

HornsLink 2.0: Addressing Communications in College

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HornsLink 2.0: Addressing Communications in College

This assignment asked our group to identify an issue under the broad umbrella of technology in higher education and propose a solution based on a hypothetical future scenario at the University of Texas at Austin. Our technology sub-group consisted of two graduate students in the Educational Administration program and one undergraduate student from the Design program in the College of Fine Arts. We summarize our proposal as follows: There exists a communications problem at The University of Texas at Austin in 2025. The myriad ways for faculty, staff and students to communicate present a barrier to simple, effective connections between UT community members. To remedy this, we propose HornsLink 2.0 — a simple digital tool that will serve to simplify some of the complexity of communications at UT by serving as a “start button” for communicating within the University community.

The Problem

We utilized design thinking and mind-mapping to guide our brainstorming for this project (see [Figure 1](#)). We constructed our mind map based on the framework for design thinking presented in class by Allan Shearer. This framework asked us to consider five different aspects in our thinking: A worldview, challenges/opportunities, a vision, an objective, and a form, all of which form a sort of design wheel around which our thinking flowed (for more, see Shearer, 2015). A brief outline of our mind mapping exercise follows.

Mind Map/Design Thinking Exercise

In our worldview, we considered engagement of the campus community through the lens of communications, wherein faculty, staff and students seeking to communicate and collaborate are presented with a myriad of options to do so. This presents a challenge/opportunity: individuals in the university community wish to communicate and work together, but often rely

on different systems to do so. Because of the variety of ways to communicate, and the personal preferences of users, digital communications present challenges to full engagement of the university community. This full engagement represented our vision: we pictured a university community able to communicate and collaborate seamlessly, thereby becoming more fully engaged. Our objective thus became effective communications between students, faculty and staff, which we believe would lead us toward this future vision of full engagement. Finally, we proposed our HornsLink 2.0 system as the form for our project, wherein we would imagine a solution to the aforementioned four design framework points.

Problem Statement

After the mind mapping exercise, we embarked on further research and crafted a succinct problem statement, from which we would continue our work. The problem statement is as follows:

Email has historically been the preferred mode of communication for faculty and staff, who disseminate information to students. However, our research indicates that students today far prefer social media and other forms of technology for communicating with each other, and do not rely on email much if at all. Currently, many options for communicating at UT exist, including email, texting, social media, Canvas, Google Docs and others; however, one unified system or preferred mode of communication does not exist. This presents a problem, a barrier for simple and effective communications between members of the UT community. The wealth of options forces users to switch platforms frequently, depending on whom they wish to communicate with, which presents challenges for collaboration and quick interactions. In short: UT lacks a “start button,” a central place where any member of the community wishing to communicate with another can begin.

To address this perceived problem, we will first outline the conceptual foundation supporting it, followed by a proposal for HornsLink 2.0, a digital system we feel would address the challenge/opportunity stated above.

Conceptual Foundation

To support our proposal, we looked at the past, present and future of communications at colleges and universities, consulting peer-reviewed literature and other sources for information. The following section presents our conceptual foundation.

Past

The ways in society communicates have changed, something that colleges and universities have witnessed as well. While email was not so long ago the default mode of communication for all, the recent explosion of social media has changed the landscape of communication and presented multiple avenues for members of the university community to get in touch with each other.

Technology has become a central tenet of life for most Americans, and has led to the development of what some term the “net generation” or “digital natives,” students who have grown up with computers and the internet — students who do not know a world without these modern marvels (Kvavik, 2005). This is markedly different than older generations (who make up the majority of faculty and staff at colleges and universities), who likely lived in a world without the always-on, instant world of internet-connected devices and are themselves “digital immigrants” to these forms of technology (Kvavik, 2005).

College students are often the first to adopt new forms of technology and ways of communicating; importantly, the “popularization of online social networking sites (SNSs) has changed this landscape even further” (Lewis, Kaufman & Chrsitakis, 2008, p. 79). Social

networking sites — Twitter, Facebook, Instagram and others— are relatively recent phenomena in the technological landscape, but have already attracted millions, even billions, of users around the country and the world (Boyd & Ellison, 2007). Consider Boyd & Ellison’s (2008) launch timeline for many of the most popular social networks, presented in [Figures 2a & 2b](#): while the first social networking site was launched in 1997, the internet saw only a few additions until 2003, when the rate of SNS creation seemingly exploded. Note that two of the most popular SNSs today — Twitter and Facebook — only became available to the world in 2006 (the end of the authors’ timeline), while Instagram, another popular platform today, was not yet conceived at the time of this article’s publication.

Present

This takes us to the present day: in only 10 years, Twitter and Facebook have become fixtures in the lives of many, including (and perhaps especially) college students. This fact has implications for colleges and universities, and, most salient for our project, has created a divide between faculty and staff and the students they serve: while faculty and staff continue using email, and universities retain it as their official communications medium, students are increasingly turning away from the technology and instead utilizing social networks to communicate.

This assertion is backed up by available research on the use of technology by college students. First, to frame this discussion, consider Pearson’s most recent (2015) national survey of technology use among college students, the findings of which are highlighted in [Figure 3](#). Nearly 90 percent of college students report owning a laptop, while 87 percent of students report using a laptop for school purposes; similarly, 85 percent of students own a smartphone, and over 60 percent report using a smartphone for school (Pearson, 2015). These numbers continue to grow

compared to previous surveys, with weekly smartphone and tablet usage increasing significantly when compared to the previous year's survey (Pearson, 2015). Additionally, the survey reports that one-third of college students report that they are early adopters of electronic devices (Pearson, 2015). Over 80 percent of students responded that they preferred using digital devices and the internet when working on projects with other students, which just slightly outpaces the 78 percent of students that reported preferring to use these same technologies for completing schoolwork on their own (Pearson, 2015).

So, college students overwhelmingly use digital technologies and the internet: but what are they actually doing on those devices? Published in *Learning, Media and Technology*, Reynol Junco (2014) investigated this very question. Junco sought to collect accurate usage data from participants, as he noted that existing research relied on self-reported usage measures, which are often inaccurate (Junco, 2014). To remedy this, Junco asked the college students participating in his study to download tracking software onto their computer and allow their usage to be tracked for two months (Junco, 2014). This study revealed key data points, summarized in [Figure 4](#). Students in the two-month study period spent an average of 123 minutes per day on their computers; of that time, users spent an average of 31 minutes on social networking sites, but only six minutes on email (Junco, 2014). *Note that this study only recorded usage of computers, not smartphones or tablets, due to the complexity of tracking usage on those devices; we would speculate, based on our experiences, that mobile device usage is significant and likely focused on social networking.*

This study highlights an important discrepancy with regards to technology use at colleges and universities: the vast majority of students are engaged with technology and spend a significant amount of time using it daily — however, far more time is spent on social networking

sites than checking email, which remains the official communications avenue of most universities (including the University of Texas at Austin). This disconnect in technology use has been highlighted in the media, with significant coverage by Courtney Rubin of *The New York Times*. Through a variety of interviews, Rubin's (2013) article detailed the real-life implications of the aforementioned research: college students are using social media and largely ignoring email, while faculty (and staff) continue to rely on it. Rubin (2013) chronicled the challenges of professors that found their students were not receiving important communications about assignments because they did not check their email accounts; in fact, some students in the upper-division course referenced in the article did not even know they had access to a university-sponsored email account. One professor reported making checking email every day a course requirement on their syllabus; staff at another institution assisting students with job recruitment said that, even though they provide students with a specific day and time to check their email and confirm their spot in the recruitment line, are often forced to text message students to receive a response (Rubin, 2013).

Reporting in the *Chronicle of Higher Education* further highlighted the challenges of colleges and universities in responding to this phenomenon: while email "remains the official method of communication on most campuses, colleges are expanding their presence in the virtual world, trying to reach students where they hang out ... without careful planning, that can lead to a scattershot approach as new platforms keep popping up and students' attention becomes increasingly dispersed" (Mangan, 2012). This will likely continue to force campuses to rethink their communications strategies and reassess "the future of institutional e-mail [sic] systems" as technology continues to evolve at a rapid pace (Kolowich, 2011).

Future

Where does this lead us in the future? To investigate this, we focused our research on technology with the lens of engagement from our mind mapping exercise.

Technology and Classroom Student Engagement. Technology use will continue to increase and proliferate on campus, both in the classroom and out of the classroom. Much of the current research on future trends focuses on advancement of teaching technologies. The argument for resources that facilitate student classroom engagement through methods such as online learning or blended instruction, a combination of traditional in-class instruction and non-traditional digital instruction, is that it can lead to the development of students as both knowledge creators and receivers (Brown, 2010).

Technology allows students' work to be shared beyond the classroom and contributed to a wider audience's understanding of a given subject. Researchers say this contributes to a feeling of attaining a broader range of transferrable skills (Chen, Lambert & Guidry, 2010). Technology also affords the opportunity for formal and informal delivery of class content. Alternative venues for teaching and learning allow for students to find their voice, encouraging them to be more engaged in their learning environment. Lastly, students feel with technology there is more of a learning community where they are able to not only learn from each other but help guide the direction of the course.

