

# The Association Between Having University Email On Mobile Devices and First-Year College Students' Engagement

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Virtually all colleges and universities offer or require an orientation course for incoming first-year students. The goal of this study was to examine the effect of having first-year college students install the university email system on their mobile devices. The focus was specifically on the effect of immediate notifications via email on student engagement. The research question asked, "Does immediate notification through university email on first-year students' mobile devices effect student engagement in their coursework?" The participants were first-year undergraduate students at a university in the Midwest who were enrolled in a college orientation course required of all first-year students. Descriptive statistics were used to analyze the responses to a researcher-developed, 13-question survey. The overall findings of this study indicate that receiving immediate email notifications is, in fact, of value to this population of first-year students, and improved student engagement.

Key Words: student engagement, mobile email communication, immediate notifications, first-year university students, college orientation course

## INTRODUCTION

As all major colleges and universities have recognized, the transition to college life for new, incoming students can be challenging, and as a result have developed a college orientation course for first-year students (Hardge, 2022). There are a number of beneficial reasons for requiring such a course including, but not limited to, the transition to college life can be intimidating, adjusting to the curricular workload demands, being away from home, adjusting to the pace of university life, and the potential impact on retention, to name a few (Hardge, 2022).

The site of this study, a four-year public university in the Midwest, has such a course which is required in the first semester of all degree-seeking first-year students. There are typically 95 to 105 sections of this 12-week course titled GEP 101, First-Year Foundations, offered every fall semester. The curriculum for this course is fixed for all sections and includes an orientation to the learning management system; weekly reading assignments in Kahn & Kahn (2023); exposure to the many university resources,

including library resources, the Counseling Center, public safety, multicultural services, and the Writing Center, to name just a few. Any full-time faculty or staff member can apply to teach the course after completing an annual training session.

After teaching this course for a number of years, this faculty researcher noticed that often there are students (who just a few months earlier were in high school) who were not as engaged in the course, and those students typically did not do as well academically, or adjusting to college life. Thus, the impetus for this study was to examine whether or not having the students install the university email system on their mobile devices, whereby they would receive immediate course-related notifications, might mitigate this situation, and possibly improve student engagement in the course activities and assignments. Students in the courses were not required to install the university email on their mobile devices, but the advantages of doing so were explained and strongly recommended.

#### *EMAIL COMMUNICATION PRACTICES AMONG COLLEGE STUDENTS*

Despite the rise of alternative communication platforms, students still recognize university email as the official source for course-related information, institutional announcements, and time-sensitive updates. According to Kaufmann and Vallade (2020) email is the most common communication channel between students and faculty. And since the pandemic, Nguyen, et al. (2022) found that college students' use of email has increased in both volume and frequency. Clearly, university email is still an important tool for official communications with students—including first-year students—contributing to the impetus for the current study.

#### *PURPOSE OF THE STUDY*

The purpose of this study was to examine whether having university email on mobile devices—allowing students to receive immediate notifications—might improve first-year student engagement in their college orientation course, including its activities and assignments. Specifically, the study focused on students enrolled in GEP 101, First-Year Foundations, and explored whether real-time communication could enhance their participation and interaction with course content and overall engagement.

### **LITERATURE REVIEW**

More students are entering college, and Kuh et al. (2008) noted that a college degree has become essential for economic self-sufficiency and responsible citizenship, offering long-term cognitive, social, and economic benefits. Despite this, completion rates remain a concern. According to the Institute of Education Sciences (IES-NCES, 2022), 64% of students who began a bachelor's degree at a 4-year institution in fall 2014 completed it within six years, leaving a substantial proportion who do not persist to graduation.

In response, many institutions have implemented first-year orientation courses, such as GEP 101, to support student transition and improve engagement and possibly retention. This course provides students with academic resources, institutional knowledge, and essential skills for success. Understanding what strategies enhance engagement in such courses is critical, as student engagement is closely linked to retention and overall success (Hardge, 2022).

