ideas42

Student Success Toolkit

Leveraging Behavioral Design Insights from ideas42 and The City University of New York

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About ideas42

We're a non-profit looking for deep insights into human behavior—into why people do what they do—and using that knowledge in ways that help improve lives, build better systems, and drive social change. Working globally, we reinvent the practices of institutions, and create better products and policies that can be scaled for maximum impact. We also teach others, ultimately striving to generate lasting social impact and create a future where the universal application of behavioral science powers a world with optimal health, equitable wealth, and environments and systems that are sustainable and just for all.

For more than a decade, we've been at the forefront of applying behavioral science in the real world. And as we've developed our expertise, we've helped to define an entire field. Our efforts have so far extended to 40 countries as we've partnered with governments, foundations, NGOs, private enterprises, and a wide array of public institutions—in short, anyone who wants to make a positive difference in people's lives.

ideas42's post-secondary education team uses insights from behavioral science to help more people—particularly those from historically under-represented groups—efficiently complete college degrees that improve their economic well-being. Since 2013, ideas42 has run more than three dozen behavioral interventions that promote college access, retention, and graduation.

Visit ideas42.org and follow @ideas42 on Twitter to learn more about our work.
Contact us at info@ideas42.org

About the Student Persistence Initiative (SPI)

The Student Persistence Initiative (SPI) is a collaboration between ideas42, The City University of New York (CUNY), and the New York City Mayor's Office for Economic Opportunity (NYC Opportunity).

SPI aims to implement interventions that use behavioral insights to increase student persistence and completion at CUNY community colleges. Since 2015, we have run 13 randomized controlled trials to determine which behavioral interventions are most impactful in the CUNY community college context. Our messaging campaigns have reached over 90,000 students across six CUNY campuses: Borough of Manhattan Community College (BMCC), Bronx Community College (BCC), Hostos Community College (Hostos), Kingsborough Community College (KBCC), LaGuardia Community College (LAGCC), and Queensborough Community College (QCC).

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What is Behavioral Science?

Behavioral science is the study of how people make decisions and act within a complex world where details and context matter. It draws from decades of research in the social sciences to create a more realistic framework for understanding the way people form intentions and take actions. The standard approach to predicting human behavior assumes that we consider all available information, accurately weigh the pros and cons of each decision, make a logical decision about what we should do, and then act on it. The behavioral approach recognizes that we make decisions with incomplete information and do not always make choices that are best for us, often due to the seemingly small and inconsequential details in our environment that undermine our intentions. Behavioral science has been used across a variety of fields to realign policies, programs, and products with how we really behave, improving outcomes for millions of people worldwide.

How Can Behavioral Science Help College Students Succeed?

Researchers and policy makers alike have recognized the completion crisis in American higher education: far too many students who enroll in college to improve their economic futures never complete the degrees that they are seeking. Indeed, only 27% of students who enroll in public, two-year community college programs in the U.S. graduate within three years.[1] Addressing such a complex challenge requires understanding the individual behaviors and the student contexts that lead to noncompletion, and designing interventions that support students with following through on their intentions to graduate.

Through applying the lens of behavioral science in our work with over a dozen state universities and community colleges, we know that a student's path through college to graduation is scattered with subtle barriers that can hinder progress over time and cause some students to drop out entirely. Our work with CUNY builds on successful behavioral interventions in higher education at ideas42 and beyond. Researchers and practitioners from across the country have used behavioral design to make encouraging impact in areas such as FAFSA financial aid completion and renewal, transitioning from high school to college ("summer melt"), and student savings accounts.[2,3,4] ideas42's behavioral interventions at Arizona State University and San Francisco State University have boosted FAFSA filing rates, increased scholarship and grant attainment, and improved retention among students most likely to drop out.[5] Drawing upon these insights for the Student Persistence Initiative, ideas42 has designed a suite of interventions to help students navigate those obstacles and persist to graduation.

Introduction

Between 2015 and 2020, the Student Persistence Initiative ran 13 randomized controlled trials (RCTs) across six CUNY community colleges. Each RCT tested a behaviorally-informed intervention aimed at helping students overcome challenges and persist to graduation.

Ultimately, our goal is to scale successful interventions to reach as many students as possible. Rigorous testing is important because it gives us insight into what we should scale, what we shouldn't scale, and how we might adapt designs in the future to further improve outcomes.[i] As behavioral scientists, we also know that context matters, and it's important for those who know their context best to scale and adapt successful designs to fit their own needs.

That is why we created this toolkit: to provide you—the education experts—with tools to scale and adapt the designs that our research suggests can improve student outcomes. Along with our intervention materials, we share detailed findings from our conversations with students and staff, as well as evidence-based best practices for designing behavioral science interventions. We hope that these resources will serve as a reference as you create and implement future campaigns.

This toolkit is divided into two sections. In the first, we summarize what we've learned about behavioral barriers to student success. In the second, we provide a guide to the materials and decisions that went into creating these interventions, and we suggest ways to adapt them for other school contexts.

Click on the graphic below to access specific sections or campaigns directly.

Understanding the Challenge	*Breaking Barriers*
What are the Behavioral Barriers to Student Success?	**How Can Behavioral Design Help Students Succeed?**
This section describes the behavioral barriers students face on the road to college completion. We provide evidence for each of these barriers from our extensive quantitative and qualitative research.	This section details our successful intervention designs. We also provide evidence-based best practices for behavioral design and communication. These can be used as a reference when applying our designs or creating custom campaigns.
→ Barriers to renewing FAFSA → Barriers to positive student mindsets → Barriers to taking enough credits early on → Barriers to preparing for transfer	→ FAFSA campaign → Mindset campaign → Credit Momentum campaign → First Year Success campaign → Second Year Success campaign
Read part 1 on page 6	**Read part 2 on page 20**

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[i] RCTs are the most rigorous way to evaluate new programs and campaigns. By randomly dividing students into treatment and control groups, we are able to compare outcomes between similar groups who did and did not receive our intervention.

1. UNDERSTANDING THE CHALLENGE

What Are the Behavioral Barriers to Student Success?

Student persistence—the progression through college to completion—consists of many complex and overlapping steps. To design effective campaigns, we used ideas42's methodology to identify the specific hurdles that students face along the path to graduation, and then considered which behaviors we could promote to help students overcome those hurdles.

Define

ideas42's methodology begins with a "problem definition" phase, in which we identify the behaviors that we will try to impact and how we aim to change them. While we have worked with CUNY on problems ranging from reducing "college melt" to improving student performance on placement tests, this toolkit focuses on our most successful interventions, which address the following problem statements:

1	**Too many students miss out on crucial financial aid dollars when they don't renew the Free Application for Federal Student Aid (FAFSA).**	We want to increase the number of students who **renew FAFSA** annually.
2	**Students who face academic or social challenges early in college may doubt whether they belong in school, which can lead to poor academic performance and drop-out.**	We want students to **maintain positive mindsets** when they face challenges in college.
3	**Students will ultimately spend more time and money on school if they take too few credits in their early semesters.**	We want more students to **take enough credits early on** (at least 15 per semester) so they can graduate in a two to three year timeline.
4	**While the majority of students intend to transfer to a four-year school after graduation and pursue a bachelor's degree, many don't complete the steps necessary to prepare for transfer.**	We want students to **prepare for transfer** by choosing courses strategically, exploring their options for four-year schools, and completing applications on time.

Diagnose

Once we have defined the behaviors we will aim to promote, we "diagnose" the problem. In this phase, we conduct rigorous quantitative and qualitative research to uncover the "behavioral barriers"—the situational, psychological, or contextual features—that prevent people from making optimal decisions or acting on their intentions.

Since people's decisions and actions are profoundly impacted by features of their context (the programs, policies, and systems around them), we began each of our projects by gaining a deeper understanding of students' contexts. For each of the problem statements above we asked: *what precludes students from making this decision or taking this action?* Through interviewing students and staff at each of the schools, conducting surveys, reviewing historical CUNY data, surveying the behavioral science literature, and using our "behavioral mapping" process, we were able to uncover some answers. The section below highlights our findings.

Reasons students may not renew FAFSA

College students need to renew the Free Application for Federal Student Aid (FAFSA) each year to maintain their financial aid. Refiling rates are particularly low among community college students, who are estimated to be nearly three times less likely to refile than freshman at four-year institutions.[6] Many students depend on FAFSA to cover the cost of tuition, and students who do not refile are over 65% less likely to persist into the next academic year.[7] At CUNY community colleges, nearly 90% of first-year students file the FAFSA, but about 40% of students who receive financial aid in their first year do not refile for their second year, missing out on continued aid.[8] Below, we outline several key behavioral barriers to FAFSA renewal.

➤ *Students face hassle factors when renewing FAFSA*

Research shows that removing small obstacles from complex, multi-step processes—such as filing financial aid forms—can have a meaningful impact on people's ability to complete these processes.[9] In the case of FAFSA, students need to gather tax information and other documents; remember their FSA ID, PIN, and password; and then wade through several pages of dense questions in order to renew. Despite the significant benefit associated with renewing FAFSA (more financial aid for college), this collection of obstacles may prevent students from completing the renewal process—or from starting the process in the first place.

