

Abstract Title Page

Title: Freshman Year Financial Aid Nudges: An Experiment to Increase Financial Aid Renewal and Sophomore Year Persistence

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Background/Context:

Concerns about the low visibility and complexity of the federal financial aid system have prompted concerted policy efforts to both simplify the aid application process and to support students and families to complete the Free Application for Federal Student Aid (FAFSA). Several of these interventions have led to substantial improvements in the rate of FAFSA completion and college attendance. For instance, low-income families with college-age dependents who received FAFSA completion assistance as part of their income tax preparation were substantially more likely to submit a FAFSA and were eight percentage points more likely to enroll for at least two years in college than students whose families did not receive assistance (Bettinger et al, 2012). In another study, students who received school-based support to file the FAFSA as part of a federal FAFSA Completion pilot initiative were nearly 12 percentage points more likely to enroll in college than students who were not offered school-based support with the FAFSA (Owen, 2012). At a national level the United States Department of Education has created tools like the FAFSA 4Caster, which enables students and families to obtain a personalized estimate of how much aid they would qualify for, and has worked with the Internal Revenue Service to pre-populate the FAFSA with information that families provide on their tax returns.

While there have been substantial investments to support students with their initial FAFSA completion, considerably less attention has been devoted to whether these students re-apply for financial aid once they are in college. Yet as many as 30 percent of college freshmen who completed the FAFSA prior to enrollment do not re-apply for aid at the end of their first year.* The loss of financial aid for sophomore year may be a substantial contributing factor to low national rates of freshman to sophomore year persistence.

One explanation for why students do not renew their FAFSA application at the end of freshman year is that they decide that the costs of college—even net of expected financial aid—exceed the benefits, and they do not plan to continue in sophomore year. Even among initially aid-eligible students who were enrolled for both freshman and sophomore years, however, 25 percent do not re-apply for aid for their second year. There are several alternative explanations for why aid-eligible college freshmen might not re-apply for aid even if they plan to persist in college. First, faced with complex tasks such as renewing the FAFSA, individuals often procrastinate or put off the task entirely in favor of more pressing or enjoyable pursuits (Bettinger et al., 2012; Madrian & Shea, 2001; Ross et al., 2013). Second, students may want to complete the FAFSA but be unaware of support resources on campus that they can access for guidance on how to re-apply for financial aid. A related point is that students may be intimidated about reaching out for help and discussing sensitive financial issues if they lack a relationship with or trust in available support resources. Finally, students may feel stigmatized about having to ask for help with financial aid; uncertainty about how to re-apply for aid may exacerbate existing doubt the student has about whether they really belong in college (Walton & Cohen, 2011).

Policy makers and researchers increasingly focus on how similar behavioral responses may impede individuals from achieving a wide range of socially-desirable outcomes. Encouragingly, interventions that proactively address behavioral obstacles have positively influenced decision-making in variety of areas, from whether individuals contribute to financial savings accounts and get flu vaccinations to the amount of residential energy people use (Alcott,

* Authors' calculations based on student-level financial aid application data from the Florida K-20 Data Warehouse.

2011; Karlan et al., 2010; Stockwell et al., 2012). Only recently, however, have behavioral insights been investigated as strategies for improving student and family decision-making in education.

Purpose/Objective/Research Question/Focus of Study:

In Summer 2012, we extended this nascent literature with a randomized trial designed to investigate the efficacy of text messaging prompts as a strategy to increase college enrollment among low-income high school graduates (Authors, 2013). In collaboration with four urban school districts, we sent college-intending high school graduates a series of 8-10 text message reminders of key tasks to complete over the summer. The messages ranged from reminding students about discrete tasks, such as registering for freshman year orientation and completing academic placement tests, to offering students guidance on more complex activities, like interpreting and acting on financial aid award letters. The messages were customized to the institutions at which students intended to enroll and provided recipients with the option of requesting help from a counselor. The intervention cost approximately \$7 per student, yet led to substantial increases in college enrollment among students who had little access to college counseling. Impacts were particularly pronounced among students who were not as far along in their college planning, and who therefore may have benefited from the additional prompts and information contained in the text messages.