Technology and Engagement Outside the Classroom. Despite the proven benefits resulting from the incorporation of technology in the classroom, our research exposed a lack of attention to technology's impact on non-classroom related student engagement. This includes both how university administrator uses technology and how students themselves use technology outside of the class but related to their position as a student.

Data on university administrations' adoption of technology, in particular among student affairs practitioners, is for the purpose of expediting and increasing efficiency of administrative processes. As early as 1928, there is record of the National Association of Deans and Advisers of Men (NADAM) — which later become the National Association of Student Personnel Administrators (NASPA) — having meeting notes detailing practitioners' concerns about being replaced with automated processes and machines (McClellan & Stringer, 2009). Although practitioners have yet to be replaced, the industrial revolution, introduction of digital storage, and the development of the Internet have transformed how university administrators engage with students. Technology is incorporated into university marketing, registration, financial aid and other areas; there is now automated information collection throughout the admissions process, as well as mainframes and online systems to organize and manipulate student data and records.

Most notably, many universities have moved to digital communications, such as email, as the official means of communication between the institution, students and the campus community. While email communication is seen as an advancement in technology to the institution, it is not technology to many traditional college students who are digital natives: individuals born after the widespread adoption of digital technology (Swanson & Walker, 2015). As put by a student surveyed through a focus group on coping with the digital revolution: "It's only technology if it happens after you are born" (Levine & Dean, 2013). Today's traditional-aged college students were born after the advent of the Internet, AOL, Apple and Microsoft. By the time they reached adolescence, social media sites, texting, online collaboration and file sharing were prevalent. Conversely, current university administrators most likely experienced these advancements during the course of their career. The difference in understanding of digital

technologies as a communication tool is an example of the digital divide between digital natives (students) and non-digital natives (university administrators).

Similar to in-classroom technology adoption, technology has proven itself beneficial in improving university administrative processes. However, there is room to explore technology's impact on non-classroom related student engagement. With the known trends of social media and technology usage among college students, university administration and student affairs practitioners must to gain a better understanding of this to better encourage student engagement and effectively communicate with students.

Emerging Adulthood. An approach to establishing effective communication practices using technology can be grounded in an understanding of the rising theory of emerging adulthood. Emerging adulthood is defined as a prolonged period of independence within a person in their late teens to early twenties (Arnett, 2000). Traditional-aged college students are often passing through emerging adulthood. This period is a time for exploration of identity and interests, as they relate to worldviews, interpersonal relationships and professional outlook. This phase of life is also marked by one's sociocultural interactions and communication style. These forms of engagement play a significant role in the development of emerging adults.

Non-academic technology use among emerging adults, such as building community through social network sites, is telling about how they think and interact. Through sites like Facebook and Twitter, community building allows emerging adults to connect with the campus community while also maintaining connections with their home environment. This integration is instrumental in the development of a student and likelihood of persistence and student success (Tinto, 1987). However, with emerging adults being in a developmental stage, there needs to be an openness in understanding that their usage is nuanced and contextual (Bennett & Maton,

2010). Still, the meaning derived from non-academic technology usage by emerging adults can shape how technology is incorporated into non-classroom, academic usage.

Technology is shaped by the demands of culture, both how it is used and who gives technology meaning. Email is said to have transcended the digital divide because it is used by both administrators and students. It does this because institutions have adopted it as the standard form of communication, but among many emerging adult students it is not seen as an effective communication tool because they prefer to use instant messaging and text as demonstrated by their non-academic technology usage. This does not mean email in general is ineffective or that emerging adult students do not use email, but among this group it is deemed less favorable.

We must acknowledge that students communicate digitally, both academically and non-academically (Swanson & Walker, 2015). With what we know about the rise of social media and digital communication among college students — and many college students' interactions and communication being able to be defined under emerging adulthood — we can begin to understand technology use among today's college students. Emerging adulthood accounts for personal, cultural and social development, and the communication used to facilitate this development among individuals being defined by their technology usage. University administrators must create systems and resources modeled not just on student usage but also on student perspective. Students must be able to see the usefulness of application of resources outside of its perceived parameters. As Swanson and Walker (2015) suggest, “emerging adults are socially constructing and influencing the trajectory for future technological practices in education.”

Limitations. Emerging adulthood, when used in the context of student development, implies students are traditional-aged college students. With increasing amounts of non-traditional

students entering colleges and universities for the first time, it is important to consider this type of student in the conversation on the digital divide between university administration and students. Thinking forward to 2026, a mere decade from now when advancements in technology are difficult to conceptualize, even a non-traditional student would be digital native. For example, a 30 year-old first-year student would have been born in 1996, making them a digital native. There will still be differences in experiences between traditional and nontraditional students. However, both will be digital natives passing or having passed through emerging adulthood.

A similar concern can be expressed for emerging adults who may have limited access to technology. Research suggests that minority populations, socioeconomically disadvantaged, and less educated individuals have limited access to technology compared to more affluent and dominant groups (Bobkowski & Smith, 2013). As access to institutions of higher education increases to students who come from traditionally disadvantaged backgrounds, consideration needs to be given to their experience and preparation in using technology. As the problem of “digital deserts” are brought to national attention, increased resources are being created by government agencies and private companies and organizations (Berdik, 2015). These efforts will hopefully close the gap in access to technology during adolescence. With a clear understanding of technology usage among emerging adults, institutions of higher education will then be able to ensure the gap remains closed among emerging adults.

It is fairly safe to use the theory of emerging adulthood to understand student development as it relates to communication, social media and digital communication trends. Looking toward the future, students will either have gone through emerging adulthood or be

experiencing it. Additionally, universities can use technology as an opportunity to close the digital divide and gaps in access to technology.

Project Proposal

In conjunction with the above conceptual foundation, we developed a hypothetical future scenario in which our proposed project solved the problem identified earlier. Available in its entirety in [Appendix A](#), our scenario focused on Jasper, an incoming first-year student at UT Austin in the year 2025. Jasper was introduced to our proposed system in an orientation program, and discovered the ways in which it would enhance his college life. The outline of our proposed system follows.

HornsLink 2.0: A Start Button for UT

We propose what we call HornsLink 2.0, a simple communications tool that will link faculty, staff and students with each other, and provide a common place to begin communications: a “start” button for UT, if you will. We adapted the name from the current HornsLink student engagement platform, which we would envision would be defunct in the future due to unsuccessful implementation, but with a name that harkens back to attempts to improve campus engagement through technology. We envision that this system will pull together the best elements of email, text messaging, and social media to remove barriers to communication and provide common ground for communications and collaboration across campus. HornsLink 2.0 will be based around an interface that presents users with two basic functions: “communication” and “collaboration.” Each user will have a basic profile that includes their name, college or departmental affiliations, and other identifying information pulled from UT’s student and/or staff information systems, though users will have the ability to control what appears on their outward-facing profile (see [Figures 5 & 6](#)). By including this identifying

information for each user, HornsLink 2.0 will create a searchable directory of the entire UT community that will display to users ways in which they are connected to others: for example, a user will be able to see that other users are in their courses and colleges (see [Figure 7](#)).

HornsLink 2.0 will include two core functions for connecting users with one another: “message” and “collaborate” (see [Figure 8](#)). Users wishing to send a message to anyone else at UT will be able to do so from this platform and have that message sent directly to single or multiple other users; because all UT-affiliated persons will be assigned HornsLink 2.0 accounts, there will be no need for anyone to search out another person’s specific email address, phone number or social media profile (see [Figure 9](#)). HornsLink “evens the playing field,” so to speak, in this manner. In addition to messaging, HornsLink 2.0 will have a “collaborate” function that enables users to collaborate in groups of two or more. Users would be able to initiate, for example, a shared Google Doc with any other HornsLink 2.0 user or group of users, who would then be able to access it from the same HornsLink 2.0 platform. Users will be able to access HornsLink 2.0 from any web-connected device or platform, and will have access to the same core features from wherever they happen to be. Additionally, HornsLink 2.0 will integrate with essential systems that exist for specific purposes — e.g., the Canvas learning management system or Google Drive collaboration platform — allowing users to link to these commonly-used systems from within HornsLink 2.0 (see [Figure 10](#)). As we are aware of the constantly-evolving nature of technology, we envision that HornsLink 2.0 would integrate with any new system used widely by the campus population, rather than attempting to replicate the system: we feel that HornsLink 2.0 should integrate with systems that perform their tasks well, rather than “reinvent the wheel.”

We intend HornsLink 2.0 to be a starting place for University communications. In the interest of simplicity and a focused vision, we do not intend HornsLink 2.0 to replace every single University system used for communicating or collaborating; rather, we envision HornsLink 2.0 integrating these systems into the communications flow for users. For example, users collaborating on a class project in the ‘collaborations’ section of HornsLink 2.0 might see options to start a shared Google Doc; they might also see, through HornsLink 2.0’s “connections” function, that the users in this collaboration are all in the same class this semester. The system might provide a link for users to quickly access the course’s learning management system (such as Canvas) so that users could submit their project upon completing it. In this way, HornsLink 2.0 seeks not to replace the specific functions of other systems, but to simply facilitate communication and collaboration between UT community members in pursuit of a common goal.