> *Hassle factors* are inconveniences or obstacles that impede a desired behavior. "Hassles" can be small (finding a stamp in order to mail a letter, for example) but have an outsized impact on our behavior (we might never mail that birthday card after all).

Students told us about the hassles they encountered when renewing FAFSA:

> "
> *Remembering my PIN was hard; I had to do the forgot password protocol to log back in."*

> "
> *Waiting in line to see someone at the financial aid office was a challenge."*

> "
> *Getting my parents' documents to hand over to the financial aid office was the biggest challenge to filing the FAFSA."*

Students have *inaccurate mental models* about the FAFSA-filling process

We found that students have a number of false mental models about the FAFSA filing process. One mental model students hold assumes that filling out FAFSA once and receiving aid implies that they do not need to refile FAFSA in order to continue receiving aid in subsequent years. This mental model is especially prevalent among freshmen. Another inaccurate mental model some students hold is that qualifying for financial aid is rare. We found that many underestimate the proportion of CUNY students who qualify for aid, leading them to believe they are also unlikely to receive aid.

Mental models are the frameworks that we use to explain how the world works. These frameworks are formed based on prior knowledge and experience, and they guide the way that we process new information.

Students have inaccurate mental models about the FAFSA filing process:

> "I didn't know you had to [file the FAFSA] more than once."

> "My sister had applied and didn't get anything—so I knew I wouldn't get anything for sure and didn't apply."

> "If you don't renew it, they don't tell you what the consequences are."

Students are *uncertain* about what will happen if they make a mistake on the FAFSA

CUNY students express being generally concerned about what might happen if they make an error on the FAFSA, but they aren't quite sure about the nature or severity of that risk. This ambiguity may lead students to delay or forgo renewal.

Uncertainty aversion (also called *ambiguity aversion*): people prefer to take actions when they clearly understand the risks involved. Conversely, when people are uncertain about risk, they may prefer to take no action at all.

Students worry about making mistakes on the FAFSA:

> "I was 70% confident. People make mistakes. What scared me the most is that it said in the fine print if you do something wrong you get 10 years in prison."

> "The part where it talks about messing it up made me anxious. If you make a mistake it can affect your parents."

➤ Students do not get help with renewing FAFSA because *school resources are not salient*

Significant resources are available at CUNY to support students in filing the FAFSA (e.g. computer labs with staff support and financial aid offices to answer questions). However, some students do not know about those resources because they aren't prominent. Furthermore, students are often time-strapped with school, work, and other commitments, so even if they do know about resources they don't think about accessing them as a top priority.

> *Salience* refers to the fact that people tend to focus on things that are more obvious or prominent in the environment, and ignore things that are less noticeable.

Students told us what they know about their schools' FAFSA resources:

> *There is something about financial aid somewhere— in the basement maybe? I am not sure if they would be able to do anything about it... so I just don't bother going. I can do something better with my time."*

> *There is a financial aid center...but I am not sure if they have actual labs where people fill it out. Maybe they do, but I don't know about them..I've never been told about a lab."*

2 Reasons students may not have positive mindsets

Especially in their first year, it is common for college students to face significant academic or personal challenges. If students don't see those around them struggling, they may attribute these challenges to features of themselves or their identities, rather than recognizing that bumps in the road are a feature of the college experience. A single low grade might make a student think "I'm not college material," or a negative social encounter might be misconstrued as a sign that "I don't fit in here." As students struggle to find their niche in their new environment, doubts related to identity and social belonging can hinder both academic performance and overall well-being. Research shows that this particularly affects students who are members of negatively stereotyped groups, who may already doubt that they belong in college.[10]

➤ Students' *identity is threatened in the face of challenges*

In their first year, students can experience situational adversity associated with the college experience, and attribute these hardships to their internal characteristics rather than the context of college itself. These universal experiences—such as performing poorly on a test or assignment—can cause students to doubt their ability to succeed in school. Students told us that they identified strongly as "students," but a low grade or missed assignment could call that identity into question. This identity threat is particularly acute among first-generation and black students, who may question whether they belong when they face challenges in school.

Identity threat occurs when an experience calls into question one of our identities. Those experiences can seed doubt and anxiety, leading to diminished performance. Experiences that activate identity stereotypes can boost or impair student performance depending on which features of their identities are cued. For instance, cuing a student's male identity before a spatial reasoning task may boost performance, whereas cuing a student's first-generation status before a social event may lead to feelings of not belonging. The latter is an example of ***stereotype threat;*** research suggests that considering negative stereotypes about one's group can raise doubt about one's own abilities and lead to lower performance in an academic setting. *Our perceptions of ourselves and how others perceive us affect our behavior.*

Students experience identity threat, especially when they encounter academic challenges early in college:

> " *I got a C in one class and from then on, I felt like a C student."*

> " *I feel like I'm not good enough or smart enough."*

> " *[A common challenge among my peers is] thinking that college isn't for them and that they would have to work extra hard to pass their classes."*

➤ *Students struggle to build relationships in their first year and* *lack a sense of social belonging*

It is common for students to feel lonely or have trouble connecting to peers in a new environment—especially when most students commute to school and have obligations that leave them with little free time. Students may interpret challenges related to "fitting in" as a sign that they don't belong in college.

Social belonging is when people thrive because they have strong social relationships with others. When people experience social adversity, they may question whether they belong in a certain environment (like college). Historically underrepresented minorities tend to experience greater uncertainty about belonging in college, but emphasizing the fact that social adversity is normal and can be overcome has been shown to improve academic outcomes and overall well-being.

Students expressed doubt about social belonging in college:

> *College is so diverse, you know no one, and people are from all different backgrounds. Thus, one doesn't feel a sense of belonging."*

> *Probably the biggest challenge was that I didn't expect to fit in the community because of my ethnic background, my interests, my lifestyle, etc."*

> *I haven't made one friend here. I have friends, but they are from outside of school. We do a lot of group work—but I ended up doing the project individually."*

➤ *Students don't plan for academic roadblocks they might encounter during the semester*

Students often don't plan enough time to complete tasks, or take on too great of a load. Students are not properly assessing risk in their academic decision-making, underestimating both the chances of unforeseen events (e.g. withdrawing from a course) and the amount of time and effort needed to successfully recover from them. More often, they address challenges as they arise, and are caught off guard and unprepared to adjust.

Planning fallacy is people's tendency to underestimate the time required to complete a task even when they have considerable experience of past failures with planning schedules and managing tasks.

Students have trouble with time management, and encounter shocks when courses are more challenging than they expected:

> *My goal was to graduate with a nursing degree in two years. That was before life smacked me in my face."*

> *I came into school and realized my time management is horrible."*

> *I had a plan way before I started but…I'm here now, and it is just scrambled."*

➤ *Students experience scarcity of time and resources, negatively affecting their cognitive performance*

Competing obligations outside of school make it difficult for students to devote sufficient attention to college requirements, which hurts their performance. With their bandwidth constrained, students struggle to find the time to access resources like tutoring and counseling, and may not be able to cultivate the relationships with peers and professors that would ultimately help them do well in their courses.

Students told us that limited financial resources and constant demands on their time make it difficult to focus on schoolwork:

> "I was too poor to function or think. My mom didn't work. When I got financial aid I went and bought a metrocard and books and maybe if I had something to eat—that was good enough."

> "I have a two-year-old, a sick mom, and no job. It is hard to study and focus with life challenges."

> "I might get home at 10pm with an appointment and the train time. That is what ends me with all-nighters—and then I have red eyes in the morning."

Scarcity describes how a lack of resources (e.g. time, money, or information) depletes people's mental resources (attention, working memory, cognitive control, etc.) and can lead to poorer-quality decision-making. People experiencing scarcity tend to focus intensely on one thing—often what is most immediately urgent—while neglecting other important stimuli. In addition to their course loads, over half of CUNY students report working for pay, and many also have parenting and care-taking responsibilities—16% of CUNY community college students said they provide financial support for children.[28]

Scarcity of time and resources is a constant reality for most CUNY students, and it exacerbates the other barriers. When students are juggling jobs and families on top of schoolwork, they find it even more challenging to dig up resources that aren't salient, to plan for balanced semesters, or to form social connections with fellow students outside the classroom.

➤ Students' *limited attention* is focused on school and personal obligations, so they miss information about tutoring, counseling, and other programs

Tutoring, counseling services, and mentorship programs can be instrumental for students' success. Students who do use these resources report receiving invaluable advice from their mentors and advisors, but many students don't know that these support systems exist, or how to access them. Even when they are advertised, information about these programs is often buried online or in long emails. Students have many demands on their attention, and often miss information about resources and opportunities.

> *Limited attention* describes the finite cognitive capacity we all have as humans. When that capacity is stretched, it is difficult to process new information and we are prone to miss things that are less prominent.

Additionally, peers and professors can offer important guidance, ranging from specific academic tips to advice about long term goals. Many first year students don't take advantage of resources like study groups or office hours, and later express regret about not using those resources.

