruited based on their self-reported usage of communication methods and were required to be employed full-time. Most had occupations that involved working on a computer for

most of the day. Participants were incentivized with \$100 American Express gift checks.

### 3.2. Analysis

All interviews were video and audio recorded. Interviews were partially transcribed for answers specific to our research questions. All participant quotes are from our transcriptions. College student participants reported a total of 996 conversations involving 1217 conversation partners. Recent graduate participants reported a total of 741 conversations involving 565 individuals.

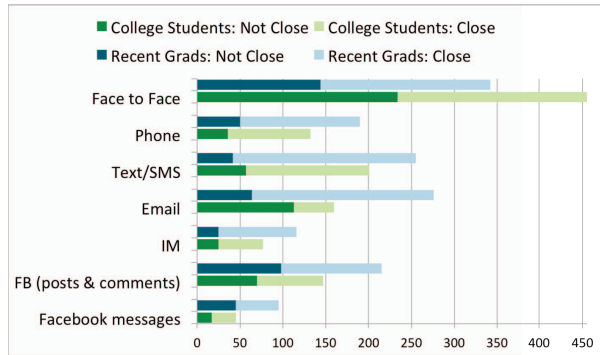
We conducted an affinity diagramming exercise to categorize conversation topics and social relationships of conversation participants. We used the results of this exercise to develop a coding scheme. Three researchers then individually coded a sample of conversations, participants, and topics. The individual codes were compared and inter-rater reliability was calculated to be 84%. The researchers then split up and coded the remaining data. We compared and analyzed the results of the coding scheme from the two field studies to generate the themes in our findings. To be consistent across participants, we looked back at 24 hours of their communication.

## 4. Results

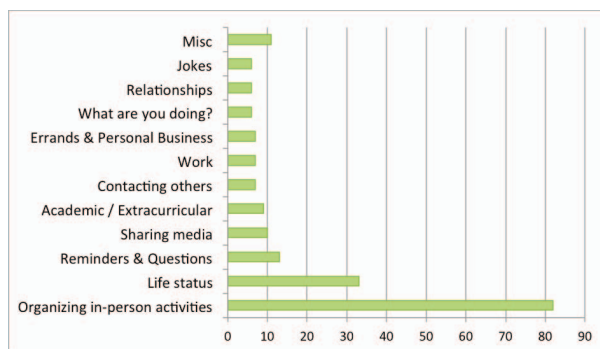
In this section, we describe our findings on how communication changes as recent college graduates transition from a college environment to the workplace. First, we briefly discuss the results from our 2011 field study with college students, focusing on their communication tool usage. College student communication has been studied extensively in prior research [11, 12, 16] so we will not go into detail in our findings. However, we build on prior work with a breakdown of conversation topics and the social relationships involved across various communication methods. Then, we discuss the life changes that impacted how recent graduates communicated.

### 4.1. College Students' Communication Tool Use

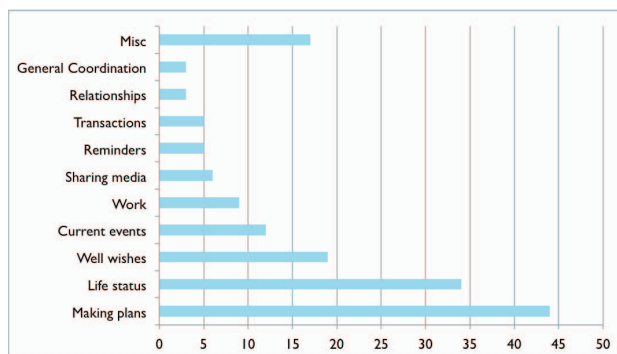
Similar to Smith et al.'s results [16], we found that college students made communication choices based on convenience and urgency. Figure 3 compares the frequency of communication methods used for contacts who were considered to be close and not close, illustrating the number of conversations college students had with their recent graduate counterparts.



**Figure 3. A side-by-side comparison of the number of conversations across communication methods and by relationship type for college students (in green) and recent graduates (in blue).**



**Figure 4. Topics of text message conversations with college students.**



**Figure 5. Topics of text message conversations with recent graduates.**

**Text messaging:** Text messaging was the preferred tool for personal communication. College students perceived text messaging as casual, non-interruptive, and more likely to generate a quicker response than email. Participants considered 72% of individuals involved in text messaging conversations to be close contacts. Text messaging was also the most popular method for updating others on personal life matters and status. Catching up on life matters comprised 27% of all the conversations across methods and 17% of all

text conversations (Figure 4). College students also used text messaging heavily for organizing in-person activities with people close to them (42% of text conversations). Activity organization via text messaging consisted of inquiring about availability (46%), discussing logistics such as time and location (29%), and status notifications such as informing others that they will be late (25%).