Like most existing communications systems, HornsLink 2.0 would provide notifications to users across devices. While notifications about new messages or invitations to collaborate in different groups would likely be the most common, we would also see HornsLink 2.0 as providing a way to communicate other important UT-related updates to the community. As all UT community members would have HornsLink 2.0 accounts, the system would provide a quick and direct way to target messaging to the community. These communications could include safety alert or weather advisories, provided in real-time to all users across their devices; conceivably, class cancellations or more specific notifications could also be targeted to all users in a certain course or department, providing a quick and easy way to communicate essential information as events unfold (see [Figure 11](#)).

In designing HornsLink 2.0, we foresaw a few areas of concern with the system, addressed below.

Security & Privacy. Security & privacy is already a central concern with our increasingly digital lives today– a concern that we would envision will continue to be relevant in the future. HornsLink 2.0 would ensure users in two ways. First, being an official University system, HornsLink 2.0 would be open to verified UT community members only. Accounts would be provided to community members upon joining the University, and would be secured at the same level as other official systems. Account access would require community members to verify their identity, whether that be through username/password, fingerprint or facial recognition (whatever method or methods would be most widely used in the future). While non-community members would be able to receive messages from HornsLink 2.0 users as emails, they would not be granted access to the full system in the same manner as UT community members.

As for privacy, HornsLink 2.0 would allow individual users to control what information other community members see when viewing their profiles or searching their name in the directory. While demographic information (full name, college or school, major, employee title etc.) for each user would be imported to their HornsLink 2.0 account from other University systems, HornsLink 2.0 users would be able to select what information is publically viewable, and what should remain private. For example, a student user would likely want to make their college or school affiliation visible to other users for the purposes of collaboration, but might keep their specific major private, depending on their personal desires. Similarly, a staff member might make their job title and department publically available to other HornsLink 2.0 users, but keep their exact office location hidden to ensure a level of privacy.

Keeping in mind that HornsLink 2.0 is a closed system focused on the UT Austin community, users would be assured a basic level of privacy: anyone outside the UT community would not have access to the information in HornsLink 2.0, as they would not have an account with which to access the system.

Adoption. Adoption is a challenge for any new system, especially a digital platform such as ours – there’s always “one more app.” However, universities present a unique adoption environment: digital systems are selected at higher levels and essentially conferred upon the community. Take, for example, the current UT EID system: all UT Austin community members are given a UT EID upon joining the UT community, granting them access to a wide variety of systems; users are not given a choice in this matter. All UT community members are provided an EID and expected to use it. There exists a similar precedent with faculty and staff at UT, wherein these groups are provided with a University email account in the Microsoft 365 system and expected to use it to conduct their business; again, users are not given a choice of systems: the expectation that faculty and staff will use Microsoft 365 to communicate is set from the beginning, and continues for their time at the University.

We envision HornsLink 2.0 replacing email communications systems for faculty, staff and students at UT Austin. Users would be given accounts and migrated to the new system in batches as part of a plan determined by administrators; incoming faculty, staff and students (those not using current communications systems) would receive HornsLink 2.0 access and begin using the system from day one.

We would envision this migration plan including messaging and training for current users and a phase-out of older systems. Data contained in existing email and calendaring systems would be migrated with user accounts to HornsLink 2.0, such that users would log into the new

system and see their messages and meetings intact. After migration, users would no longer have access to the systems HornsLink 2.0 replaces. Once all users were migrated, previous systems would be retired from use entirely. In this way, HornsLink 2.0 leverages the unique ability of university communities to speed adoption among users and become a central hub for university communications.

Communicating Outside of the University. We envision HornsLink 2.0 replacing email and other methods of communication for the UT community, streamlining communications by allowing individual or group messages to be sent to other UT community members in HornsLink 2.0. Because all UT community members would have a HornsLink 2.0 account, there would be no need for them to reach for other communications systems (such as email or instant messaging) when communicating with another community member.

However, we acknowledge the need for UT community members to still communicate with individuals outside of UT. To accommodate this, all HornsLink 2.0 users would be assigned an official University email address with their HornsLink 2.0 account. When composing a message, users would be able to enter any email address in the ‘To’ field; the system would recognize the email as outside of the HornsLink 2.0 system and format the message appropriately so that the recipient would be able to read and reply to the message as they would with any regular email. This allows UT community members to still utilize a single system for their communications needs, rather than having to switch to something else to message those outside the UT community.

Conclusion

This is a future scenario, and we know that technology changes rapidly. We can only make our best guesses to how the system would function and what it might look like. However,

we anticipate that — regardless of what communication devices/computers/cell phones/etc. look like in the future — the basic problem we identify, that there's many disparate methods of communication and the wealth of choices necessitates a common starting point, will still exist, and we feel that HornsLink 2.0 would go a long way to addressing it.

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Figures

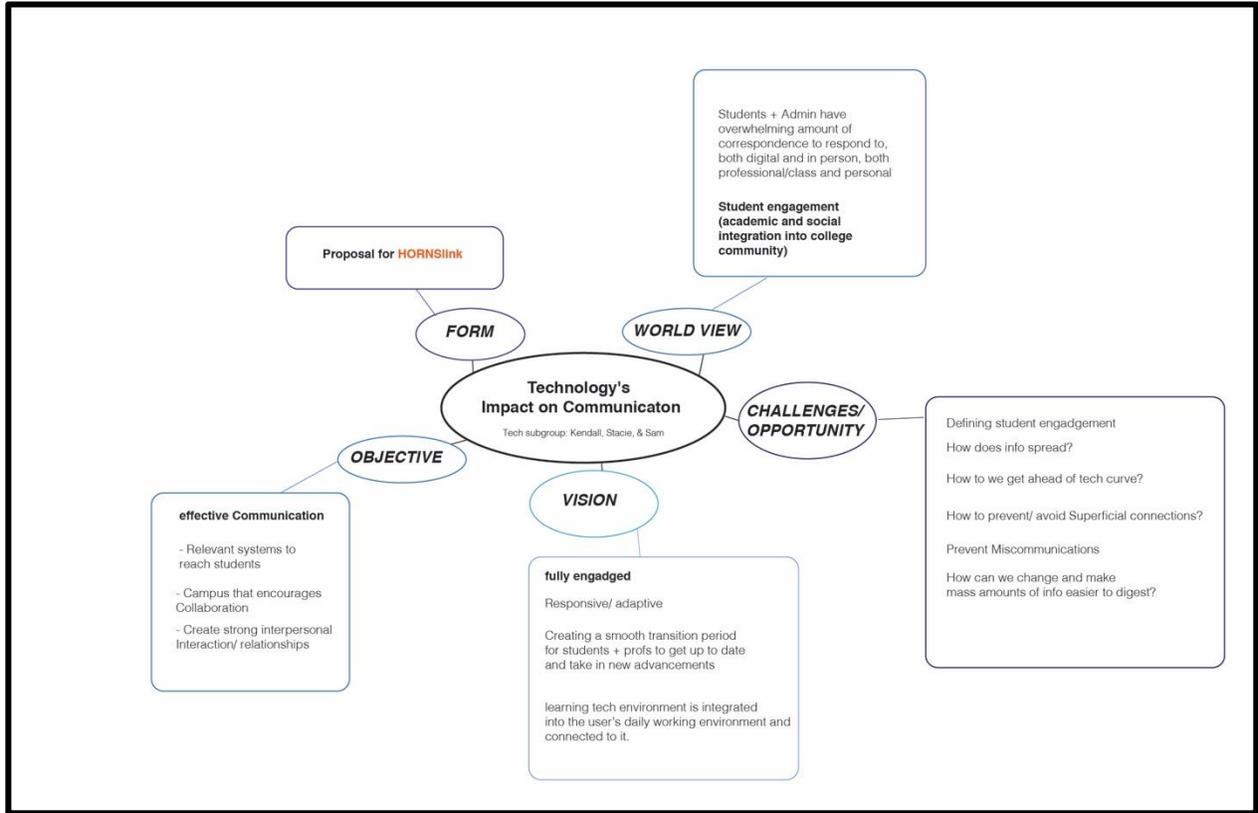


Figure 1. Mind map used for design thinking exercise, based on framework developed by Shearer (2015).