Students under-utilize both formal resources like tutoring or mentorship programs, and informal resources, like peer and professor connections:

> " *Things are easy to navigate once you know. But finding the knowledge is like digging through a haystack.*"

> " *There are little groups. Unless you know somebody from a group, you won't really know about things.*"

> " *There are a lot of programs and activities that can help you with scholarships and stuff, but unless you know what to put into that search bar, you won't find it.*"

3 Reasons students may not take enough credits early on

Evidence suggests that students who take at least 15 credits in their first semester may be significantly more likely to earn a degree than those who take 12 credits, especially at two-year community colleges.[11,ii] Taking 15 credits per semester or 30 credits per year puts students on track to graduate in less time and at lower cost.[iii] Data from CUNY's 2015 and 2016 cohorts suggests that most full-time CUNY community college students take fewer than 15 credits per semester—about 11.9 on average. About 26% of full-time students enrolled in 15 credits, and even fewer, about 13%, <u>passed</u> 15 credits. Credit completion is lower among first-year students: only about 5% of full-time freshmen completed 30 credits by the end of their first year.[12]

➤ Students **anchor to 12 credits** per semester as "full-time" and start out with a lower credit load

Students "anchor" to 12-credits per semester because this is the minimum number of credits needed in order to receive full-time financial aid. With this reference point in mind, students may view any credit load above 12 as higher than necessary. As a result, newer students hesitate to tackle the "higher" 15-credit load even if this number of credits would be feasible in their schedule. This barrier may become less prevalent over time as CUNY schools implement "15 to finish" campaigns, and begin to create a new anchor at the 15 credit mark.

> **Anchoring** is a psychological heuristic (a simple model for decision-making) whereby people start with an implicitly suggested reference point (the anchor) and then make adjustments from that point. The anchor can have an undue influence on people's assessments.

Students said that especially in their first semesters, 12 credits felt right because it means "full-time" for financial aid:

> "If you are full-time you take 12 [credits], but sometimes, like for me, they speed it up and you take extra classes. You take as many as possible when you are trying to graduate, but just 12 when you first start out."

> "You need to take 15 - 18 credits per semester to graduate; most students aren't aware of this. They link it to financial aid."

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ii Previous interventions have noted that selection bias may have affected measured outcomes; students who choose to take 15 credits are certainly more likely to earn a degree, but untangling whether that relationship is causal is more complicated. Some studies have tried to overcome selection bias using methods like propensity matching.

iii The minimum requirement for full-time financial aid status is 12 credits per semester. In most cases, there is no additional cost for taking 15 credits per semester rather than 12.

➤ Students *focus on the present* and don't consider the relationship between current credit load and time-to-finish

When selecting their courses for the semester, students focus more on immediate concerns ("Do these courses fit with my work schedule?") and less on long-term, big-picture planning ("If I take this many credits now, how many years will it take me to graduate?"). Focusing on the present is useful in the short term, but it may leave students struggling in their later semesters, when they need to tackle higher credit loads and more challenging courses. In many cases, this leads students to delay graduation.

Present bias is the preference for a smaller reward sooner over a larger reward further in the future. Our "present selves" feel fundamentally different from our "future selves," and we often focus disproportionally on what the present self needs.

Students think more about their present situation than their path to graduation:

> "
> *I don't have a plan for when I want to graduate. I don't really see graduating as a timeline—anytime between now and I guess, five years from now."*

We surveyed 133 first-semester CUNY students, and the results suggest that **present bias** *may contribute to students not taking enough credits early on.*

▸ **81%** of respondents reported that they hoped to graduate in two years, yet **91%** indicated that they planned to take fewer than 15 credits the next semester. Many students opt to take fewer credits in the present, without recognizing the consequences for their graduation timelines.

➤ Students enroll in fewer credits because they *tunnel on more urgent needs*

Despite the "momentum" benefits of taking 15 credits per semester, this credit load may not be feasible for every student in every semester. There are important caveats in some of the studies on credit uptake; for example, students who do more than thirty hours of paid work per week may not benefit from the higher credit load.[13] The number of credits a student should take varies depending on a number of factors, including real (rather than perceived) level of academic preparedness, the actual workload associated with that student's courses, and the extent to which outside obligations will limit time available to study. In some cases it is wise to prioritize urgent needs—but it does help explain why students find themselves on a long, winding path to degree-completion.

Tunneling is the brain's tendency to focus on the most urgent or pressing unmet needs in situations of scarcity. When resources such as time or money are scarce, these needs fully "capture" the mind and create a "cognitive bandwidth tax" that crowds out all other concerns, questions, or tasks that would otherwise compete for attention.

Students sometimes take fewer credits due to other pressing obligations:

> "
> *I work also so I don't want to get overwhelmed...I took five courses and it was too much."*

> "
> *The most challenging part for me was finding a way to take classes while I work full-time during the week, and being able to pay for school expenses."*

4 Reasons students may not prepare for transfer

The overwhelming majority of CUNY students (nearly 90%) intend to complete their associate degree and transfer to a four-year institution, but only a small subset of students successfully follow through on graduating (32%) and transferring (10%).[iv,v] Much like first-year CUNY students, second-year students face behavioral barriers to staying in school, progressing, and transferring. But, with far more urgency than first-time freshmen, second-year students must focus on completing degree requirements and developing a concrete plan for after graduation. Furthermore, many have already encountered setbacks (such as a failed course) that make college completion feel unattainable.

➤ Students are *overly optimistic* and unprepared for hurdles that affect their graduation and transfer timelines

Students' *intentions* to graduate and transfer in two-to-three years are often based on the assumption that they can take (and pass) exactly the courses they need in later semesters. Some of the most common hurdles are a late decision to change one's major, trouble enrolling in a required course, or failure and withdrawal from courses. Students don't expect these things to happen to them, so when challenges arise they're left scrambling to fill

> **Optimisim bias** is people's tendency to assume they are less likely than others to experience negative events. This means that people are easily derailed when challenges inevitably occur.

requirements and retake courses. Advisors can help mitigate these problems—for example, they can let students know about important prerequisites, or help them contact professors when they're struggling, before they fail or withdraw from the course. But many students, especially those who are not part of cohort programs like ASAP (Accelerated Study in Associate Programs), don't consult regularly with their advisors.

We surveyed 323 students in their third and fourth semesters at CUNY community colleges, and also gathered data from CUNY's administrative records. **The results suggest that students are overly optimistic:**

▸ Of every ten students, about three failed a course in their second year. Of those, the large majority **(88%)** did not graduate or transfer within three years.

▸ Of every ten students, about five withdrew from a course in their second year. Of those, about four students **(83%)** did not graduate or transfer within three years.

▸ Yet, **nearly half** of the respondents on our survey said they were confident they could complete their degree after failing a course, and that failing would not change how long it took them to graduate and transfer.

▸ ASAP students were four times as likely as non-ASAP students to report scheduling regular meetings with their advisors, meaning those outside the cohort program are far less likely to have effective contingency plans and support systems.

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iv Data on student graduation intentions is according to an internal SPI survey.

v 32% graduation and 10% transfer figures are according to CUNY administrative data.

Students looked back at challenges they had faced and reflected on how those lengthened the time and effort it took to graduate and transfer:

> " *Don't change your major, change a class, or drop a class. When you drop a class it makes you stay longer. I was supposed to graduate last year, but then took a semester off."*

> " *To prep for this year, I would have taken more prelim courses in the summer. I should have saved the easy classes for the end; I put too much work on myself this year. I would have to take 29 credits to graduate this year."*

> " *I've switched my major twice and I feel like it held me back a bit. I know it's common, but do research to avoid doing that."*

❯ *Students don't plan enough time to research schools, prepare materials, and fill out applications*

The transfer process involves multiple steps and can often become arduous. Students need to identify the schools they're interested in applying to; meet with their advisor; narrow

> For more on **planning fallacy,** see page 12

their choice set based on factors like cost, location, and minimum GPA; figure out how to pay for school; note application deadlines; gather the right forms; and then submit before the deadline. But despite these multiple complex steps, students underestimate the amount of time it will take them to complete key transfer tasks. This can have significant consequences—many students graduate before submitting applications, which means fewer students will ultimately follow through on their intentions to pursue a bachelor's degree.

The results of our survey of students in their third and fourth semesters suggest that students don't anticipate how long the transfer process will take them:

▸ **26%** of respondents thought the transfer process would be "simple," and another **40%** did not think it would be particularly complex.

▸ **27%** of respondents hadn't thought about when they would submit transfer applications. The majority of those students were second-year students who planned to graduate and transfer within a two to three year timeline.

❯ *Students experience scarcity, which limits their ability to find and utilize transfer resources*

Already constrained by personal obligations, CUNY community college students focus most of their energy on passing the current semester's classes. This leaves little energy for planning

> For more on **scarcity,** see page 13

future academic pursuits—particularly preparing to transfer to a four-year school. While the bachelor's degree is an important goal for most students, transferring feels like a more distant concern when exams and assignments pile on. Some of the most important resources for transfer planning involve significant time and physical presence on campus. Transfer offices and advisors offer extensive guidance, and transfer fairs give students exposure to the four-year schools—but students don't feel they don't have time to take advantage of these resources.

Students told us that they don't go to transfer events because they have too much else on their plate:

> "I know they have transfer fairs and stuff, but I feel like I never have time to go over there. It's always at a time when I have class or work."

> "I made an appointment with someone in the transfer office and then I forgot to go, and I canceled it, and I haven't been there since. I was trying to look for websites, but it is very tiring."

> "I am too tired from exams, so I will (prepare for transfer) after. I still have one semester."