**Phone:** College students used phone calls primarily for personal conversations with close contacts, a finding that was also observed in [16]. 73% of phone conversations were with people who were considered to be personally close contacts. Phone calls were often used for organizing in person activities (47% of phone conversations). Activity organization over the phone was similar to that which took place over text messaging. The primary difference was that phone activity conversations consisted of a higher proportion of meeting status notifications (35%) compared to text messaging. This difference is likely the result of the disruptive nature of phone calls. Participants reported using the phone for urgent notifications, status updates or last minute meeting changes. College students also used the phone to discuss their life status and current well-being (17%). These conversations tended to be too lengthy to communicate over text messaging.

**Email:** Email was considered impersonal and was largely used for school-related purposes, although some participants used email for sharing media with close friends and family. This finding also aligns with Smith et al.'s results [16]. 38% of email was school-related communication, and 54% of email conversation partners were classmates, teachers, and members of extracurricular organizations. As Katie explained:

*Most of my friends reserve email for more official or professional conversations... Communicating with my professors about an assignment or someone at work. Or... with anyone on campus for an event. People I don't know... Adults. -Katie, college student*

**Instant messaging:** College students reported low instances of instant messaging (IM) use because they were not at their computers for extended periods of time, often moving between classes, activities and friends. IM was perceived as the mode of communication for extended conversations.

**Facebook:** Facebook was primarily used for broadcast sharing and discussing media such as photos, videos, and links. Previous research has shown how Facebook is used to keep in touch with contacts [5, 10]. Similarly, we found that college students primarily used Facebook as a lightweight way of staying in touch with their contacts, especially through sharing media (35% of all posts and comments). College students considered Facebook to be the most casual

communication method and did not use it for intimate conversations. Facebook was the most popular form of communication for best friends (including significant others) and geographically distant friends and family; these two groups were implicated in 26% of Facebook posts. Facebook Messages were rarely used, comprising just 3% of all conversations. Like email, college students considered Facebook Messages to be slow and impersonal, although they perceived it as more responsive than email.

## 4.2. Recent Graduates' Life Changes

We have discussed the adoption of a full-time work schedule and searching for an emerging adulthood identity as lifestyle changes that recent graduates experience. A third lifestyle shift reported by our participants is the reduced density of one's immediate social network. A college student's livelihood centers around campus where friends live within a small radius of each other and see one another daily. However, in the graduate's post college life, friend groups are geographically scattered, and recent graduates must contend with geographic distances and work schedules that limit the frequency of in-person activities:

*Four years ago I would've had so many friends that I contacted regularly, but now I only have one friend [in the area] from college... I've always been meaning to get together with my college friends, but it's hard with schedules.* –Kim, recent graduate

Prior research has examined the ways in which different communication tools support relationships during life transitions. Shklovski et al. [15] studied how people maintain friendships after a residential move and found that people rely on a constellation of various technologies to stay in touch with friends and family. They found that although email helped to maintain social relationships, phone calls were able to grow a relationship after the move and were more useful than email in exchanging social support.

Recent graduates used communication tools in a similar order of preference as college students (Figure 3). Text messaging remained the most commonly used communication method (after face to face communication). Email and Facebook (posts, comments, and messages combined) were the next most common methods. IM, Facebook messages and video chat were the three least used methods for both groups. However, there were several significant differences in communication behavior between recent graduates and college students. First, recent graduates reported fewer face to face interactions. Second, recent graduates used email more than college students. There were also notable changes in the content of their conversations and their motivations for choosing

communication methods. We describe these changes in the following sections.

**4.2.1. The effect of being on a computer at work all day.** When recent graduates engaged in social, non-work related communication, the tools they used were affected by the nature of their occupations. Most recent graduate participants worked at a desk job and sat in front of a computer for most of the day (18/20). As with college students, the need to communicate throughout the day remained, but the environment changed. Communication methods needed to be adjusted to accommodate the restrictions of a work environment. Desk jobs meant that text-based communications (email, IM, text messaging) were more subtle and non-interruptive than other methods. As a result, recent graduates found these methods to be more convenient for personal communication. Phone calls were indiscreet and thus, rarely used at work. This was reflected in the frequencies with which recent graduates used email and IM, compared to that of their college student counterparts. As illustrated in Figure 3, recent graduates tended to use email and IM more than the college students.