Our current paper builds on this experiment and investigates the impact of financial aid-related prompts on whether college freshman re-apply for aid and persist into sophomore year. The paper is organized around the following core research question: Does a text messaging campaign that informs students of key stages in the financial aid renewal process and that offers to connect them to professional assistance if they need help increase the probability that students will re-apply for aid and persist into sophomore year of college? We identify several mechanisms by which text messaging-based financial aid prompts could positively influence whether students successfully re-apply for aid and persist into sophomore year. First, the messages may inform students about important tasks or deadlines in the aid renewal process about which they were unaware. Second, even if students are aware of these tasks and deadlines, the messages may prompt students to complete the tasks rather than put them off until a later date. Finally, the messages may minimize barriers to students seeking help with aid renewal, since all students need to do is reply to the message to get assistance.

Setting:

We partnered with uAspire, a Boston-based college access organization, to implement the freshman year financial aid nudge campaign. uAspire provides financial aid advising to high school students in three Massachusetts urban districts: Boston, Lawrence, and Springfield. All three districts primarily serve low-income students of color. uAspire's high school financial aid advising is quite robust: each public high school in the participating districts is staffed by a uAspire financial aid advisor. Throughout senior year the financial aid advisors lead group workshops and meet individually with students to provide personalized assistance with the FAFSA and other aspects of the financial aid application process. The uAspire sites also comprised three of the four districts in the summer 2012 text messaging experiment described above.

While the financial aid planning support that uAspire provides to students during senior year and the summer after high school is quite comprehensive, the organization has limited capacity to support students once they are in college. The text messaging campaign therefore provided uAspire and our research team with an opportunity to evaluate a low-cost, easily-scalable strategy to provide students with important information about the financial aid renewal process after they had successfully transitioned to college

Population / Participants / Subjects:

The experimental sample includes students who were assigned to the summer 2012 text messaging treatment group and who were enrolled in college in Fall 2012. 774 students met these conditions. We randomly assigned 387 students to receive the freshman year financial aid text messaging intervention and 384 students to the control group. Mirroring the overall population served by uAspire, our experimental sample is majority female (60 percent), majority students of color (92 percent), and majority qualifying for free- or reduced-price lunch (67 percent). Approximately two-thirds of the sample was enrolled at a four-year college or university in the fall semester, with the balance enrolled at community colleges.

Intervention/ Program / Practice:

The core of the freshman year financial aid nudge campaign was a series of text messages that reminded students about important tasks and deadlines related to financial aid re-application. We began delivering messages in mid-winter, when students could first renew their FAFSA application, and continued sending messages through the summer after freshman year, during which time students had to review and make decisions based on financial aid award letters and pay their sophomore year tuition bills. The messages provided students with institution-specific information (e.g. the phone number for the financial aid office at their college) and also offered students the opportunity to ask questions of or request help directly from uAspire financial aid advisors.

Broadly speaking, the messages prompted students to complete key tasks in the financial aid renewal process (such as the FAFSA) ahead of important deadlines; reduced barriers to students getting help with financial aid by providing them with contact information for resources at their college and the ability to connect via text with uAspire financial aid advisors; and combined financial aid renewal with a chance to connect with friends by hosting FAFSA completion parties throughout the spring. In Appendix Figure 1, we provide the specific message content that we delivered during the campaign.

A key feature of the text intervention was the web-based portal that our text messaging provider, Reify Health, created to facilitate communication between students and financial aid advisors. While students sent and received messages from their phones, the advisors were able to read and respond to messages through an email-like client. This system allowed advisors to better organize their communication with students and allowed for much faster responses since the intervention did not require advisors to send text messages from their phones. In Appendix Figure 2 we provide screen shots of this web portal to illustrate its capacity and value to the intervention.

Research Design:

We will evaluate the impact of the freshman year financial aid text campaign on whether students persist in college, whether and where they transfer after their freshman year, and the extent to which they maintain communication with uAspire during sophomore year, after the messaging campaign ends. By virtue of using a randomized control trial design to select which students would receive the financial aid texts, we are able to employ straightforward regression analyses to isolate the causal effect of the messaging campaign on students' college attainment.