Our survey of students in their third and fourth semesters told a similar story:

▸ **60%** of respondents said they had not attended a career or transfer fair. When asked the top reasons why they didn't go, nearly 57% said they either didn't have the time, or couldn't fit it into their schedule.

➤ *Students consider stop-out (or drop-out) to be meaningful options, especially when they see others doing so*[vi]

At CUNY community colleges, students know that stop-out and drop-out are common, so those become meaningful options in their choice set. When hurdles arise, students actively consider taking a break from school—even if that means they might never return. One reason this may occur is because stop-out is a descriptive norm—the thing that people see others doing. Students know that this is not the *prescriptive* norm (the desired behavior), but the reality of what those around us are doing can be equally powerful.

> *Social norms* are rules or standards shared by a group that guide and/or constrain behavior. Perceived social norms can be particularly powerful when people are uncertain what to do. *Descriptive norms* are perceptions of which behaviors are common. This is distinct from *prescriptive* norms, which are perceptions of which behaviors are approved or disapproved.

Students recognize that stop-out and drop-out are relatively common among their peers:

> "If students are here for three to four years they drop out. Only 19% of students graduate."

> "The national average for graduating community college is six years….relax."

> "Some students have dropped out because it's a lot of stress. Half of the students drop out. Lots of students drop out in the summer."

[vi] A stop-out" refers to when students temporarily discontinue their education, with plans to return and continue at a later date.

2. BREAKING BARRIERS

How Can Behavioral Design Help Students Succeed?

The Student Persistence Initiative designed behavioral interventions that directly address the barriers outlined in part 1. Each intervention was launched at one or more CUNY community colleges and evaluated to determine its effectiveness at helping students reach important success outcomes.

Through rigorously testing our designs, we were able to identify which campaigns worked, and which were less impactful. This section covers our five most successful and promising interventions. An overview of some of our other RCTs is available in the appendix.

Design

In this section, we first summarize **principles for behavioral design** and **guidelines for effective communication,** which you can reference when addressing similar barriers at your school. Then, we provide sample content from each of our interventions so you can see the **communication and design principles in action.**

When designing these interventions, we had two goals in mind:

1 **Design content** that directly addresses the behavioral barriers underlying the problems we're trying to solve

2 **Follow evidence-based best practices** for behavioral communications in order to get students' attention and make it easy for them to take action

Click on the icons below to jump directly to a specific campaign page

FAFSA Renewal Campaign

Mindset Campaign

Credit Momentum Campaign

First Year Success Campaign

Second Year Success Campaign

Principles for Behavioral Design

In addition to helping us clearly identify the barriers that students face in college, behavioral science offers a set of principles that can help us design for student success. **In our design process we develop strategies for *surmounting* behavioral barriers.** Often the best design approaches "flip" the barrier on its head: if resources are not salient, our designs should help make them salient. In other cases, the design principle is more complex. For example, to create designs to confront "identity threat," we conducted deeper research about the specific challenges that threaten students' mindsets. In all cases, designs should flow directly from the diagnoses to ensure the intervention's success.[14]

We used the principles below to guide our design choices in each intervention—but principles are just the beginning of the design process. For each principle we brainstormed: *"how might we…* make transfer resources salient?" or *"how might we … simplify the actions required to renew FAFSA?"* Hundreds of ideas emerged, and we narrowed them down based on criteria like impact and feasibility. Only then did we translate our concepts into content (emails, texts, planners, etc.). Though we know these strategies are effective, it is important to keep in mind that adapting them to a given context often takes additional effort and creativity.

Designing for Behavioral Barriers

Behavioral Barrier	Design Principles
Scarcity A lack of resources (time, money or information) creates a tax on "cognitive bandwidth" (mental energy or attention) that leads people to focus intensely on the most urgent thing.	• Simplify decisions and actions. • Cut the costs by reducing the time, money, or willpower that a person must spend to act • Give slack by providing people extra time or money to help reduce bandwidth constraints.
Hassle Factors Inconveniences or obstacles can meaningfully impede a desired behavior.	• When a process is by nature complicated or confusing, offer regular reminders and clear steps for seeking assistance to help people get through the hassle. • Minimize hassles where possible by eliminating unnecessary complications and steps, and removing confusing jargon.
Identity Threat Experiences that seed doubt and anxiety can call into question people's identities, leading to diminished performance.	• Prime positive identities by making the values associated with those identities prominent. • Detach external challenges from immutable facets of people's identity; make it clear that challenges are normal, and encourage growth mindset as it relates to their competencies.
Mental Models Frameworks (formed by our prior experiences) guide the way that people process new information.	• Give people a new model to replace the faulty one. • Use simple, memorable rules of thumb.
Uncertainty Aversion When people are uncertain about risk, they may prefer to take no action at all.	• Reduce uncertainty by listing the benefits of action and the consequences of inaction.

Salience
People tend to focus on things that are more obvious or prominent in the environment, and ignore things that are less noticeable.

- Present the right information at the right time.
- Choose a channel that engages your audience.

Stereotype Threat
Considering negative stereotypes about one's group can raise doubt about one's own abilities.

- Avoid negative priming by eliminating cues about belonging in a stigmatized group, and try to reduce the perceptions of stigma. Increase the visibility and obviousness of underrepresented groups.
- Use self-affirmation to help people remember and identify their positive traits and accomplishments.

Social Belonging
When people experience social adversity, they may question whether they belong.

- Increase a sense of belonging by reminding people that social adversity is normal and temporary.
- Use firsthand quotes and images that reflect diverse groups of people and a range of experiences to convey the message that "people like me do belong here."

Planning Fallacy
People tend to underestimate the time required to complete tasks.

- Make salient the amount of effort involved in completing a task by relating it to similar past experiences or simply by informing people of the average time it takes to complete the task.

Limited Attention
People have a finite amount of attention at their disposal; when that capacity is stretched, they miss things that are less prominent.

- Use repeated reminders to draw attention to the most important resources.
- Select the right channel (email, SMS, etc.), sender, and timing to grab attention.

Anchoring
An implicitly suggested reference point (an anchor) can have an undue influence on people's assessments.

- Intentionally select a desirable reference point to create a soft default for people to consider, signaling that choices close to that reference point are typical.

Present Bias
People often focus disproportionately on what the "present self" needs, even if it hurts the "future self."

- Create a moment when the desired action is presented, and encourage people to take action in that moment.
- If action is not immediate, encourage people to develop a specific plan of action with times and locations. Add an outwardly imposed deadline, with consequences if missed.

Tunneling
In situations of scarcity, people focus on the most urgent needs and ignore less pressing things (outside the tunnel).

- In many cases, tunneling on urgent needs is necessary and even useful. Create cognitive, temporal, and financial slack so people have more bandwidth and can address important (but less urgent) tasks.

Optimism Bias
People assume they are less likely than others to experience negative events and are easily derailed when challenges occur.

- Reset expectations and give people tools for contingency planning.
- Highlight the negative effects of specific actions to encourage people to avoid those actions.

Descriptive Social Norms
Perceptions of which behaviors are common guide and/or constrain people's behavior.

- Provide descriptive, factually accurate information about how people "like you" behave (with a focus on desired behaviors).
- If the desired behavior is uncommon, highlight the prescriptive norm instead (what people think you should do) or frame the behavior as fluid and changing over time.

Guidelines for Effective Communication

In addition to the design principles described above, our interventions use evidence-based communications principles. These strategies have been shown to increase the likelihood that a message will be seen and read, and that the receiver of the message will take the desired action. As we discuss the choices made while designing our interventions, we will draw from these principles, and our experiences in the field. Still, as technology itself and the ways students communicate continue to change, it is important to make adjustments to your communications strategy, paying attention to new ways to achieve these three goals:

🔊 Grab Attention	🔍 Know Your Audience	📋 Make Action Easy
Maximize the chances students will open your message	**Make your message relevant and easy to understand**	**Tell students exactly what to do, and make it simple to follow through**
1 Select the Right Channel: Choose the most direct medium available that aligns with the purpose of your message.	**1 Choose Words Carefully:** Keep it simple, avoid jargon.	**1 Give Concrete Action Steps:** List each thing a student needs to do and link them directly to resources explaining how to follow through.
2 Consider Timing: Send messages when students are likely to notice and act on them.	**2 Use the Right Tone & Voice:** Be professional but friendly; create urgency when needed.	**2 Emphasize Deadlines:** Do so more frequently and prominently as the due date nears. Create artificial deadlines where formal ones don't exist.
3 Consider Frequency: Minimize the number of messages sent, spacing them closer together as deadlines near.	**3 Apply Loss or Gain Framing:** Consider whether a positive or negative bent is more likely to get results.	**3 Provide Help:** Make it clear how and where to get help so students' momentum doesn't stall.
4 Write Strong Subject Lines: Be brief and descriptive, personalizing them when possible.	**4 Leverage Graphics & Formatting:** Keep text to a minimum and use bolding, color, etc. strategically. Where possible, opt for images instead.	⚡
5 Use a Trustworthy Sender: Enhance credibility; send from a real person who is seen as an expert.	**5 Speak to Each Person:** Personalize using names and individual information. Only send it to people it applies to.	**TIP:** print this out and refer to it next time you need to send out student communications.