*Instant Messaging:* Spending so much time in front of a computer prompted recent graduates to use IM more frequently. College students, in contrast, had reported low instances of IM because they were often on the go:

*I am too busy to be on instant messaging. You actively have to sit there... it's a huge distraction.* –Kathryn, college student

In contrast to Kathryn's perception of IM as an activity that would require her to go out of her way to engage in, recent graduates viewed IM as being convenient:

*Now I'm using [instant messaging] more, as a procrastination thing. Also, now I'm more often in front of a screen. In school I was more often walking around, or doing other things.* –Kara, recent graduate

In post-college life, IM went from being perceived as a distraction and time-consuming, to being seen as a convenient activity that required little effort. Many recent graduates had IM running all day on their computers, using it as an ongoing stream of communication. This increase in IM use post-college was a direct effect of communication choices shaped by convenience at work. We found that most IM conversations took place during the workday and rarely on the weekends or evenings.

The topics of IM conversations also changed. Recent graduates reported using IM more for discussing their personal lives (56% of IM conversations) and much less for organizing in-person

activities (13%). In contrast, college students discussed personal lives in 23% of IM conversations and organized in-person activities in 30%.

*Phone:* The perception that the number of phone calls has declined since college was related to concerns about an appropriate work image. Recent grads cited fewer opportunities to actively talk on the phone. Like many of their friends, they were at work all day, where they felt it was difficult to make personal phone calls. In college, they had more time for phone calls during the day or in between classes. Instead of phone calls, recent graduates turned to text messaging for personal communication at work.

*Text messaging:* Two recent graduates, John and Jake, developed similar strategies for subtle external communication at work. They used Google Voice for text messaging, a telecommunications service that provides a web interface for managing phone calls and text messages. When they received an incoming text message, Google Voice would notify them on their mobile phones and then they used their computers to access the web interface to read and respond. Since they were normally on their work computers all day, this enabled them to participate in external communications without pulling out their phones.

*Email:* As we observed with IM conversation topics, sitting in front of a computer all day at work impacted what they communicated about. Email was no longer primarily used for school-related conversations. (Note that for the recent graduates, we excluded work-based email accounts and counted only personal email messages.) Recent graduates used email to share media more than college students did (26% versus 14% of email conversations) and to organize in-person activities more than college students did (17% versus 11%). Recent graduates also used email more for personal communication with close contacts. They reported that 73% of individuals in email communications were people close to them, compared to 29% for college students (Figure 3). Recent graduates cited using email more to discuss their personal lives (12% of email conversations) than college student participants. Although recent graduates used email more frequently than college students to organize in-person activities and to discuss their personal lives, texting was still the preferred communication method for those activities.

**4.2.2. Changing social circles and scenes.** One of the biggest differences between transitioning from high school to college and college to the workforce is the size of social circles. College students are introduced to many potential new friends, contacts, and acquaintances. Jones reported that college students are accustomed to living in an environment where they expect to be in touch with others throughout the day, and that they carry those expectations with them after

graduation [11]. Jones argued that college students are likely to continue to maintain a wide social circle, keeping in touch with friends from high school and family, along with their new college relationships. As a result, their social circles are likely to grow. In contrast, we found that many recent graduates left behind large college social networks and did not experience the same opportunities to build a new network when they moved to a new location or started a new job. Thus, recent graduates reported that their social circles and the number of people with whom they communicated had decreased since college.

*Now, I just communicate with the home people, as opposed to college people. People who are around New York... I don't see [my friends from college] everyday anymore, so [there is] less of a reason for me to talk to them.* –Vance, recent graduate

This contraction of recent graduates' social circles impacted their communication. They reported using some communication methods such as email and text messaging more frequently in an effort to keep in touch and prevent their social circles from shrinking further. Phone call usage was mixed, with some participants reporting using the phone more and having longer conversations, especially in the evenings or during the weekends. Other participants reporting using the phone less because of shrinking social circles.

*Email:* Three participants reported using email more, and two of those participants created email groups to use amongst their close circles.