Data Collection and Analysis:

We will capitalize on data from several sources. First, uAspire has already provided student-level demographic and prior academic achievement information from their senior year administrative records. This data will include students' gender, race/ethnicity, free/reduced price lunch status, FAFSA completion status as of the end of high school, and high school GPA. uAspire will also obtain student-level college enrollment records from the National Student Clearinghouse (NSC). Finally, Reify Health will provide recipient-level data on message response. The primary explanatory variables in our analyses will be whether the student was randomly assigned to the financial aid text treatment group. To increase the precision of our analyses, we will include the academic and demographic covariates referenced above. We will also include fixed effects for each uAspire site, since we conducted randomization at the student-level within each uAspire site. Finally, we will include site-by-treatment fixed effects to allow for site-specific variation in intervention impact across sites.

Findings / Results:

Preliminary data indicates a substantial response from students to the financial aid nudges. Roughly 35 percent of students assigned to receive the messages responded at least once over the course of the semester. Approximately 20 percent received in-depth support from a uAspire financial aid advisor. These response rates are similar to what we observed in the summer 2012 experiment. We will obtain the NSC outcome data by November 2013 in order to evaluate the impact of the intervention on initial college enrollment. Based on informal discussions with uAspire at the end of the project, advisors were quite positive about their ability to interact efficiently and promptly with students via text about financial aid issues that had arisen.

Conclusions:

While considerable effort has been invested to increase FAFSA completion among high school seniors, there has been much less investment to ensure that college freshmen re-apply for financial aid. Text messaging is a promising approach to inform students of important stages in the financial aid re-application process and to connect them to professional assistance when they need help. Our paper will provide rigorous, experimental evidence on the impact of freshman-year financial aid text reminders on students' college persistence. These findings are relevant both to ongoing policy efforts to increase college success and completion among low-income students and, more generally, to efforts to harness technology to improve students' educational outcomes.

Appendices

Not included in page count.

Appendix A. References

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- Bettinger, E., Long, B.T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *Quarterly Journal of Economics*, 127(3): 1205-1242.
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- Owen, L. (2012). Narrowing the college opportunity gap: Helping students and families navigate the financial aid process. Unpublished doctoral dissertation, Oregon State University.
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- Walton, G.M., & Cohen, G.L. (2011). A brief-social belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023): 1447-1451.

Figure 1: Text message content

MESSAGE PURPOSE: Persist_2 Introductory Message

DELIVERY DATE: Monday, 2/18/13

MESSAGE TO STUDENT: Hi [\[STUDENT NAME\]](#) it's ACCESS, now known as uAspire! We'll send u texts w/info about fin aid for next yr. Save the # so u know it's us. Call [\[UASPIRE_SITE_PHONE\]](#).

EXAMPLE MESSAGE TO STUDENT: Hi [\[STUDENT NAME\]](#) it's ACCESS, now known as uAspire! We'll send u texts w/info about fin aid for next yr. Save the # so u know it's us. Call [XXX-XXX-XXXX xXXX](#)

MESSAGE PURPOSE: FAFSA Renewal Event #1 at uAspire

DELIVERY DATE: 2/19/13

MESSAGE TO STUDENT: Want free FAFSA help? Come to uAspire FAFSA party [\[FAFSA_Renewal_Date_Time\]](#) at [\[FAFSA_Renewal_Location\]](#)! Sign up here [\[FAFSA_Renewal_RSVP_URL\]](#)

EXAMPLE MESSAGE TO BOSTON STUDENT: Want free FAFSA help? Come to uAspire FAFSA party [\[2/22 from 10-3\]](#) at [\[31 St James Ave, #520, Boston\]](#)! Sign up here [\[http://www.uaspire.org/boston/students/succeed\]](#)

MESSAGE PURPOSE: SAP Intro

DELIVERY DATE: 2/25/13

MESSAGE TO STUDENT: Hi [\[STUDENT NAME\]](#)! Did u get aid this year? U must have Satisfactory Academic Progress (SAP), a minimum GPA, to keep aid. Info: [\[SAP_POLICY_URL\]](#)