The findings of this study offer practical value for instructors, curriculum designers, and administrators by identifying whether mobile email notifications can serve as an effective tool to increase engagement. Additionally, the study addresses the broader issue of student reading compliance. Prior research (Hoeft, 2012) found that although many first-year students report completing readings, comprehension levels remain low. Increased engagement through immediate notifications may possibly help improve not only participation but also reading compliance.

Furthermore, research by Pham et al. (2016) demonstrated that push notifications positively influence learner engagement. Accordingly, this study examines whether installing university email notifications on mobile devices enhances engagement and encourages students to adopt effective learning strategies throughout their academic careers.

As mentioned, Kuh, et al. (2008) asserted that a college degree has replaced the high school diploma for a number of important reasons in several areas of life. Yet those recent high school graduates who are now new, incoming first-year college students, often face challenges that can impact student retention. Additionally, all college and university administrators are aware of the need to find ways to improve retention of first-year students at their institutions. Retention is “a vital aspect of higher education since it influences graduation rates, which shows how well a school is doing for its students” (Chaudhry, 2023, para. 6). Furthermore, student retention impacts university income through enrollment. In addition to the financial component, “student retention is a promising indicator of stability and success, which helps not just the staff but also the student who are currently enrolled or are considering joining” (Chaudhry, 2023, para. 12). Offering or requiring a college orientation course has become a widespread practice adopted by most colleges and universities (Hardge, 2022) to guide first-year students through that critical first semester, which hopefully results in positively impacting new student retention.

#### *HISTORICAL OVERVIEW OF STUDENT ORIENTATION PROGRAMS*

According to Finnegan & Alleman (2013),

Scholarship on the history of student services and in particular freshman orientation programs typically begins with the administrative interventions of the mid-1920s. However, freshman orientation services and activities did not arise from administrative or faculty initiatives. As early as the late 1870s and motivated to ensure the welfare of their own student organization, members of campus-based Young Men’s Christian Associations recognized needs of incoming students and gradually developed college entry programs, resources, and strategies in response. These interventions were designed to ameliorate and influence the otherwise difficult transition process into collegiate life. (p. 95)

One of the first institutions to recognize the need for a student orientation program was Harvard College. According to Craven (2015), Harvard College was the first institution to implement a mentoring system where upper classmen helped new students transition to campus life. Also, as of the end of the 19th century, Harvard had established and maintained a system whereby faculty were assigned to the orientation of new students outside the classroom.

One of the active professional organizations is NODA, originally the National Orientation Directors Association, which is now known as NODA – Association for Orientation, Transition and Retention in Higher Education. According to the NODA website, the organization was chartered in 1976 and today is an international association comprised of professional administrators, students, faculty, and related organizations concerning the orientation, transition, and retention of students in higher education. NODA hosts an annual conference, and regional conferences, holds retention symposiums, and publishes an annual report.

According to NODA, “The first official orientation program for new students in higher education was held at Boston University. By 1925, over twenty-five colleges throughout the nation had such courses, and Directors of Orientation began to emerge on various campuses” (NODA, History, 2023, para. 1).

Fast forward to “Today’s orientation programs have evolved from merely providing individualized faculty attention to focusing on myriad issues while responding to the needs of an increasingly diverse student and family population” (Craven, 2015, para. 4). Thus, first-year orientation courses have become one of the primary ways of responding to the needs of today’s newly entering college students. Examining how engaged first-year students are in such a course has become one of the topics of research in this area. One of these topics, given the many methods of digital communication available to students in these courses, and the focus of this research, was to examine whether or not receiving immediate notifications via email on the students’ mobile devices is of value i.e., might increase student engagement in their coursework.