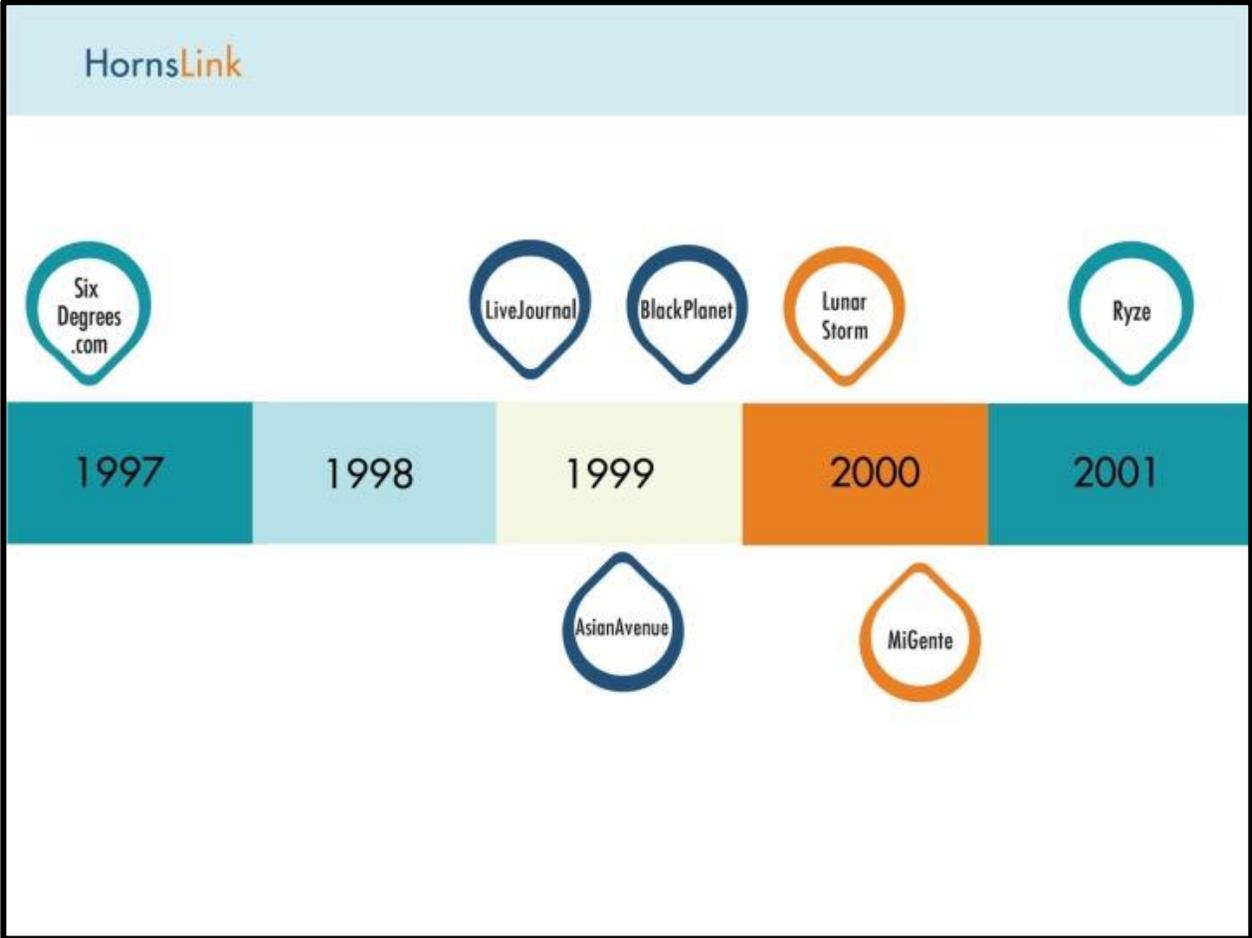


Figure 2a. Timeline of social networking site (SNS) launches from 1997-2001, adapted from Boyd & Ellison (2007).

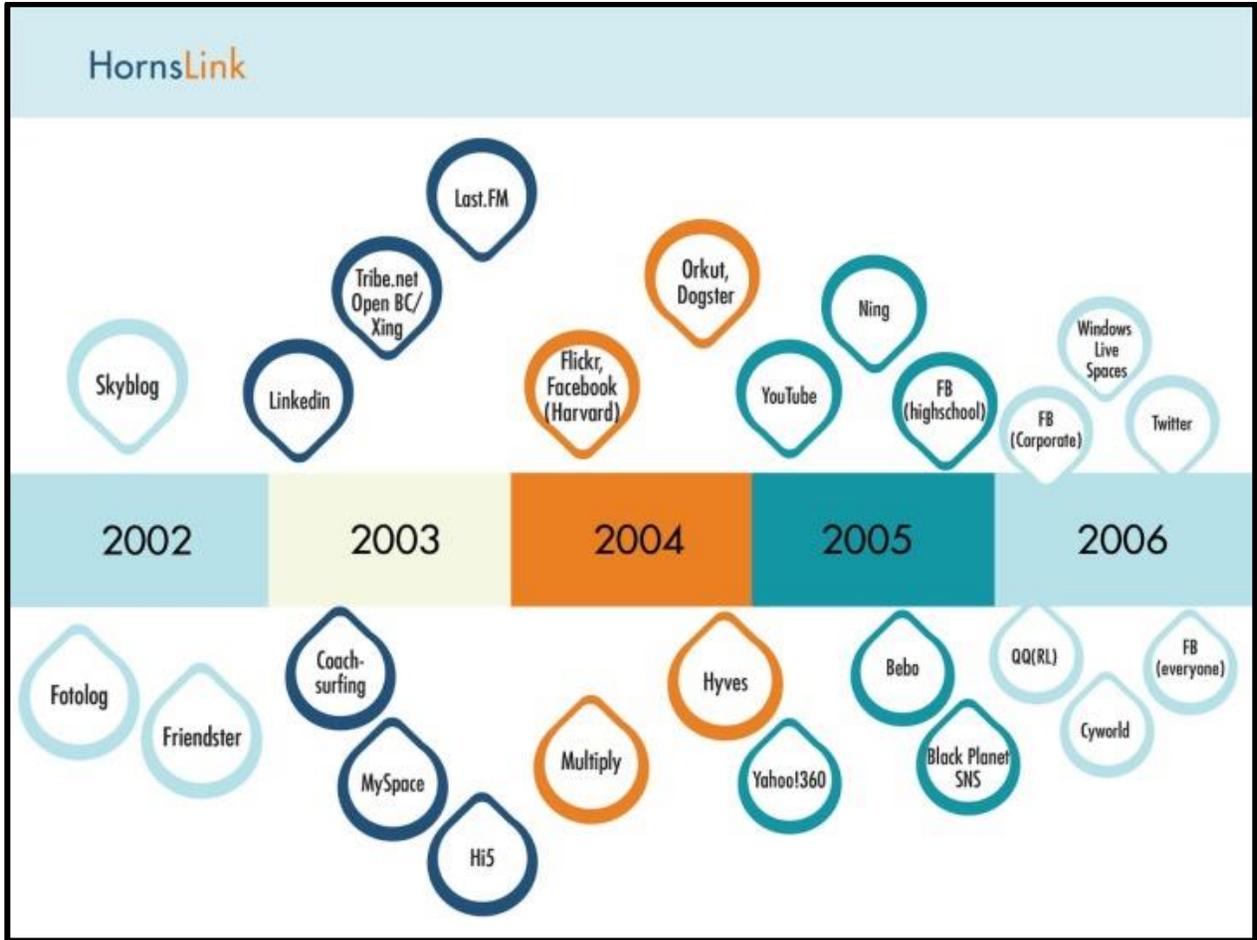


Figure 2b. Timeline of social networking site (SNS) launches from 2002-6, adapted from Boyd & Ellison (2007).