EXAMPLE MESSAGE TO STUDENT: Hi [\[STUDENT NAME\]](#)! Did u get aid this year? U must have Satisfactory Academic Progress (SAP), a minimum GPA, to keep aid. Info: [\[insert inst. SAP Policy TINY URL\]](#)

GENERIC MESSAGE TO STUDENT: Hi [\[STUDENT NAME\]](#)! Did u get aid this year? U must have Satisfactory Academic Progress (SAP), a minimum GPA, to keep aid. Info: [\[http://studentaid.ed.gov/eligibility/staying-eligible\]](#)

MESSAGE PURPOSE: FAFSA Reminder #1

DELIVERY DATE: 3/5/13

MESSAGE TO STUDENT: Remember to do ur FAFSA at [fafsa.gov](#) ASAP! Call us at [\[UASPIRE_SITE_PHONE\]](#) or ur aid office [\[FIN_AID_OFFICE_PHONE\]](#). File taxes for free @ [\[SITE_EITC_URL\]](#)

EXAMPLE MESSAGE TO STUDENT: Remember to do ur FAFSA at [fafsa.gov](#) ASAP! Call us at [\[XXX-XXX-XXXX xXXX\]](#) or ur aid office [\[XXX-XXX-XXXX\]](#). File taxes for free @ [\[EITC Website\]](#)

GENERIC MESSAGE TO STUDENT: Remember to do ur FAFSA at [fafsa.gov](#) ASAP! Call us at [\[XXX-XXX-XXXX xXXX\]](#) or ur aid office [\[blank\]](#). File taxes for free @ [\[EITC Website\]](#)

MESSAGE PURPOSE: FAFSA Renewal Event #2 at uAspire

DELIVERY DATE: 3/14/13

MESSAGE TO STUDENT: Want free FAFSA help? Come to uAspire FAFSA party [FAFSA_Renewal_Date_Time] at [FAFSA_Renewal_Location]! Sign up here [FAFSA_Renewal_RSVP_URL]

EXAMPLE MESSAGE TO BOSTON STUDENT: Want free FAFSA help? Come to uAspire FAFSA party [3/19 from 12-6] at [31 St James Ave, #520, Boston]! Sign up here [http://www.uaspire.org/boston/students/succeed]

MESSAGE PURPOSE: SAP Academic Resources

DELIVERY DATE: 3/21/13

MESSAGE TO STUDENT: Hi, its uAspire! Students can lose fin aid if GPA is not high enough. Want to bring up GPA? Use support on campus: [ACADEMIC_SUPPORT_URL].

EXAMPLE MESSAGE TO STUDENT: Hi, its uAspire! Students can lose fin aid if GPA is not high enough. Want to bring up GPA? Use support on campus: [insert academic resource URL].

GENERIC MESSAGE TO STUDENT: Hi, its uAspire! Students can lose fin aid if GPA is not high enough. Want to bring up GPA? Use support on campus: [like tutoring services or writing center].

MESSAGE PURPOSE: FAFSA Reminder #2

DELIVERY DATE: 4/1/13

MESSAGE TO STUDENT: Last reminder to fill out FAFSA! Once you/your parents file 2012 taxes, use IRS Data Retrieval Tool to fill in FAFSA at fafsa.gov. For help, call 800-433-3243

MESSAGE PURPOSE: Award Letter

DELIVERY DATE: 4/17/13

MESSAGE TO STUDENT: Hi [STUDENT NAME] it's Award Letter time! Make sure u get urs from ur fin aid office & ask them for help if u have questions. Or call us at [UASPIRE_SITE_PHONE].

EXAMPLE MESSAGE TO STUDENT: Hi [STUDENT NAME] it's Award Letter time! Make sure u get urs from ur fin aid office & ask them for help if u have questions. Or call us at [XXX-XXX-XXXX XXXX].

MESSAGE PURPOSE: SAP/Academic Supports Reminder

DELIVERY DATE: 4/29/13

MESSAGE TO STUDENT: Almost time for finals! Want help bringing up ur GPA or studying for finals? Use these free academic supports: [ACADEMIC_SUPPORT_URL].