Grab Attention

Simply sending an email or a text doesn't guarantee that students will read it. Maximize the chances that your message will grab their attention by choosing the **right channel,** sending messages at the **right time** and with the **right frequency** from the **right sender,** and using a **strong subject line.**

1 Select the Right Channel

Using the right channel for your message is arguably the best way to ensure it grabs your students' attention. Our interventions, which were focused specifically on communications, used four main channels: email, SMS, Blackboard, and student portals/intranet systems. We focused on these channels in part because we were running **random assignment experiments** and needed to target certain students but not others. For our purposes, broader channels, like student newsletters, would be difficult to customize, and more individual channels, like face-to-face conversations, would be difficult to target only at specific students in a systematic way.

How to select the right channel

When not running an RCT, we recommend using in-person delivery during advising sessions, orientations, or in the classroom; when available, these direct channels are likely to create greater impact than communications alone. When face to face interaction isn't an option, opt for the most direct communications channel whose strengths and weaknesses align with your goals.

Email:

✚ Emails are good for introducing a topic and providing information like deadlines, lists of steps to take, and links. The information within them can be stored and referred back to later.

▬ Many students never set up or use their school email accounts. Those that do, receive so many emails that competition for their attention is stiff. Even if they do open them, emails that are too long or poorly formatted *(see Formatting)* still may not be read thoroughly.

SMS Message (Text):

✚ The urgent nature of text messages means they are more likely to get a student's attention, and many students are more likely to respond to a text, too. They are a good channel for sending reminders, individual links, or actions that can be completed in the moment.

▬ Their short length limits the amount of information you can send. Because students are more likely to notice texts, if they receive too many mass texts or think they aren't useful, they are also more likely to ignore or unsubscribe from them.

Blackboard:

✚ Many students use Blackboard for their classes, so they know how to navigate the site. It can store lots of information and send real-time notifications when something is posted. The Blackboard cellular app is becoming more widely used and makes accessing the site even easier.

▬ The Blackboard web platform is not very user friendly, so information must be laid out well or students may encounter unnecessary hassles when trying to access information.

School Intranet/ Student Portals:

✚ Student facing channels such as student portal splash pages or pop-up messages embedded directly into a system like CUNY's course registration pages, are often the most likely to be seen by students and at the right times. Their direct, unavoidable nature and timeliness *(see Timing)*, make them highly likely to be effective ways to share a message.

▬ Getting these platforms to integrate and function may require coordination with an IT team or permissions from higher ups.

2 Consider Timing

The time of day, day of the week, or point in the school year when a message is sent can influence whether or not people pay attention to it. Because there is no one magical time that will work for every school or student, experiment with different options to discover what's best in your context.

How to consider timing

Think about what your students might be doing when and send messages at complementary times. For example, if you want students to take a specific action while on campus, try sending messages during the school day. Do most of your students have a break at 12 noon? Send reminders then. Also, make sure that you are sending your communications at moments in time when that information is relevant for students. Did the FAFSA application just open? Let students know that as soon as possible. Are finals nearing? Send encouraging messages when stress levels are high.

3 Consider Frequency

The number and rate of messages that students receive can influence whether or not they are opened. Our research in different college contexts shows that communications that are too frequent may inundate students, reducing the chances they will pay attention to the message. Send messages too infrequently and students may not act.

How to consider frequency

Space your messages out, making them more frequent as deadlines near or urgency increases and less frequent at other times. Consider what other departments are doing and who needs to send more frequent messages about which topic and when to help ensure all of the important messages can get through to students. Diversify the channels *(see Channels)* through which you send your messages and choose a frequency that works for your level of urgency: nudges sent every five days have been successful[15] when something needs to happen quickly. One to three messages per month has worked well for ideas42 across longer time horizons or for less urgent subjects.

4 Write Strong Subject Lines

Subject lines (and preview text) are the first things that students see and help them decide whether or not to open an email.[16] We have found that subject lines that use a student's name and/or accurately reflect whether they personally have completed an action (like renewed their FAFSA) are opened more often *(see Personalization)*. Those that communicate urgency, feature upcoming deadlines *(see Emphasize Deadlines)* and/or encourage action also have high open rates. Preview Text, the few words from inside an email that are visible before you open it, can be leveraged as another quick way to catch students' attention.

How to write strong subject lines

Use subject lines and preview text to your advantage: make the email topic clear without having to open it. When a message is urgent, communicate that clearly with a serious, direct tone *(see Tone)* and action oriented words *(see Word Choice)*. Experiment with different subject line and preview text combinations using A/B testing to find out what language your students respond to most often. Remember, students often read email on a phone which displays only the first 25-30 characters of a subject line. Limit them to five or six words for the best chance of being read. To help avoid SPAM filters, run your email through a free online SPAM tester.

5 Use a Trustworthy Sender

Who a message comes from can influence whether or not students read and act on the information within it. The right sender can lend credibility to the contents of the communication—the more the sender is perceived as a subject matter expert, the more positively people view the information they are providing.[17] Plus, our conversations with students have revealed that mass messages and messages that come from the college or a faceless entity feel less relevant than those that come from a department they are familiar with or an individual person they trust.

How to use a trustworthy sender

Send messages from a real, specific person who your students can follow up with or ask for help *(see Provide Help)* whenever possible. Course registration-related information from a familiar advisor may be taken more seriously than if it had come from the more general Office of the Registrar.

Know Your Audience

Once students see your message, you'll want to ensure they read and understand its contents. The more relevant a communication feels to a student, the more likely that is to happen. Ensure relevance by communicating in the right **tone,** using **simple language and graphics,** and **personalizing each message** to your students.

1 Choose Words Carefully

There are many terms that college faculty and staff may be familiar with but which hold little meaning to students, especially when they are new. Avoiding overly complex terms, technical language or jargon in student communications can lead to greater understanding and more positive ratings of the content from readers.[18]

How to choose words carefully

Keep language simple and direct, minimizing the number of words used to convey your message *(see Graphics & Formatting)*. A good rule of thumb is to write at a sixth grade reading level.[vii] When trying to spur action, choose descriptive words that convey urgency and tell students exactly what you want them to do. Words like Urgent, Action Needed, and Attention have been effective. Words that convey urgency should be avoided, however, if you are trying to convey a more positive, friendly, encouraging message: try Click Here, and Renew Today instead.

2 Use the Right Tone & Voice

There is more to crafting a message than just choosing words; the way a message is written also conveys important information to students, sending signals about the sender's attitude toward them. The behavioral literature suggests that changing just 3% of the words in a communication, on a spectrum from flexible to strict, made college students feel more negative about the message sender.[19] This was echoed in our research with students who reported that they prefer to be communicated with in a friendly but professional tone. Interestingly, while students preferred a friendlier tone, they thought a more serious tone would be more likely to spur them to action.

How to use the right tone & voice

Aim for a supportive tone; be professional but friendly with students who appreciate kindness but may not love overly friendly/informal communication from someone positioned as an expert. Leverage a more serious or strict tone when urgent action is needed but always be encouraging and supportive.

[vii] In Microsoft Word go to File>Options and click 'show readability statistics' in the Proofing menu. Then Review Spelling and Grammar.

3 Apply Loss or Gain Framing

Behavioral Science tells us that the way we put information into context can influence how well we absorb and interpret a message and how likely we are to act on it. There are many ways to think about framing a message, but two of the most common are: 1) positive, focusing on rewards gained for taking action and 2) negative, focusing on what is at risk or what is lost by failing to take action. Different problems may align better with one frame over the other and different people may act more decisively at the prospect of gaining or losing something important.[20]

How to apply loss or gain formatting

When deadlines are approaching, try loss framing to highlight that time is running out and to create urgency. When you want students to build healthier habits or develop a more positive mindset, use a positive frame to help them focus on what they can gain by taking action.

4 Leverage Graphics & Formatting

Design your email in a way that is proven to help our brains digest the message. Research shows that when text isn't well formatted, people scan it using an F pattern that prioritizes the first lines at the top of a message and the text at the left of the page as you go further down, missing text on the right or at the bottom.[21]

How to leverage graphics & formatting

Put the call to action front and center so students can't miss it. Help ensure students will read your whole message by limiting text and using (info)graphics to help express ideas and get your message across instead. When you do include text, format it well using bullet points, numbered lists *(see Give Concrete Action Steps)*, and strategically placed bolding, underlining, or colors. Keep in mind, large graphics may not load well on mobile devices, which many students rely upon to read texts and emails.

5 Speak to Each Person

Speak directly to your students! Research has shown that messages that address someone using their name, and accurately reflect their individual situation or status, are more likely to get their attention and spur action.[22] *Students have similarly reported that they respond to texts more often than emails, in part, because they usually come from a specific person, making them feel more personal than messages that come from the college or an office.*

How to speak to each person

To personalize communications, incorporate your students' names *(see Subject Lines)*, use school or department logos or colors, only send messages to those that they apply to, and choose an individual person as the message sender whenever possible *(see Sender)*. Because using a student's name in every single message will eventually start to feel artificial, try user-testing your subject lines or texts with students to get a sense of how they'd react to them before sending.

Make Action Easy

The ultimate goal of any communication is not just for students to see it and read it, but to take action. Make action easy by giving **concrete steps** to take, **emphasizing deadlines,** and **providing help** when necessary.