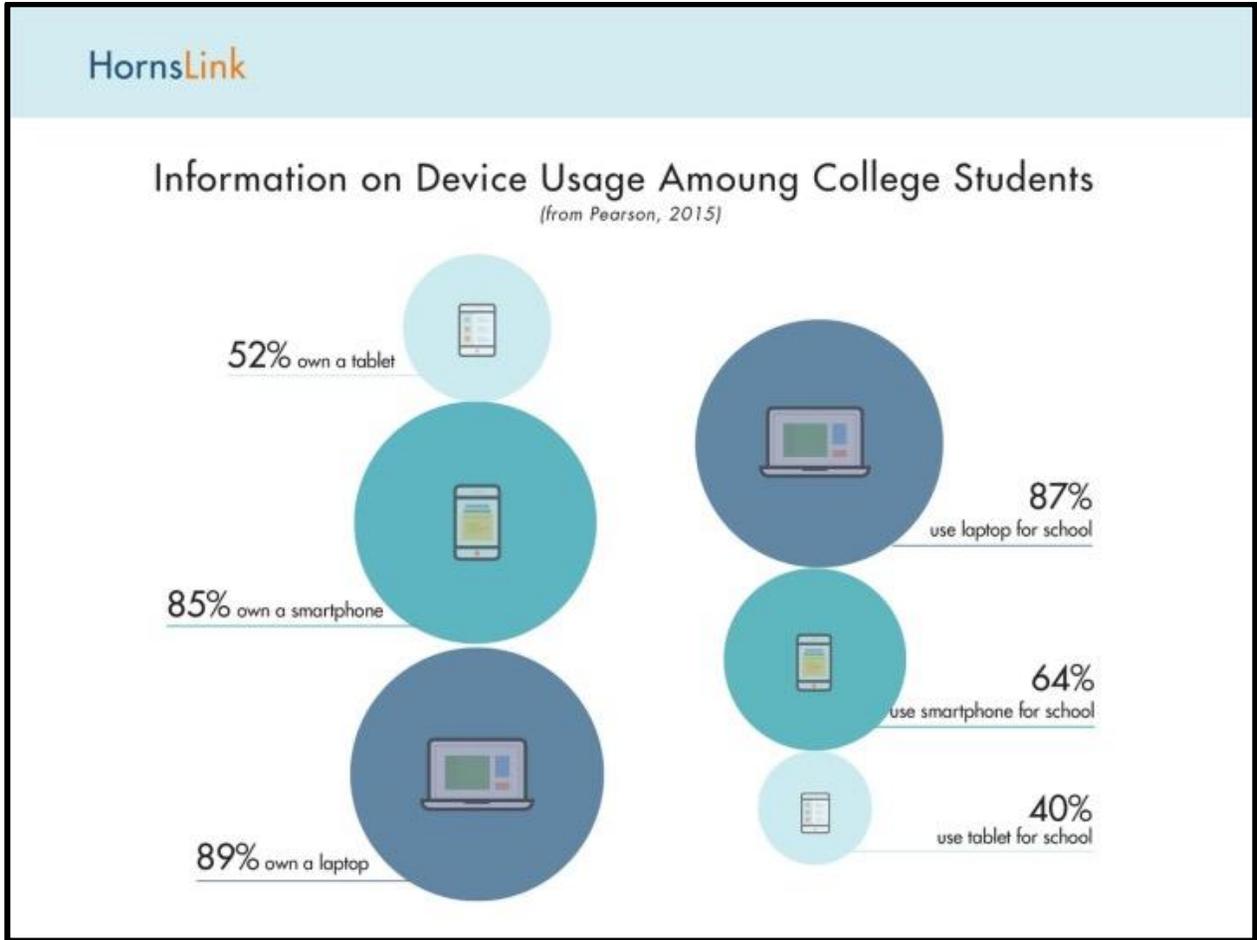


Figure 3. Digital device ownership and usage among college students, adapted from Pearson (2015).

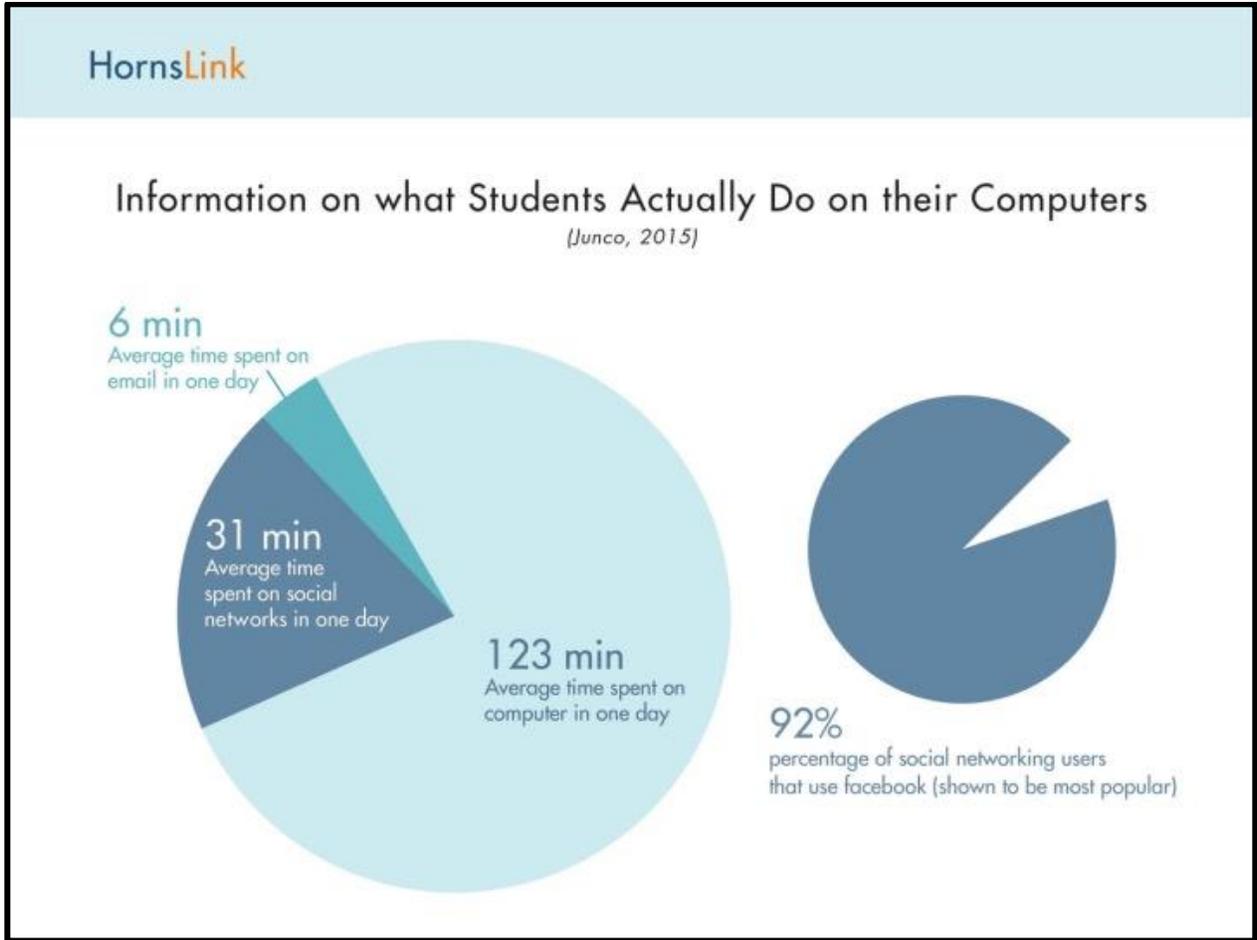


Figure 4. Results of study of computer usage of college students, adapted from Junco (2014).

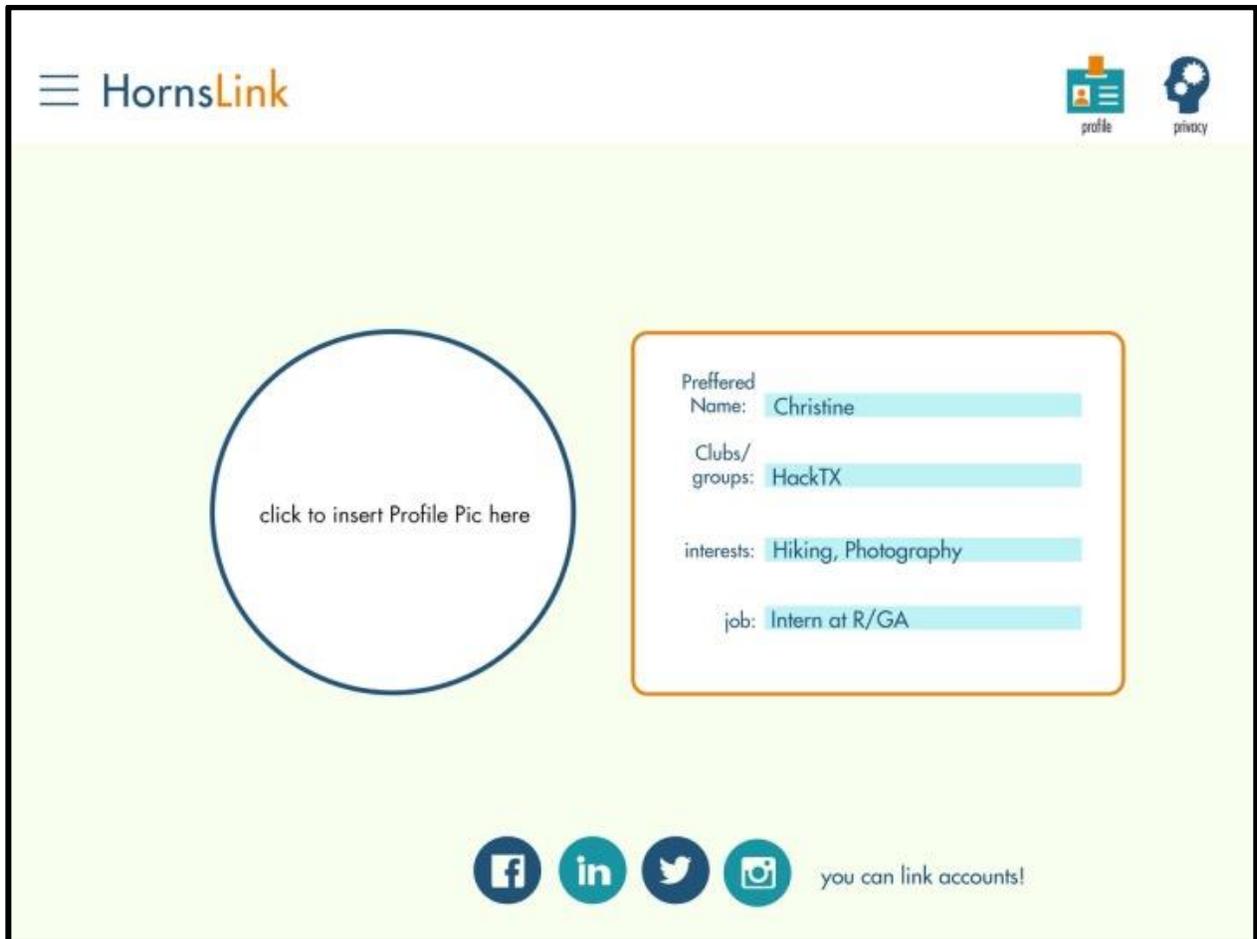


Figure 5. Basic HornsLink 2.0 profile, shown with information pre-populated from official student information systems.