EXAMPLE MESSAGE TO STUDENT: Almost time for finals! Want help bringing up ur GPA or studying for finals? Use free academic supports: [*insert academic resource URL*].

GENERIC MESSAGE TO STUDENT: Almost time for finals! Want help bringing up ur GPA or studying for finals? Use free academic supports: [*like tutoring services or writing center*].

MESSAGE PURPOSE: Summer Jobs

DELIVERY DATE: 5/6/13

MESSAGE TO STUDENT: Summer jobs are taking apps & they fill up fast! Apply now so u can make money for summer & college. Visit [*STUDENT_EMPLOYMENT_URL*] for help.

EXAMPLE MESSAGE TO STUDENT: Summer jobs are taking apps & they fill up fast! Apply now so u can make money for summer & college. Visit [*student employment URL*] for help.

GENERIC MESSAGE TO STUDENT: Summer jobs are taking apps & they fill up fast! Apply now so u can make money for summer & college. Visit [*student employment websites*] for help.

MESSAGE PURPOSE: Summer Support

DELIVERY DATE: 5/29/13

MESSAGE TO STUDENT: Hi again [*STUDENT NAME*]! Congrats on finals! If u have financial aid questions for fall, call uAspire at [*UASPIRE_SITE_PHONE*] for help or to set up a meeting.

EXAMPLE MESSAGE TO STUDENT: Hi again [*STUDENT NAME*]! Congrats on finals! If u have financial aid questions for fall, call uAspire at [*XXX-XXX-XXXX xXXX*] for help or to set up a meeting.

FIGURE 2: Screen shots of text message counselor interface

Inbox where counselors view messages they have received from students

Project: Reify Demo

Home

PARTICIPANTS

- Inbox
- List
- Add
- Import

PROJECT

- Messaging
- Variables
- Configuration
- Twilio

Participant: Inbox Privacy Off

Unread		
Name	Last Message	Direction
Michael #####5822	Thank you!	4:58pm, 5/23 inbound
Respond Ignore		
Read		
Aditya R**** #####6907	Hello World!	11:57am, 5/17 outbound
Respond		
Henry L**** #####9294	I'm just recording a demonstration for all the folks! :) Thanks, #firstname	11:56am, 5/17 outbound
Respond		
Chanakya #####5557		7:00pm, 12/31 inbound
Respond		
Xenophon #####5556		7:00pm, 12/31 inbound
Respond		
Aristotle #####5555		7:00pm, 12/31 inbound
Respond		
Mahavira #####5568		7:00pm, 12/31 inbound
Respond		

Export all logs
Export all data

Message center allowing counselors to view all messages to/from a student

Message Center
Test Center
Subscriptions
Data Log

Message Center Export logs

Content	Direction	Date
<i>Hello, Michael. Welcome to the Education Support texting program!</i>	outbound	4:58pm 5/23/2013
	<i>Thank you!</i>	inbound 4:58pm 5/23/2013
<div style="border: 1px solid #ccc; height: 20px; width: 100%;"></div> <div style="float: right; background-color: #007bff; color: white; padding: 5px 10px; border-radius: 3px;">Send message</div>		
Hi Michael, it's your College Advisor! We'll send u texts w/ info about fin aid for next yr. Save the # so u know it's us. Call 909-123-3948.	outbound	11:00am 3/1/2014
Hi Michael. Need financial aid help as you return to College this semester? Call ur fin aid office for support 909-123-3948.	outbound	12:00pm 3/9/2014
Want free FAFSA help? Come to our FAFSA party at the community center on June 20! Sign up here http://goo.gl/FAFSAmtg	outbound	12:00pm 3/12/2014
Hi Michael! Did u get aid this year? U must have Satisfactory Academic Progress (SAP), a minimum GPA, to keep aid. Info: http://goo.gl/SAPinfo	outbound	12:00pm 3/15/2014
Last reminder to fill out FAFSA! Once you/your parents file 2012 taxes, use IRS Data Retrieval Tool to fill in FAFSA at fafsa.gov . For help, call 800-433-3243	outbound	12:00pm 3/20/2014