1 Give Concrete Action Steps

A well crafted message clearly communicates every action that students should take to reach a goal. Research tells us that each step in a process should be individually listed in an easy to follow format, like a checklist, which has been shown to help people break down complex tasks and reduce errors.[23] Including steps that a student has already completed on the checklist gives them a sense of progress, making them more likely to continue on and complete the remaining steps.[24]

How to give concrete action steps

Include checklists that break steps down into discrete, numbered actions that aren't hidden amongst dense text; curate what is included carefully, leaving out unnecessary detail. Include steps that have already been completed to give students a sense of forward momentum and provide direct links or attach forms and documents students need to complete the next steps whenever possible to eliminate one extra hassle from the process.

2 Emphasize Deadlines

One very good reason to send a text, email or post a message on a student portal, is to communicate an upcoming deadline. There is clear evidence that deadlines help people get things done.[25] When sent at the right time (see Timing), using an urgent tone (see Tone), the right keywords (see Word Choice) and the right framing (see Framing), etc. deadlines create urgency among students, leading them to act.

How to emphasize deadlines

Put important dates front and center in your communications by making the font larger, a different color or bolded/underlined at the top of the page *(see Formatting)*. Reiterate the deadline multiple times, messaging students during a window that is close enough to feel urgent, but still far enough away to leave time for action, becoming more frequent as the actual deadline approaches. *(See Timing and Frequency).*

3 Provide Help

While a carefully crafted communication is enough to get some students to act, many others will still require help. Research shows that under ambiguous circumstances where the outcome is uncertain students are more likely to do nothing.[26]

How to provide help

Don't make students guess about how to keep moving forward! Provide the name and contact information of a real person who can give nuanced answers to their specific questions. Provide direct links to helpful resources, and the locations and hours of offices or labs where they can secure assistance; include how to make an appointment when necessary. When giving location details and directions, provide a map with the exact location circled to make it as clear as possible where the help they need is located, increasing the likelihood that someone will go seek it out.

Communications & Design Principles In Action
SPI's Behavioral Interventions

The **FAFSA Renewal** Campaign

The goal of the FAFSA campaign is to increase the number of students who renew their FAFSA each year by the priority deadline. We designed and tested four iterations of this campaign between 2016 and 2019. Full results and lessons learned from each version of the campaign can be found in the appendix.

Our FAFSA interventions include:

1. Emails providing in-depth instructions for how to renew, including screenshots to guide students through the process and links directly to the FAFSA website

2. Text messages with concise reminders to renew by the deadline

3. This recommended messaging calendar is based on our most recent FAFSA campaign, which specifically tested timing and frequency.[viii]

> ### *Keep in Mind:*
> In order for FAFSA reminders to feel personal and relevant, they should be sent only to students who have not yet renewed. Students' filing status will change dynamically as students renew over the course of the campaign, and it's important that students who complete the task are removed from future communications. When we ran our FAFSA campaigns, we built in routine "list updates" before each message went out; each time, we pulled the most recent FAFSA filing data for the students in our campaign, and then removed that list of "filers" from text and email lists. When planning your FAFSA campaign, it is helpful to assign a dedicated "list manager" to ensure that messages are sent only to the correct students.

Below, learn how we applied behavioral design and communications principles when creating our FAFSA campaign materials. These deliberate choices are important to keep in mind as you run one of these campaigns or think about creating your own FAFSA or financial aid related messages.

[viii] We found that both of the timelines we tested—one starting earlier in the year, with less frequent messages, and the other starting closer to the deadline, with more frequent messages—were equally effective at increasing renewal rates. However, students who received earlier messages did file *earlier*. Our recommended calendar follows the early timeline because early renewal helps students secure aid in advance of the next academic year. Less frequent messaging also reduces the administrative burden of sending messages by dispersing the effort over a longer period of time.

Communications Principles In Action: FAFSA

📢 Grab Attention

Channel	**Emails** and **text messages** reminded students to renew their FAFSA, outlined the steps for how to do so, and directed them towards helpful resources. ⭐ *TIP: In future applications, embedding reminders into CUNYfirst (school intranet) could be an additional channel.*
Timing & Frequency	**Timing:** We began messages on October 1st when FAFSA opens, and ended messages on June 30th, the priority deadline. **Frequency:** We sent one email early in each month and one follow up text two weeks later. Every three months, we sent one additional "Aid Year Confirmation" email, alerting students who edited the previous year's FAFSA but had not yet filed the most recent one that they still needed to renew. ⭐ *TIP: Early, less frequent messages encourage students to renew earlier in the year and also limit the administrative tasks required each month.*
Subject Lines	**Authoritative** and **personalized** subject lines worked well for this topic because students reported feeling that FAFSA content is truly urgent. ⭐ *Key words: Attention, Urgent, Action Required, the student's first name*
Sender	Texts and emails were sent from the **"CUNY Success Team."** Ideally, the sender would be a school-specific person so the message appears relevant and trustworthy. **Potential senders:** a specific financial aid advisor, the director of financial aid ⭐ *If sending from an individual person isn't possible, try a pseudonym related to student finances (e.g. Financial Aid Success Team).*

🔍 Know Your Audience

Word Choice	We chose language that is **clear, simple, and urgent.** We focused on the main goal— renew FAFSA to continue paying for college—and avoided technical terms or acronyms like EFC, SAR, and IRS.
Tone & Voice	**In earlier messages:** we used a professional but friendly tone to communicate the importance of renewing the FAFSA early. **As the deadline approached:** we increased the urgent tone using bolding or underlining to emphasize deadlines and the consequences of not renewing (e.g. "FAFSA Status: Not Filed" and "Warning").
Framing	In earlier messages, we used **positive/gain framing** to highlight the *benefits* of filing earlier (e.g. locking in as much aid as possible or not having to worry about filing in the Spring). As the deadline approached, we shifted towards **loss framing** to highlight the *consequences* of not filing (e.g. losing the aid or getting less aid to cover the cost of classes).

Graphics & Formatting	At the top of the email, we **emphasized the main action** we wanted students to take (renew the FAFSA), and provided direct links to the FAFSA website.
	We used graphics such as screenshots from the FAFSA website to give students step-by-step instructions on how to login & get started.
Personalization	We removed students from our messaging once they renewed FAFSA, so only those for whom reminders were relevant would continue to receive them. This allowed us to accurately say things like "FAFSA Status: NOT Filed," which got students' attention.
	We used **students' names in emails and texts** to make them more likely to notice and then open the message; knowing that a financial aid message is meant specifically for "me" makes it feel appropriately urgent.

Make Action Easy

Give Concrete Action Steps	We focused *primarily* on **one concrete next step:** click the link and renew FAFSA. In some emails, we also gave students step-by-step instructions for how to renew, including:
	• A list of required documents and login credentials
	• Screenshots and videos illustrating each step
	• A time estimate for how long the renewal would take
Emphasize Deadlines	Throughout the FAFSA campaign, we called attention to the priority deadline. In earlier messaging, we emphasized the benefits of filing by the deadline (securing more aid ahead of time), and in later messages we focused on the potential consequences of filing after the deadline (getting less aid before next year).
Provide Help	We emphasized resources that can help students file, including online information, a FAFSA FAQ page, and on-campus resources. When directing students to campus offices, we included the location, hours, and a small map.

Sample Content: FAFSA

Example email

Write strong subject lines: Authoritative and urgent subject lines work well for FAFSA

Correct faulty mental models: Students must renew FAFSA *each year*

Provide help: We emphasized on-campus resources and provided location & hours

Choose words carefully: Clear, simple, and urgent language works well for FAFSA

Reduce uncertainty: We listed benefits of renewal & consequences of failing to renew

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FAFSA Status: NOT FILED

CU NY THE GREATEST URBAN UNIVERSITY IN THE WORLD

FAFSA Status: NOT FILED

As of 11/7/2018

|FNAME|, act now and renew your FAFSA **for the 2019–2020 academic year.**

– **You must renew FAFSA each year** to receive Federal and NY State Student Aid.
– **It's required** if you want to be eligible for the Excelsior Scholarship
– It only takes 45 min and can **save you thousands of dollars**

Need help?
Come visit us in the [Financial Aid Office Name], [Location].
Hours: [Hours]

Click Here to Renew Your FAFSA

School Name
Address
Unsubscribe

Sample Content: FAFSA

Example text messages

Renew your FAFSA today! **Many people renew in 30 min or less** at https://fafsa.ed.gov/. (1/2)