*I created [a Google Group] right after we ended college, emails get sent to my inbox...It's the best thing ever. It's awesome because we all live in different places and we all lived together in college for a year so it's been a really nice way to keep in touch.* –Cathie, recent graduate

*Text messaging:* In addition to email, recent graduates also used text messaging to keep in touch with friends. Compared to college students, we found an increase in the proportion of text conversations in which recent graduates discussed personal lives. Participants reported that text messaging was an easier way of keeping in touch. It was not disruptive and did not require an immediate response, which worked well for people with whom they did not communicate often or people who were geographically distant (e.g., lived in different time zones).

*We're in different time zones. Texting is easiest just because I don't know when he'll get back to me. We don't know when we'll get back to each other. Instead of having a full on conversation, this is quicker.* –Vance, recent graduate

Recent graduates' changing social circles also impacted how they planned events. As [9] reported, spontaneous activities were the norm in college. College students often texted during class to plan activities for when they were free. Texting was preferred because it usually produced immediate responses, was non-disruptive, and could be done subtly while sitting in class. Social planning post college, however, was noticeably less spontaneous.

*The primary things that have changed in my personal relationships since college is that people are a lot harder to get a hold of and meetings that happened in person have to be a lot more prearranged.* –Jake, recent graduate

Due to recent graduates and their friends having less availability during the day and living farther apart (e.g., across town versus in the same college dorm), events needed to be planned in advance. Although recent graduates still used texting for (now rare) spontaneous activities and last-minute coordination, they now used email more often for planning in-person activities in advance. They had become the “adults” to whom college students ascribed email communications.

*Phone:* Recent graduates also perceived increases in both phone call frequency and conversation length to try to maintain relationships with people they no longer see in person as often, although calls usually took place in the evenings or weekends when they were not at work. Comprising 74% phone conversations, phone calls were overwhelmingly used to communicate with family and friends with whom they maintained close relationships (Figure 3).

*I'm making a lot more calls just to chat now. In college there were a lot more face to face meetings. Now my college friends are all spread out, so instead of grabbing dinner, we'll have a phone date.* –Beatrice, recent graduate

On the other hand, participants reported using the phone less because with smaller social circles. There

were fewer people to keep in touch with. For example, four recent graduates reported making fewer phone calls than when they were in college for that reason:

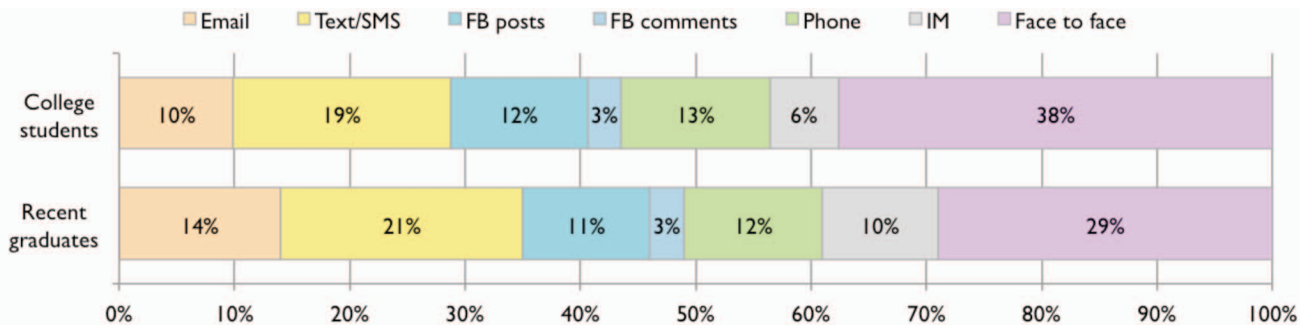
*I don't think [phone calls are with] different types of people. But I think the people that I call has diminished. I think I called more a variety of people when I was in college. So now the circle has condensed a little bit.* –Brad, recent graduate

When faced with diminishing social circles, recent graduates experienced conflicting needs in their communication choices. They may feel less motivated to use certain communication methods (e.g., phone calls) since they have fewer people with whom to communicate. At the same time, they may also feel the need to communicate more in order to prevent their circles from shrinking further.