#### *EMAIL USAGE AMONG COLLEGE STUDENTS*

A number of studies have indicated that college students prefer instant messaging platforms such as Remind to using email for communication (see e.g., Chang & Pearman, 2018). Junco and Cotton (2011) cited studies that found between 59% and 75% of college students use instant messaging and first-year college students spend an average of 16.3 hours per week instant messaging versus only spending 3.9 hours using email.

Nevertheless, the use of email among college students is still very prevalent. Morreale, et al., (2014) found that “Email appears to be the student–teacher “language” of choice at many, if not most, colleges and universities” (p. 21). In the Chang & Pearman (2018) study for example, several participants stated that they check their email regardless, since many of their professors do not use instant messaging. Additionally, many schools both K-12 and Higher Ed, have implemented emergency notification platforms that will provide immediate notification in the event of a campus emergency, and email is one of the channels for receiving emergency messages.

Additionally, at the site of this study, official communications to students e.g., financial aid information, information from the health center, etc., are always transmitted via email. Also at the site of this study, faculty are required to only communicate with online students via the official university email. Thus, there are many reasons for the continued use of email by not only first-year students but by all university students.

#### *EMAIL USAGE AMONG FIRST-YEAR COLLEGE STUDENTS*

This faculty researcher found a sizable number of studies concerning the use of email by college students, their faculty, and the implications of email use. For example, Heim (2022) examined how college instructors’ email communication impacted professor-student rapport, student academic self-efficacy, resilience, academic success, and motivation. Weiss and Hanson-Baldauf (2008) examined the use of email between faculty and undergraduate students, the expectations, and the perceived impact on instructional outcomes and student success.

An article by Nelson (2023) was parent-focused, suggesting that parents need to encourage their college-aged student to utilize the university email system since schools use it to transmit important information; students are held responsible for information sent by the institutional email system; and college offices and faculty recognize college email as legitimate, among other reasons. As far back as the end of the 20th century, Elasmr and Carter, (1998) discussed the implementation and potential uses of a college-wide email system at a Northeastern university, how it would be used by their students, and how its use might impact curriculum.

However, research studies specifically on the topic of email usage by first-year college students were not found. Marquette University (2023) has a webpage concerning email etiquette for first-generation college students, including tips for using their Marquette email

address; but again, little or no information has been discovered by this faculty researcher specifically on the use of email among first-year college students – the focus of this study.

### *SUMMARY*

For decades colleges and universities have recognized the necessity of offering or requiring a college orientation course for first-year students, given the potential stumbling blocks associated with the transition to college life for new, incoming students, and the potential impact this transition has on retention.

The site of this study has such a course which is required in the first semester for all degree-seeking first-year students. The impetus of this study came as a result of this faculty researcher's experience teaching this course for a number of years and noticing that often there are students who were not as engaged in the course and that those students typically did not do as well academically or adjusting to college life. Thus, this study examined one potential way to mitigate this problem – having the students install the university email system on their mobile devices, whereby they would receive immediate course-related notifications, and possibly improve student engagement in the course activities and assignments.

The current body of literature contains many studies on the use of email by college students; its impact on their interactions with their professors; its effect on curriculum; its potential impact on academic success, and motivation, among others. However, there were no existing studies found concerning the specific focus of this study, i.e., whether or not immediate notification facilitated by having the university email on first-year students' mobile devices impacts student engagement in their coursework. This faculty researcher believes this gap t hopefully will make the findings of the current study even more valuable to those teaching first-year orientation courses, the curriculum developers, administrators involved with student retention, and other stakeholders.

### **METHODOLOGY**

The goal of this study was to determine the value, if any, of having first-year students at a Midwest university set up the university's email system on their mobile devices, and whether or not doing so had an effect on this population's engagement in the course activities and assignments.

### *RESEARCH QUESTION*

Does immediate notification through university email on first-year students' mobile devices effect student academic engagement in their coursework?