Tip: This time it's easier! **The data retrieval tool loads your tax info for you.** Check it out: https://fafsa.ed.gov/ (2/2)
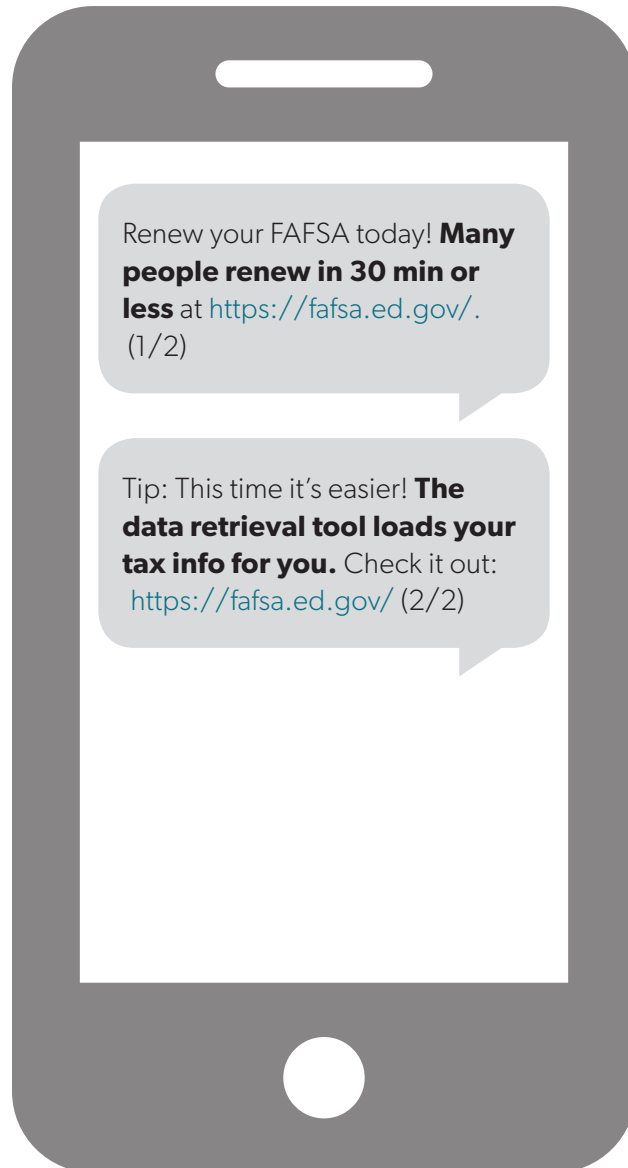
Choose words carefully: Clear, simple, and urgent language works well for FAFSA

Reduce hassles: We focused on well-timed reminders with immediate calls to action.

We highlighted resources that simplify the process (like the tax data retrieval tool)

The **Mindset** Campaign

The goal of the Mindset Campaign is to increase the numbers of students who persist to graduation by helping them normalize challenges as a part of the new student experience, build positive identities around belonging at a CUNY community college, and leverage school resources to help them succeed.

We designed and tested two iterations of this campaign in Fall 2016 and Spring 2017. Full results and lessons learned from each version of the campaign can be found in the appendix.

Our Mindset interventions include:

> *1.* A video featuring a representative set of second-year students looking back on their diverse first-year challenges and how they overcame them.

> *2.* A reflective writing exercise that can directly follow the video and encourage students to apply what they have just seen to their own lives.

> *3.* A series of "booster" messages that motivate positive study habits and help seeking behaviors.

> *4.* A first-year student survey that asks students to look ahead on the challenges they anticipate in college.

Below, learn how we applied behavioral design and communications principles when creating our Mindset campaign materials. These deliberate choices are important to keep in mind as you run one of these campaigns or think about creating your own mindset & belonging related messages.

> **Keep in Mind:**
> Creating impactful Mindset content can be tricky. For guidance about how to adapt content to your own context, check out the Mindset Scholars Network or contact the Psychology department on your campus.

Communications Principles In Action: Mindset

📢 *Grab Attention*	
Channel	**Emails:** introduced the video + writing activity and survey, provided some context, and helped students understand why engaging with them is important.
	Texts & Intranet Splash Page: reminded students of the deadline to engage with the content, linked directly to the tools, and provided motivating "booster" messages.
	⭐ *TIP: Embed the video into a student portal or show it at an orientation. Provide the survey during a freshman seminar or during an advisor session. Requiring students to engage will likely lead to greater impact.*

Timing & Frequency	**Timing:** We sent the video + writing activity and survey within the first two weeks of the semester when relative uncertainty can make new students question their abilities. **Frequency:** We sent "booster messages" on a weekly basis for the rest of the semester to keep positive messages and helpful resources top of mind.
Subject Lines	**Descriptive** subject lines told students what action to take in each email and when to do it. To increase open rates, we created a deadline (*see Emphasize Deadlines*) and included it in some of the subject lines; these were opened at higher rates. **Successful Subject Lines:** Watch the CUNY New Student Video Today and Due Today: Complete The New Student Video Activity
Sender	Texts and emails were sent from either a "First Year Experience Team" or "The Office of Student Affairs" which included booster messages in a weekly student email. Ideally, the sender would be a specific person, like an advisor or other trusted source of specific advice. ⭐ *TIP: Experiment with different senders; the more specialized the better. Messages about tutoring from a specific tutor or messages encouraging help seeking from a student's own professor may make messages feel more personal (see Personalization) and supportive.*

🔍 Know Your Audience

Word Choice	We chose language that is **clear, simple, and direct.** We focused on the main goal—making students feel supported and empowered to seek help—and avoided mentioning the psychological barriers, like stereotype threat, that we were trying to counteract.
Tone & Voice	**The video** spoke to students directly through the voices of their peers giving it a friendly, relatable tone. Booster messages often posed rhetorical questions, mimicking a friendly conversation and giving encouraging advice about how to overcome challenges through the voice of a knowledgeable friend. **Texts and emails** nudging students to engage with the video or survey used words like "Attention" and "Action Requested" to grab students' attention, but not alarm them.
Framing	We used **positive/gain framing** to communicate all the ways in which students can enhance their college experience rather than focusing on what they have to lose if they don't. Highlighting negative outcomes only makes those outcomes more salient and may backfire.
Graphics & Formatting	We embedded the video or survey link directly within **emails** to decrease the hassles involved in engaging with the materials. We wrote **deadlines** in a large red font in a prominent space. We used very little additional text except to give context to the video or survey, or to encourage students to set aside time for the activity.
Personalization	We used students' **first names** to make messages feel more personal, and created materials to **target the specific challenges** of new students, making them feel more relevant. We customized every email with the logo and colors of the school those students attended.

Make Action Easy

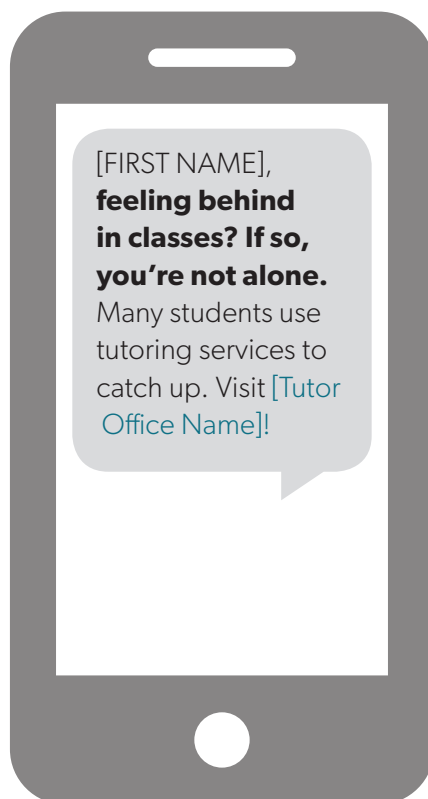|	
Give Concrete Action Steps	Each communication asked students to focus on completing just **one or two actions at a time,** for example: • Complete the survey or watch the video and respond • Visit a tutoring or wellness center • Speak with a professor to get help • Study alone or with peers Focusing students on one thing at a time makes it easier to act.
Emphasize Deadlines	We created an **artificial deadline,** making content available for a limited time, to create a sense of urgency, and encourage more students to engage. The video was made available for a two to three week period; the survey for three to four weeks. As the deadline approached it was emphasized in subject lines and using bold, underlined, and red text.
Provide Help	We emphasized ways to seek help from tutoring and wellness centers to advisors, professors, peers and more. When directing students to campus offices, we included the location, hours, and a small map.

Sample Content: Mindset

Example text message

[FIRST NAME], **feeling behind in classes? If so, you're not alone.** Many students use tutoring services to catch up. Visit [Tutor Office Name]!
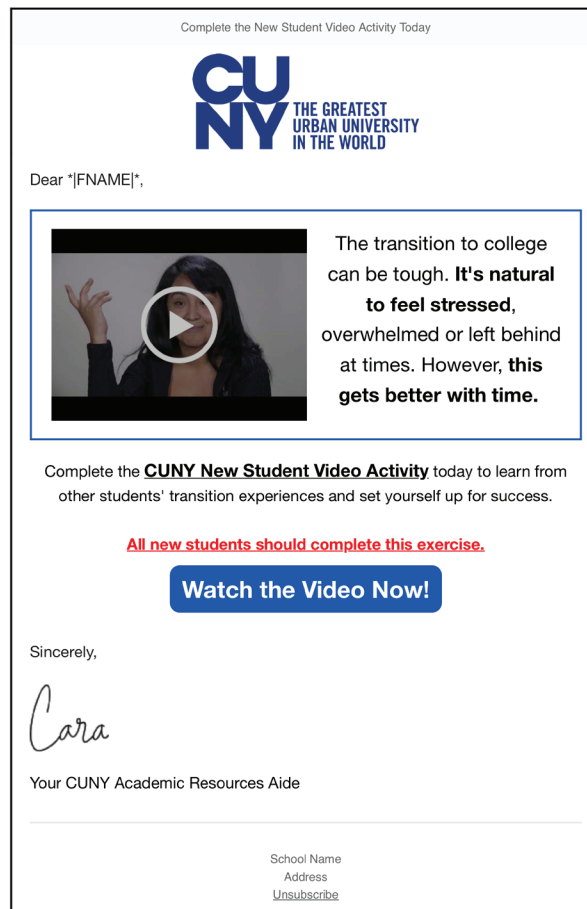
Capture limited attention: Timely reminders draw attention to the most important resources

Give action steps: Texts highlighted one clear action students can take to help overcome challenges (e.g. visit a tutor)

Example email

Complete the New Student Video Activity Today

CUNY — THE GREATEST URBAN UNIVERSITY IN THE WORLD

Dear *|FNAME|*,

The transition to college can be tough. **It's natural to feel stressed**, overwhelmed or left behind at times. However, **this gets better with time.**

Complete the **CUNY New Student Video Activity** today to learn from other students' transition experiences and set yourself up for success.