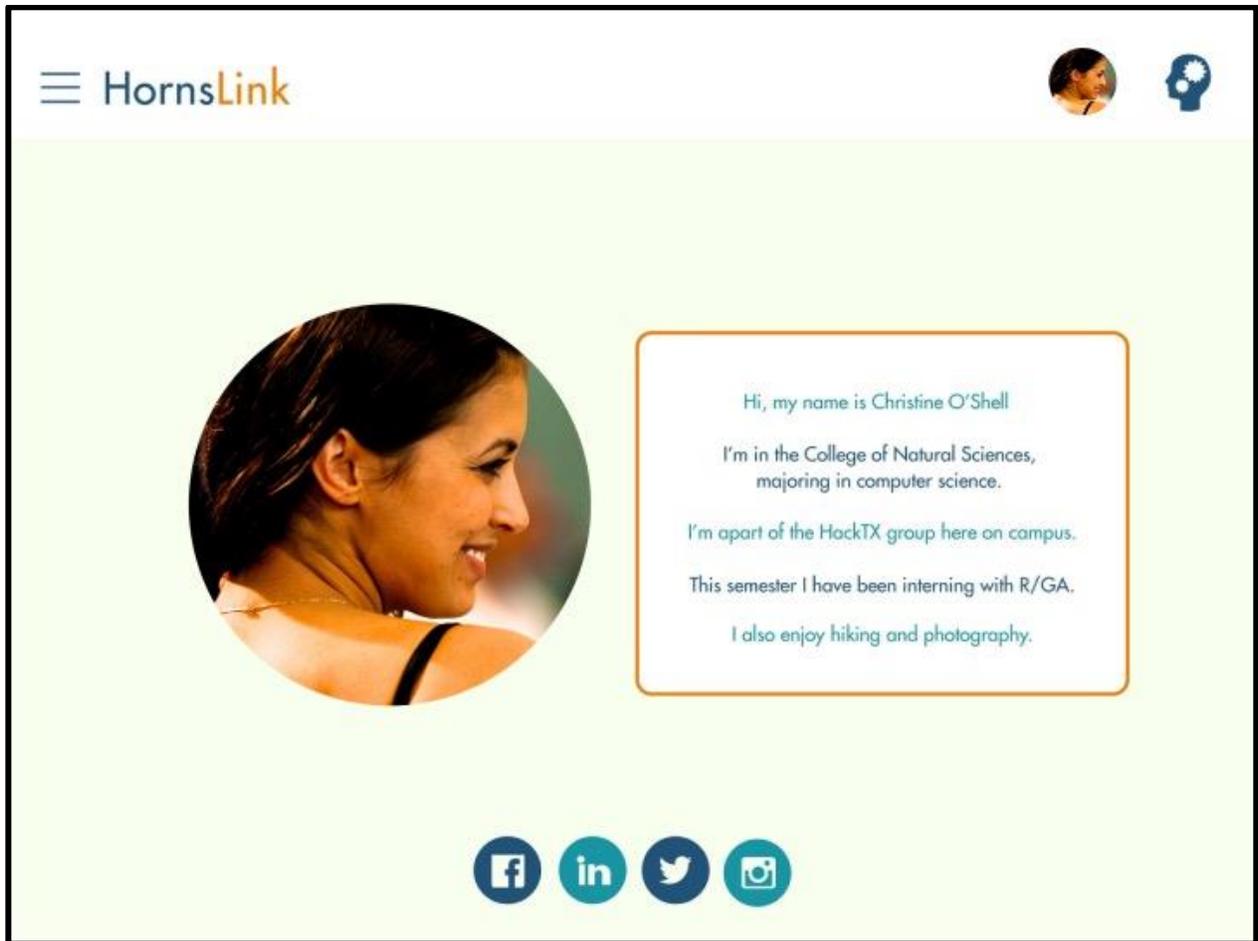


Figure 6. Completed HornsLink 2.0 profile, showing profile photo and SNS links as set by user.

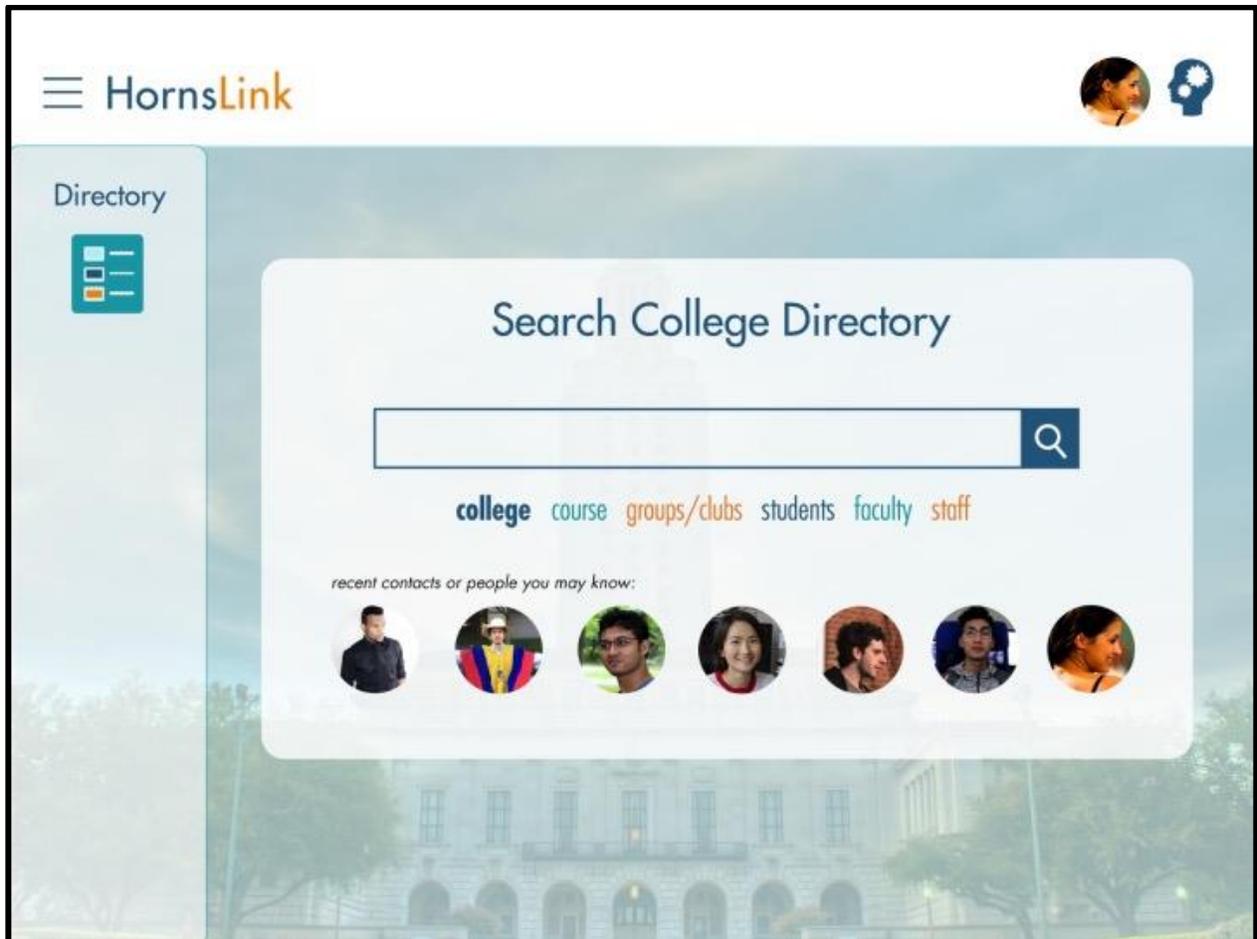


Figure 7. HornsLink 2.0 directory page, allowing users to search entire university community and view people they may know based from courses, organizations, jobs and other involvements on campus.