### *RESEARCH DESIGN*

This research used the quantitative Cross-sectional Survey research design. According to Mills & Gay (2019), characteristics of survey research include sampling from a population, collecting data through a questionnaire, the construction of a survey instrument for data collection, and a high response rate. Cross-sectional surveys are surveys in which “data are collected from selected individuals at a single point in time. It is a single, stand-alone study” (Mills & Gay, 2019, p. 202). This study meets these criteria.

### *PARTICIPANTS*

Participants were recruited using convenience sampling from four GEP 101, First-Year Foundations courses during the fall 2022 and fall 2023 semesters. The 89 participants in this study were all first-year undergraduate students. In order to qualify as a participant, all of the students were, at the time of data collection, currently enrolled in this college orientation course.

### *SETTING*

This research study took place at a four-year public university in the Midwest, located in an urban area with a population of slightly over 170,000 residents. The Fall 2022 First-Time undergraduate student population at the site of this study was 9,718 students. The Fall 2023 First-Time undergraduate student population at the site of this study was 8,643 students. (Source: Headcount and Credit Hour Enrollment Summary by Student Classification for Fall 2023 & Fall 2022 Census).

### *INSTRUMENTATION AND DATA COLLECTION*

Data collection for the study was facilitated by a researcher-created paper-and-pencil survey instrument titled “Email on the Go – The Impact of Setting Up the University Email on the Mobile Devices of First-Year College Students” (see Appendix A). This 13-question survey consisted of seven demographic questions; five questions on a 5-point Likert scale specifically concerning students’ perspectives on having the university email on their mobile devices; and one optional, open-ended question.

For those who chose to participate, the instructor explained the process then left the room. During class time, the paper-and-pencil voluntary informed consent forms were distributed to and collected from the participants by the Peer Leader assigned to this class. Consenting participants were required to sign the form indicating their voluntary consent to participate in the survey. Once the signed consent forms were collected, the paper-and-pencil survey was distributed to the participants. The survey took approximately 15-20 minutes to complete and collect.

In order to maintain anonymity and privacy, the surveys also were distributed to and collected from the participants by the Peer Leader and placed in an envelope while the researcher was out of the classroom. At no point in this study could individual participants be identifiable; no names or any other identifying information was requested on the survey. Any data displayed or published will be in aggregate so that no individual participant could be identified.

Participants were given in-class time to complete and return the survey. There were no incentives offered for participating. Of the 106 surveys distributed, there were 89 submissions with valid responses, which were manually entered into Qualtrics for statistical analysis by an experienced Graduate Assistant who was not associated with the student-participants.

## **DATA ANALYSIS AND RESULTS**

The participants in this study, first-year students at a Midwest university, were asked, via paper-and-pencil survey, questions concerning the effect of having the university’s email system installed on their mobile devices. This faculty researcher was interested in determining whether or not this affected student engagement, particularly for those students who were not as engaged in the course, and who typically did not do as well academically, or adjusting to college life.

### *DEMOGRAPHIC DATA*

The data collected from the eighty-nine valid responses to the survey were analyzed using descriptive statistics. The demographic data provided by the participants is presented below.

*Table 1.* First Generation College Student

<b>First Generation</b>	<b>N</b>	<b>Percentage</b>
Yes	21	23.60%
No	68	76.40%
Sum	89	100.00%

Table 2. Age of Participants

<b>Age Range</b>	<b>N</b>	<b>Percentage</b>
16-17	1	1.12%
18-19	84	94.38%
20-21	2	2.25%
22-23	1	1.12%
24-25	0	0.00%
26 or older	1	1.12%
Sum	89	100.00%

Table 3. Gender of Participants

<b>Gender</b>	<b>N</b>	<b>Percentage</b>
Male	25	28.09%
Female	61	68.54%
Non-binary/third gender	3	3.37%
Other	0	0.00%
Prefer not to answer	0	0.00%
Sum	89	100.00%