**4.2.3. Keeping in touch with geographically distant contacts.** Whether they were moving to a new college away from their hometown or to a new job away from college, college students and recent graduates alike were faced with the challenge of keeping in touch with close contacts who are geographically distant. Distant contacts for college students consisted mainly of family members, former high school classmates, and other friends from their childhood homes. Similarly, recent graduates often lived away from family members and were geographically distant from former college classmates.

*Facebook:* Both college students and recent graduates used Facebook frequently for communicating with geographically distant contacts (22% of conversations for college students and 37% for recent graduates) (see Figure 3). However, the two populations kept in touch with different social groups. College students used Facebook the most to keep in contact with their best friends and significant others (26% of conversations). Recent graduates, on the other hand, considered Facebook to be too impersonal for close friends and used it primarily to keep in touch with acquaintances and infrequent contacts.

*Because now [Facebook] is really for keeping in*



**Figure 6. Comparison of communication method use in the past 24 hours between recent graduates and college students. There were 0 instances of video chat for recent graduates and only 1 instance for college students, so it is not included in this chart.**

*contact with people. A lot of the people when I was at school I would see them on campus or something like that. But now, it is kind of like, to update you a little bit more.* –Elisha, recent graduate

Lightweight Facebook features such as status updates, wall posts, and “Likes” were cited as a quick means of keeping in touch with contacts. Participants reported that these features facilitated easy communication with low overhead.

*I guess I've sort of used 'Liking' as keeping up with you even though I'm not communicating with you.* – Kim, recent graduate

*Video chat:* Providing a direct contrast to the lightweight attributes associated with Facebook is video chat, a method that often required advance planning. Ames et al. [2] reported that geographically distributed family members such as grandparents and grandchildren, believed that video chat enabled them to build closer social relationships than phone calls. Both college students and recent graduates reported rarely using video chat. College participants reported only 1 video chat conversation out of 966 total conversations. Recent graduate participants reported zero video chats in the last 24 hours. Of the video chats reported for both college students and recent graduates combined (extending beyond 24 hours), 78% of individuals involved were geographically distant. Distance and limitations on overlapping free time were contributing factors for why participants perceived video chats as being difficult to arrange.

*It seems kind of like a hassle. There are not many people I'd actually want to video chat with because most of the people I connect with here primarily live in the area... The only person I'd want to video chat with would be my sister and my nephew but... it's hard to connect.* –Madison, recent graduate

**4.2.4. The desire for a professional persona.** For most participants, the transition from college graduation to working full time marked the beginning of their careers. Projecting a professional persona was especially important to them as they embarked upon their new, career-focused lives. Recent graduates' choice of communication tools for personal conversations at work and outside of work was influenced by the desire to project and maintain a professional persona. In particular, participants were concerned about how their Facebook profiles shaped their public personas and about potential or current employers discovering their profiles. As a result, participants tended to be more reserved in the kinds of things they posted and the information they shared. Recent graduates reported sharing less on Facebook compared to when they were in college. One reason for

this was that they were more selective about what they chose to share. In college, participants were not as concerned about how their Facebook posts might reflect on their professional image.

*Back in college, I would probably post things, stuff I found funny slash stuff that just might comment on random stuff... I go on Facebook a lot less now just because I decided not to have that large of a digital footprint so I rarely post anything.* –Vance, recent graduate

Recent graduates, in general, reported similar changes and being more reserved in what they have shared since college. When we asked a participant, Blake, about how his Facebook usage has changed since he graduated, he reported that the frequency of his posts decreased because his Facebook friends now consisted of both social contacts and work contacts. Blake's recent activity on Facebook consisted of commenting on a friend's link, liking two status messages on his friends' walls, and posting a link to a news article. Because he was conscious of his audience that included co-workers, he was more reserved and selective about what he posted.

Recent graduates reported restricting access to parts of their Facebook profiles. Others went further and pruned their list of friends, so as not to be “guilty by association.” Kara, for example, adjusted her privacy settings such that her activity would not show up on her contacts' News Feeds and only those she was interacting with directly could see her activity on their Facebook pages. With that setting enabled, she posted frequently and freely. However, when she noticed that Facebook disabled this setting, she found herself being more selective about what she posted. In the same vein, Caleb restricted access to his photos to only the small group of people who were in the photos.