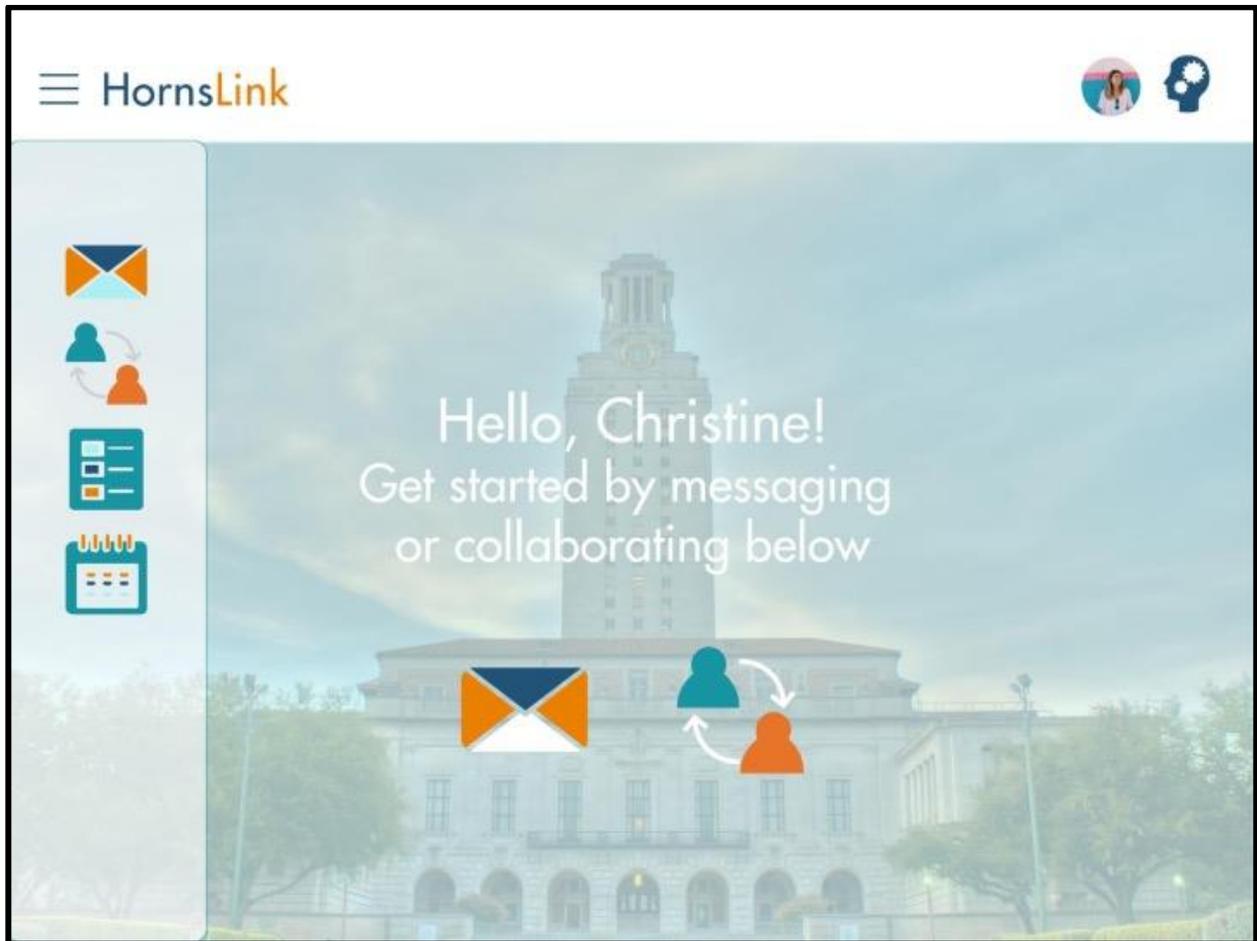


Figure 8. HornsLink 2.0 landing page with left-hand option drawer expanded, showing options to compose a message, start a new collaboration, search the university directory, or view their calendar.

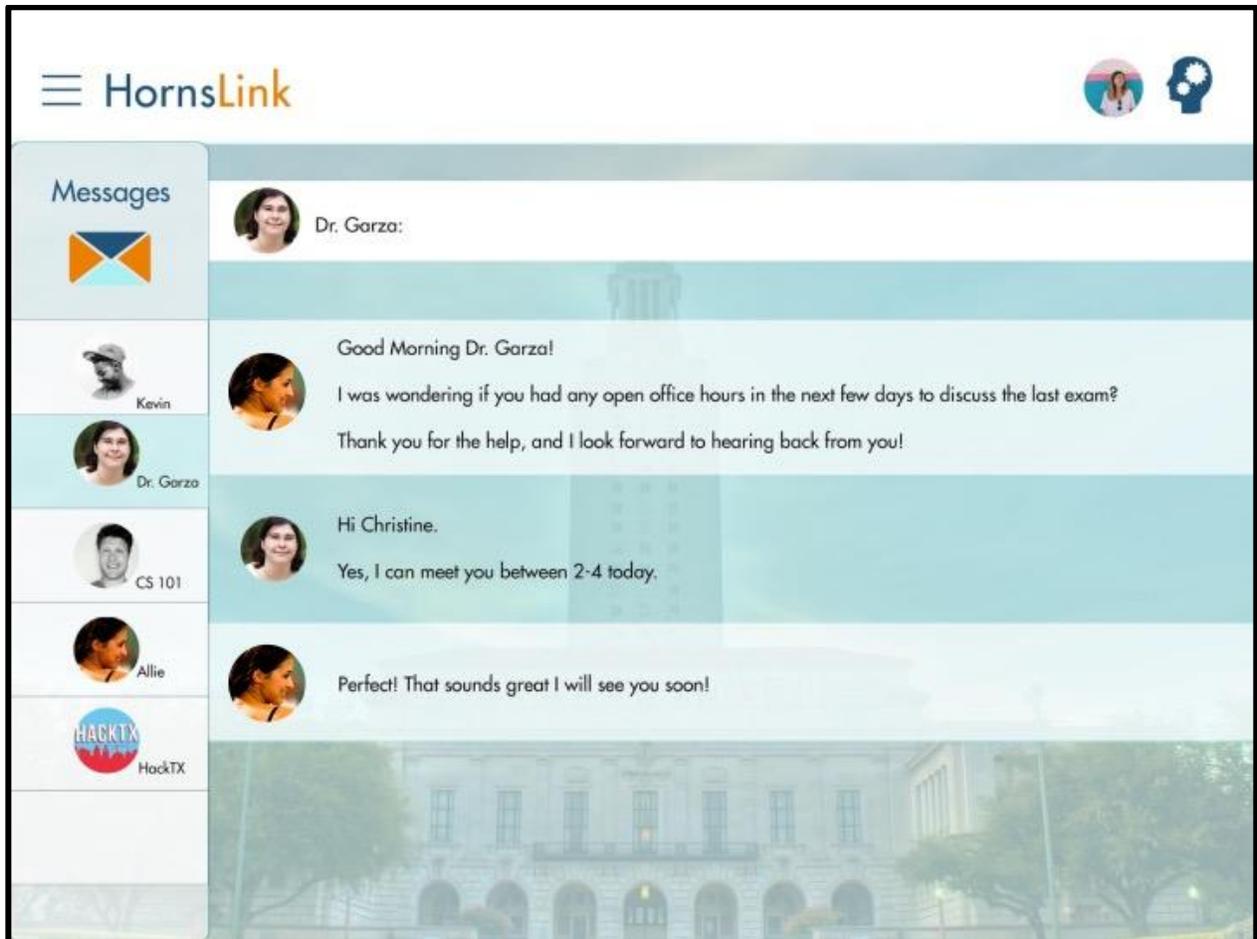


Figure 9. Example of a HornsLink 2.0 message between a student and her professor, with selected message highlighted in the user's inbox on the left.