Table 4. Ethnicity of Participants

<b>Ethnicity</b>	<b>N</b>	<b>Percentage</b>
American Indian or Alaska Native	2	2.15%
Asian	3	3.23%
Black	3	3.23%
Hispanic or Latino	5	5.38%
Native Hawaiian or other Pacific Islander	0	0.00%
White	76	86.01%
Prefer not to answer	0	0.00%
Sum	89	100%

Table 5. Major Declared by Participants

<b>Declared Major</b>	<b>N</b>	<b>Percentage</b>
Yes	75	84.27%
No	14	15.73%
Sum	89	100.00%

### *SURVEY DATA*

As noted, the research question investigates whether enabling immediate notifications by installing the university email on first-year students' mobile devices affected their academic engagement. Questions 8-12 of the survey, which were in the Likert-scale format, directly addressed this question. The findings are as follows below.

Table 6. The Immediate Notification Facilitated by Installing the University Email on First-Year Students' Mobile Devices Affects Student Engagement in Their Coursework

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Agree Nor Disagree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
8. I believe receiving university emails on my phone helps me stay more informed and in touch with my instructors.	65 (72.22%)	22 (24.44%)	3 (3.33%)	0 (0.00%)	0 (0.00%)
9. I believe receiving university emails on my phone helps me stay more informed and in touch with my classmates.	35 (38.89%)	31 (34.44%)	18 (20.00%)	6 (6.67%)	0 (0.00%)
10. I believe receiving university emails on my phone helps me stay more on track with my coursework.	65 (72.22%)	20 (22.22%)	5 (5.56%)	0 (0.00%)	0 (0.00%)
11. I believe using the email calendar feature on my phone helps keep me on schedule with my class and meeting times.	34 (37.78%)	26 (28.89%)	26 (28.89%)	3 (3.33%)	1 (1.11%)
12. I believe using the email calendar feature on my phone helps keep me on track with my assignment due dates.	38 (42.22%)	25 (27.78%)	22 (24.44%)	4 (4.44%)	1 (1.11%)

In order to clarify what high and low levels of agreement indicate about students' perceptions of engagement, the following interpretation is provided.

Very high agreement (e.g., ~70%+ strongly agree)

- Strong evidence students perceive a clear benefit

High combined agreement (agree + strongly agree above ~70–80%)

- General consensus, even if intensity varies

Moderate or split responses (30–50% strongly agree, sizable neutral group)

- Mixed perceptions or weaker effect

High neutral percentages (~20–30%)

- Uncertainty, inconsistency in experience, or limited use of that feature

Very low disagreement (~0–5%)

- Little to no resistance to the idea

*Open-ended Question.* There was also one open-ended question which asked, “If you have other thoughts or experiences that resulted from installing University email on your mobile

device that were not mentioned above, please share them here.” Some of the written comments that were received have been sorted into categories and appear below.

#### Positive responses

- Having my MSU email on my phone makes me actually check my email, where I never used to check it on my computer
- The email feature is a lifesaver!
- helpful to have all assignments on one page rather than in each course's tab on Blackboard

#### Neutral responses

- One student entered: N/A
- None that I can think of

#### Negative responses

I don't like the amount of unnecessary email

#### *SUMMARY OF THE RESULTS*

The findings corroborate the research question suggesting that immediate university email notifications on mobile devices support this population of first-year students' academic engagement by improving communication and organization related to coursework. Most participants agreed that notifications helped them stay informed and connected with instructors and remain on track with coursework. A somewhat smaller majority reported improved connection with classmates, which may reflect a preference among this age group for communicating through text or social media rather than email (Straumsheim, 2016). Participants also indicated that calendar features helped them manage schedules, including class meetings and assignment due dates. Open-ended responses further suggested that notifications served as reminders for time-sensitive academic tasks. The overall results indicate improved student engagement i.e., students generally perceived immediate notifications as helpful for staying aware of academic responsibilities and course-related communication.

### **DISCUSSION, FUTURE RESEARCH AND CONCLUSION**

#### *DISCUSSION*

As indicated in the previous section, the first-year college student-participants in this study found that receiving immediate notifications on their mobile devices via university email was beneficial.