*I limit a lot of what's on Facebook. I don't think it is very professional. I don't like the image that it can possibly send off on you. I don't post very much, I try to limit it because I know it could come back to bite you.* –Caleb, recent graduate

Like other recent graduates, Caleb was concerned about how he could be associated with the information on his Facebook page and how that could potentially reflect poorly upon his professional persona. As a result, he maintained specific privacy settings for specific audiences. Adam expressed a similar concern about posting on Facebook where his boss could see the content he was sharing. Although he wanted to comment on a sensitive political issue that his friends were discussing, he was hesitant to “get tangled up” in a public forum. Instead, he opted to send private messages to a small circle of his friends.



*When the President came out for same sex marriage, there were people posting [about it]... That's not something I want to get tangled up in... I'll send out a message [via email to personal friends]... I wouldn't put it out for everyone to see.*  
–Adam, recent graduate

In addition to being more conservative about the content they shared publicly, participants also reported that they now preferred to share “meaningful content,” rather than personal status messages:

*In college, people posted about stupid things they think it's cool, whatever. I probably did that too. Now, I just post stuff that I think is actually meaningful, and not just some random stuff. Not “Oh, I went shopping.”* –Jacob, recent graduate

For Jacob, meaningful content on Facebook consisted of job postings for a friend, comments on photos he was tagged in, “Liking” a blog link, and “Liking” a friend’s product page. This content is consistent with what other participants identified as meaningful content. 13% of recent graduate Facebook posts were links, articles, and other media. Martha considered this type of content to be more meaningful because it was intended to be informative, rather than a status message about oneself. She observed a similar trend amongst her friends:

*Yeah, definitely less posting. I'm not on Facebook that much. That's all around across the board. Everyone else is posting less on Facebook. When I post something, it'll never be something like this is what I'm up to. It'll be a link, like learn more.* –Martha, recent graduate

For both college students and recent graduates, the biggest difference in sharing links and other media through Facebook versus email was audience size. Facebook was used in situations where participants wanted to share content widely to a large audience. In contrast, email was usually used to share content with a limited number of individuals.

Goffman’s performance perspective is often cited in HCI to describe how people have highly contextualized, nuanced behavior concerning what information and with whom it is shared [7]. His perspective has been particularly useful for understanding how people perform impression management through computer-mediated communication. As the desire for a professional persona became important to recent graduates, their perception of self was changing. In Goffman’s terms, access and content control was a tool through which recent graduates crafted their identities and managed other people’s impressions of them.

## 5. Discussion

Our findings have demonstrated that college students and recent graduates use an array of communication methods to maintain contact with their social circles. There are also a myriad of communication devices and products that support multiple communication methods. Mobile and tablet devices often have email, messaging and video chat apps pre-installed. For example, the Apple iPhone features native apps for phone calls, email, SMS, and video chat. In addition to native apps, third party communication apps are also available for download. Many popular social networking platforms feature the ability to communicate using multiple methods on both desktop and mobile. Google+ and Facebook both offer desktop and mobile instant messaging, group messaging, broadcast status updates, and video chat.

Google+, Facebook, and other services ask users to enter their ages, academic affiliations, occupations, and graduation dates. Using this information, services could anticipate when college age users will be graduating and potentially experiencing the lifestyle changes we described. During this time, developers of communication devices and products should anticipate potential changes in the usage of their products as the result of these life shifts. These altered usage patterns may include changes in how often a communication method is used, who users are communicating with, and the content of conversations. Product developers have the opportunity to anticipate and promote features to address these lifestyle changes and stay abreast of recent graduates’ evolving communication needs. The benefit of targeting recent graduates or other populations undergoing lifestyle changes is that recent graduates may be more amenable for different or new product features during transition periods.

Our findings suggest that the frequency with which recent graduates used certain communication methods changes as they adopt a full time work schedule and setting. A potential effect for developers of multi-communication products could be increases in the usage of some features of their communication product in favor of others. This transition is an opportunity to promote the awareness of different or previously underutilized product features to better suit users’ current situations.

Recent graduates experienced dispersions in their social circles after they left college. Developers may potentially see decreases in overall frequency of communication across all methods as former classmates and friends move away from each other. In our study, two participants created email groups to stay in touch with former classmates. Developers could use this opportunity to promote contact group or list

features to recent graduates as a way of maintaining contact with now distant friends. Developers could also encourage their recent graduate users to update contact lists to better reflect their current social circles.