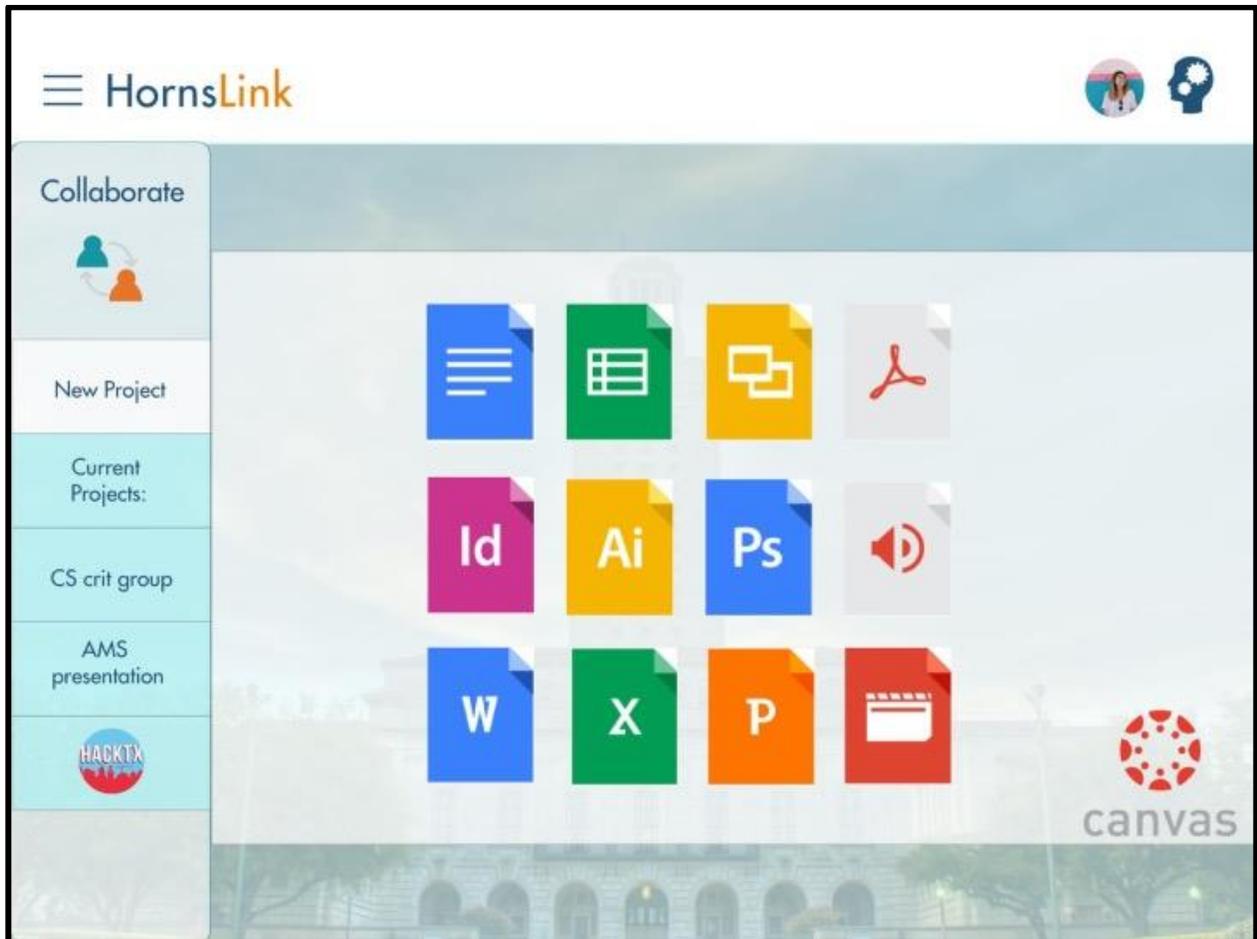


Figure 10. The HornsLink 2.0 collaborations landing page, showing current collaborations on the left and options to begin a new collaboration in the center.

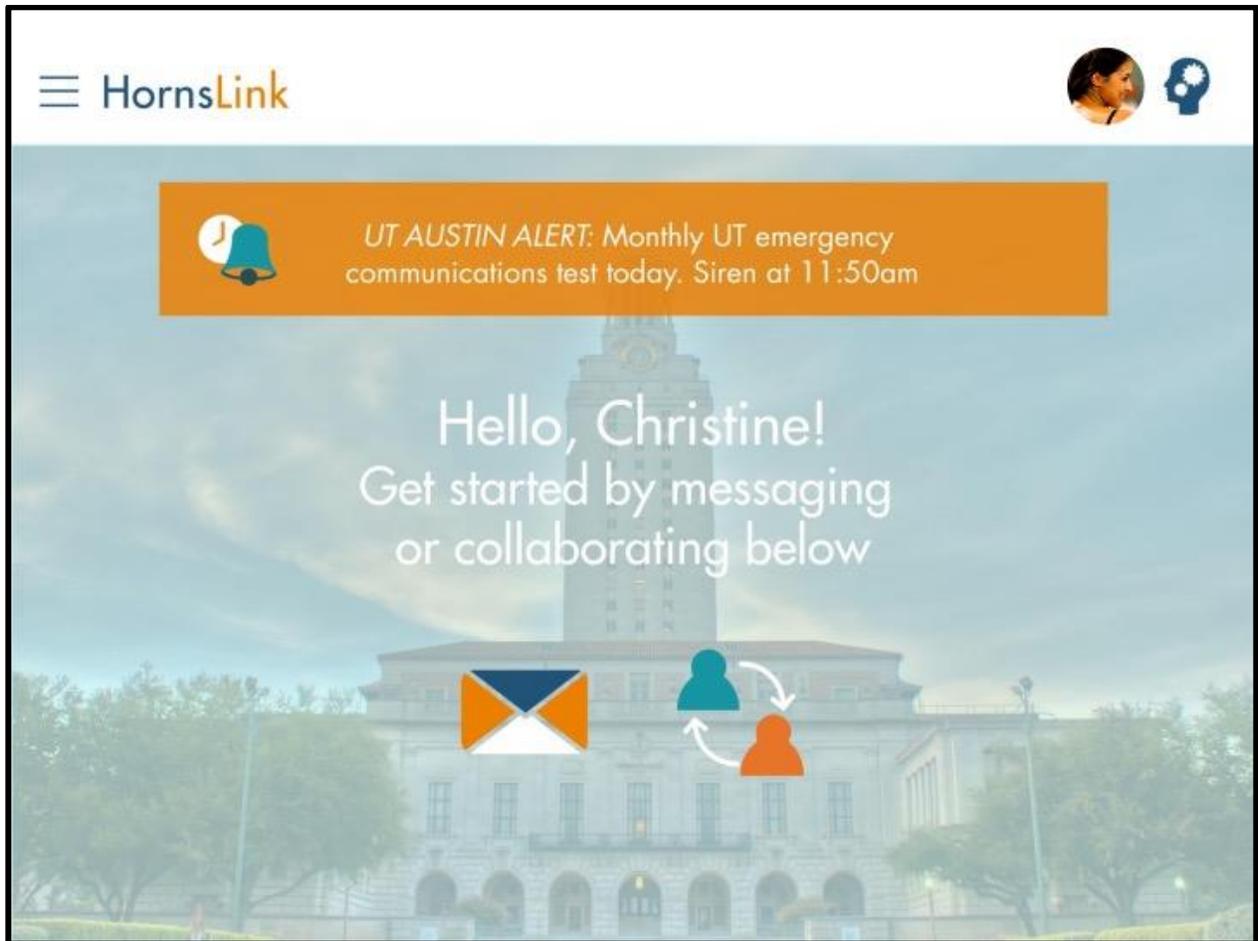


Figure 11. Example of an emergency alert being communicated to users through HornsLink 2.0.

Appendix

Appendix A: Future Scenario

Time: 2025

Place: The University of Texas at Austin

Jasper is a traditionally-aged incoming student at UT Austin in 2025. He comes from a low- to middle-socioeconomic background, and grew up in a small town on the border of Texas and Louisiana. He is a first-generation college student entering into the School of Undergraduate Studies, as all first-years do before deciding on their major sophomore year.

Jasper, like many first-year students, is excited for the opportunities college presents, but is daunted by the size of UT: there's so many students, faculty members and staff/administrators, as well as a multitude of colleges, student organizations and other "silos" that people work in on campus [challenge/opportunity]. Jasper wants to be successful and become fully integrated into the college experience, and he wants to collaborate and engage not only with his peers but with his professors and the staff members that he might encounter on a daily basis [objective].

Before beginning classes in the fall Jasper attends a mandatory summer Orientation program. At the program he is given information on HornsLink [form], a communications system that Jasper is told has just been completely re-vamped at UT, and he sees/hears all the current students serving as Orientation Advisors using the system on a variety of devices. He also notices that his Orientation schedule includes a session dedicated to setting up HornsLink later that afternoon.

In the session, Jasper finds out all he needs to know about HornsLink. The session's presenters explain that UT decided to implement this system as a central hub for all forms of communication at the University, to encourage collaboration and make it easier for everyone to

get in touch [vision]. Jasper learns that all UT-affiliated people (staff, students, faculty, etc.) have a HornsLink account from the first day they arrive on campus.

The system gives everyone a profile that contains all of their personal information: demographics, college/major, contact information, social media profiles, health records, transcripts... the list goes on. People select what information they would like to display to the UT public; staff and faculty with higher levels of access are able to see students' personal information if needed, though.

Jasper learns that HornsLink combines instant messaging and email, and is the way that everyone communicates with each other. Jasper can search for people by name, or look through the roster of his classes to find his classmates. When Jasper joins different organizations, he will find that they all have profiles and rosters of their members. This way, Jasper can simply click on a person's profile to email or message them, rather than having to already know their email address or phone number.

The session also shows Jasper how the interface is customizable and can divide information into tabs to separate social contacts from work contacts and academic contacts. The different tabs can easily be turned on or off if the user needs to focus on a specific group of contacts or projects. The new system also organizes your inbox to divide things by priority, as well as combines similar information so everything is concise and easily readable to let students stay on top of their tasks.

Jasper sees that once he is part of a class or organization, he can form groups and collaborate with his peers. He and others can exchange messages, edit documents and share files, and schedule times to meet. He sees that HornsLink works with different file-sharing platforms

and systems, like Google Docs and Canvas, so that he does not have to leave HornsLink to create a Google Doc to share with his classmates- the system does this for him.

Prior to rolling out the updates to HornsLink, university administration completed extensive research on the effectiveness of incorporating digital communication systems and the impact it would have on student engagement on campus. As technology advances, the line between in-person and online engagement blurs creating new opportunities for approaches to student engagement. With that also come challenges, such as creating a system that would lead to a decrease in meaningful interpersonal connections and interactions with the campus community [challenge/opportunity]. The university is committed to academic and social integration of all of its students into the campus community [worldview]. They are aware of the overwhelming amount information students receive digitally and in-person, academic and person. Since HornsLink is for both academic and social use, the goal was to streamline and ease avenues of communication while encouraging diverse forms of collaboration [objective].

Jasper leaves the HornsLink session excited to explore the list of student organizations and fill in all the information he can on his HornsLink profile. His fears of not knowing what is going on, or of how he can work with his new classmates or group members, are quickly becoming a thing of the past.