Almost all of the participants (96.66%) strongly agreed or agreed that receiving immediate notifications on their phone via the university email helped them stay more informed and in touch with their instructors. Almost three-quarters (73.33%) of the participants strongly agreed or agreed that receiving immediate notification emails on their phone helped them stay more informed and in touch with their classmates. This somewhat lower percentage may be due to the fact that the age of this study population (94% of whom were 18-19) is more likely to *communicate with classmates* by social media or text than by email (Straumsheim, 2016).

The vast majority of the participants (94.44%) strongly agreed or agreed that receiving the immediate email notifications on their phone helps them stay more on track with their coursework. This was corroborated by some of the open-ended comments received. It is possible that the immediate notifications signal the students about assignments, as a reminder; thus helping them stay on track.

Two-thirds (66.67%) strongly agreed or agreed they believe that using the email calendar feature on their phone helps keep them on schedule with *class and meeting times*. Additionally, 70.0% strongly agreed or agreed that using the email calendar feature on their phone helps keep them stay on track with their *assignment due dates*. These percentages, and at least one of the open-ended comments, leads this faculty-researcher to believe it is possible that the immediate notifications act as a prompt or ‘heads-up’ to check their email calendar, where all the assignments are listed by date in one place.

While one written response to the open-ended question stated that the immediate email notifications were “unnecessary email”, the findings of this study and others strongly indicated that receiving immediate email notifications is, in fact, of value to this population of first-year students and improved student engagement. Again, this faculty-researcher believes it is likely that automatically receiving notifications about assignments, due dates, and other time-sensitive information acts as a type of prompt or signal to the students; rather than them having to remember to manually check for this important information, which in turn would facilitate more engagement in the course.

### LIMITATIONS

As with any study utilizing a survey research design, the possibility always exists that some responses may be subject to *response bias* (also referred to as social desirability bias) where a participant responds with what they believe the researchers want to hear, rather than answering (Nikolopoulou, 2023). This faculty-researcher was never present in the classroom when the informed consent forms and surveys were distributed, completed, and returned, which should mitigate this type of bias.

### FUTURE RESEARCH

This study focused on first-year college students, 94% of whom were Generation Z, in a required college orientation course and the impact of immediate email notifications on student engagement. A follow-up study could focus on other age groups to determine if more mature undergraduate students, or possibly even graduate students, would also find immediate email notifications useful.

It would also be interesting to repeat this study to determine if immediate email notifications by phone with different disciplines impacted student engagement. For example, would a Communications major be more amenable to immediate notifications than a Math, Philosophy, or other major?

And finally, it could be especially useful to determine if immediate notifications via alternative methods of communication, such as text, instant reminder apps, or social media (see e.g., Chang and Pearman, 2018; Eriksen, 2020) impact students' engagement with their coursework.

### CONCLUSION

Colleges and universities have recognized that the transition to college life for new, incoming students can be challenging. This has resulted in the development of a college orientation course for first-year students at these institutions. Offering or requiring such a course can mitigate some of these challenges and potentially affect retention.

The site of this study has such a course which is required in the first semester for all degree-seeking first-year students. This faculty researcher who teaches the course found, over the years, that often there are students who were not as engaged in the course, and that those students typically did not do as well academically or adjusting to college life. That was the impetus for this study i.e., to determine if this issue could be mitigated by providing

this population with immediate email notifications about assignments and other time-sensitive, course-related information.

The findings of this study overwhelming indicate that receiving immediate email notifications is of value to these first-year, mostly Gen Z students, and did improve student engagement. Thus, this researcher believes that the findings of the current study are important and beneficial for facilitating greater student engagement possibly including reading compliance, as well as potentially creating a positive habit in new students to make use of this technology-based learning strategy throughout their college careers. Future research would be useful to corroborate and/or augment these findings.

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