We found that projecting a professional persona is important as recent graduates embarked on their careers. They became more selective about not only what they communicated about but also to whom they communicated. Decreases in communication activity should not necessarily be viewed as a sign of a declining interest in communication, but rather, as an opportunity for to highlight profile visibility and privacy settings to recent graduates as a way of managing their professional personas.

## 6. Conclusion

The transition out of college and into the workforce can have a huge impact on lifestyle, which in turn, impacts social relationships and how people choose to communicate. Despite the extensive work studying the communication practices of discrete populations such as teens, college students and adults in the workplace, little is known about the transition between college and the workplace. In this paper, we addressed this gap by presenting the results of a two-part field study with 29 college students and 20 recent college graduates, examining how and what they communicate about. We identified life changes that occurred during this transition that affected communication practices: the adoption of a more structured lifestyle, geographically distributed social circles, and the desire to adopt a more professional persona. Lifestyle changes are not exclusive to the emerging adulthood transition. People undergoing transitions such as getting married, starting families, and retirement are also likely to experience lifestyle changes. A promising area for future work would be to investigate how other lifestyle transitions impact communication practices.

## 7. References

- [1] P. Adams, "Communication mapping: understanding anyone's social network in 60 minutes", *Proc. DUX 2007*, ACM Press (2007), pp 1-8.
- [2] American Time Use Survey, <http://www.bls.gov/tus/charts/home.htm>.
- [3] M.G. Ames, J. Go., J.J. Kaye and M. Spasojevic, "Making Love in the Network Closet: The Benefits and Work of Family Videochat", *Proc. CSCW 2010*, ACM Press (2010), pp 145-154.
- [4] J. Birnholz, "Adopt, adapt, abandon: Understanding why some young adults start, and then stop, using instant messaging", *Journal of Computers in Human Behavior*, 26 (2010), pp 1427-1433.
- [5] d. boyd, "Why Youth Heart Social Network Sites: The Role of Networked Publics in Teenage Social Life", *Youth, Identity, and Digital Media*, D. Buckingham (ed.), The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning, MIT Press (2008), pp 119-142.
- [6] P.D. Gardner and S.E. Lambert, "It's a hard, hard, hard, hard, hard, hard world", *Journal of Career Planning and Employment*, 53 (1993), pp 41-49.
- [7] E. Goffman, *The Presentation of Self in Everyday Life*. Doubleday Anchor Books (1959), Garden City, NY.
- [8] R.E. Grinter and M. Eldridge, "Wan2tlk?: Everyday Text Messaging", *Proc. CHI 2003*, ACM Press (2003), pp 441-448.
- [9] R.E. Grinter and L. Palen, "Instant Messaging in teen life", *Proc. CSCW 2002*, ACM Press (2002), pp 21-30.
- [10] A.N. Joinson, "Looking At, Looking Up or Keeping Up with People?: Motives and Use of Facebook", *Proc. CHI 2008*, ACM Press (2008), pp 1027-1036.
- [11] S. Jones, "The Internet Goes to College: How Students are Living in the Future with Today's Technology", *Pew Internet & American Life Project* (2002).
- [12] A. Lenhart, K. Purcell, A. Smith, and K. Zickuhr, "Social Media & Mobile Internet Use Among Teens and Young Adults", *Pew Internet & American Life Project* (2010).
- [13] A. Lenhart, R. Ling, S. Campbell, and K. Purcell, "Teens and Mobile Phones", *Pew Internet & American Life Project* (2010).
- [14] S.J. Schwartz, J.E. Côté, and J.J. Arnett, "Identity and Agency in Emerging Adulthood Two Developmental Routes in the Individualization Process", *Youth & Society*, 37, 2 (2005), pp 201-229.
- [15] I. Shklovski, R. Kraut, and J. Cummings, "Keeping in touch by technology: maintaining friendships after a residential move", *Proc. CHI 2008*, ACM Press (2008), pp 807-816.
- [16] M.E. Smith, D.T. Nguyen, C. Lai, G. Leshed, and E. Baumer, "Going to college and staying connected: communication between college freshman and their parents", *Proc. CSCW 2012*, ACM Press (2012), pp 789-798.
- [17] N.M. Wendlandt, and A.B. Rochlen, "Addressing the College to Work Transition: Implications for University Career Counselors", *Journal of Career Development*, 35 (2008), pp 129-150.
- [18] K. Zickuhr, "Generations 2010", *Pew Internet & American Life Project* (2010).