All new students should complete this exercise.

Watch the Video Now!

Sincerely,

Cara

Your CUNY Academic Resources Aide

School Name
Address
Unsubscribe

Consider timing: We sent Mindset materials early in the semester, when uncertainty is highest

Reduce identity threat: Messages detached external challenges from internal identities & conveyed that challenges are normal among students' peers

Stills and student quotes from emailed video

"I thought I was going through that all by myself. But then over time in the cafeteria, some of the people would try to talk to me and it was like **"Oh wow, we're in the same boat!"**

"I was always afraid to raise my hand in class because I was like 'What if I get something wrong? What if people laugh?'» **"I got comfortable because I started talking to more people in the class."**

Increase feelings of social belonging: Students told their peers that it's normal to feel alone at first—social connections will develop over time.

Use the right tone & voice: We used students' own voices to create a relatable tone

The **Credit Momentum** Campaign

The goal of the Credit Momentum campaign is to encourage students to take at least 15 credits per semester and 30 credits per year so they stay on track to graduate in two to three years. We do this by helping students normalize 15 credits as the recommended number to take and to plan a concrete path to graduation.

We designed and tested two iterations of this campaign in Fall 2017 and Spring 2018. Full results and lessons learned from each version of the campaign can be found in the appendix.

Our Credit Momentum interventions include:

1. A timeline infographic that prompts students to decide when they want to graduate, and nudges them to take 15 credits per semester to graduate sooner.

2. Emails introducing the credit and course planner tools, and alerting students about important course add/drop deadlines.

3. Text messages nudging students to take 15 credits per semester and 30 credits per year.

4. An enrollment portal pop-up that alerts students when they have registered for less than 15 credits.

5. An online Credit Planner tool that helps students visualize their personal path to graduation.[ix]

6. An online Course Planner sheet that students use to record the specific courses they plan to take each semester.

Below, learn how we applied behavioral design and communications principles when creating our Credit Momentum campaign materials. These deliberate choices are important to keep in mind as you run one of these campaigns or think about creating your own credit momentum related messages.

> ### *Keep in Mind:*
> Messages reminding students to "take at least 15 credits this semester" will not feel relevant for students who have already enrolled in at least 15 credits. As students continue to enroll throughout the campaign, those who hit the 15 credit mark should stop receiving reminders. When we ran our Credit Momentum campaigns, we built in routine "list updates" before each message went out; each time, we pulled the most recent enrollment data for the students in our campaign, and then removed "15+ credit takers" from text and email lists. When planning your Credit Momentum campaign, it is helpful to assign a dedicated "list manager" to ensure that messages are sent only to the correct students.

[ix] Note that this version of the credit planner has been updated and improved since we initially ran the intervention, but the version used during the pilot had the same purpose.

Communications Principles In Action: Credit Momentum

📢 Grab Attention

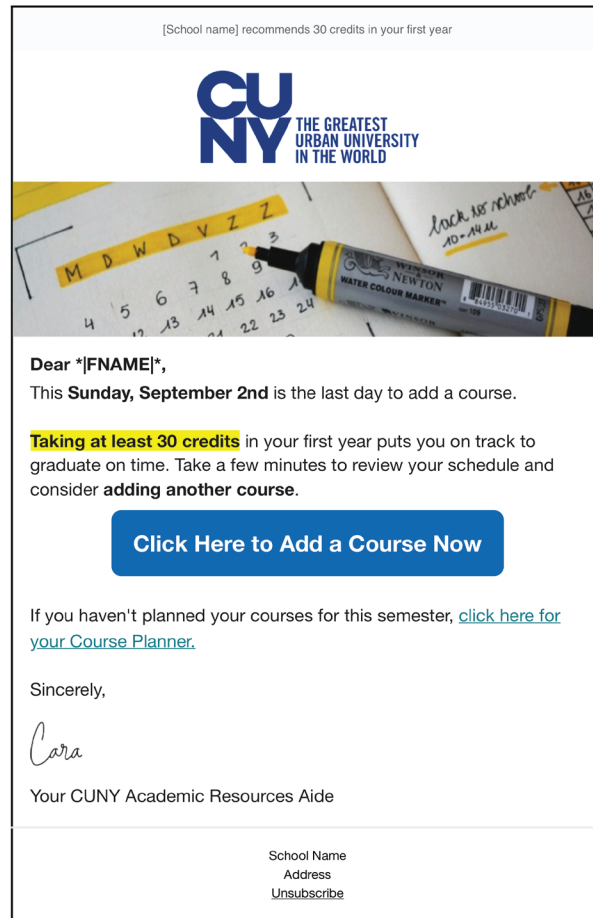|	
Channel	**Emails** and **text messages** informed students about the benefits of taking 15 credits a semester. The messages also directed students towards online, interactive **credit and course planners.** A pop-up in CUNYfirst (school intranet) during course registration created a "moment of choice" for students to reconsider if they enrolled in under 15 credits. ⭐ *TIP: In future applications, additional in-person channels could help students plan more effectively. Introducing the credit and course planning tools during advising sessions, in-person course registration, or first-year orientation would increase engagement with these resources.*
Timing & Frequency	**Timing:** We began messaging as soon as registration opened for the upcoming semester. This early messaging approach gives students time to discuss course options with their advisors, and encourages thoughtful course planning. It is also ideal to reach students *before* they have enrolled in courses for the next semester so they don't need to take the additional step of adjusting their initial course selections. **Frequency:** In the weeks leading up to the course enrollment deadline (e.g. late August), we sent about one email and one text message per week. The pop-up message was enabled for the full length of the intervention.
Subject Lines	**Action-oriented** subject lines work well for Credit Momentum. It is also useful to create a growing sense of urgency as deadlines (like the last day to add a course) approach. The subject line should attempt to highlight the type of information contained within the message (e.g. "Important Course Enrollment Information"). **Key words:** Action Required, Last Chance, student's name
Sender	We sent messages from relevant departments at each school (e.g. "The Office of Academic Advisement"). Ideally, the sender would be a specific person, like an assigned advisor. More specific senders are especially important for Credit Momentum, since students often depend on their advisors for personalized help when it comes to course selection and planning.

🔍 Know Your Audience

Word Choice	We **elevated the key numbers**—15 and 30—wherever possible in order to create an association between these numbers and credit uptake. We also used action-oriented phrases like "plan your credits now" and "meet with an advisor today."
Tone & Voice	We used phrases like "CUNY recommends taking 30 credits per year" to convey authority, while still being flexible. While a strong tone is crucial in order to get students to consider the importance of credit uptake, it is also important to recognize that students might want more flexibility due to variable factors in their lives (e.g., work, family). A "recommendation" helps strike this balance. Our materials also gave students options for ways they could accommodate their outside obligations, such as taking Summer or Winter courses to spread out their credit load.

Framing	In our messages, we used **positive/gain framing** by highlighting the benefit of taking more credits: for example, one text said, "30 credits per year = less tuition $$, on-time graduation, and achieving your goals sooner."
	In the enrollment pop-up, we used an **"enhanced active choice"** frame, which prompts students with a question ("Do you want to register for 15 credits?") and requires students to actively select whether they do or do not want to take 15 credits. This can be an effective way to frame either option as a decision– it makes taking under 15 credits a conscious, thoughtful choice.
Graphics & Formatting	We leveraged several visual displays to demonstrate the importance of early credit load for on-time graduation. The infographic and online credit planner tool make an abstract concept more concrete, and convey a sense of urgency by showing how lower credits translate into more time and money spent on school. We also employed icons such as graduation caps to motivate students to consider their long term goals when deciding on this semester's credit load.
Personalization	We removed students from our messaging once they enrolled in 15 or more credits, so our reminders were appropriate and relevant for the individuals receiving them. The enrollment portal pop-up was also specifically directed at students who were planning to take fewer than 15 credits, so we could give them a chance to reconsider.
	We spoke directly to students by using their names in emails and texts. Since course registration circumstances vary by student, we designed materials that allow students to customize their plan: for example, the online credit planner tool asks students when they want to graduate, instead of assuming that all students have the same goals.

Make Action Easy

Give Concrete Action Steps	Our messages centered around three concrete action steps that students should take when registering for courses:
	1. Use the credit planner to form an intention for when to graduate and to decide how many credits to take this semester based on that graduation goal
	2. Use the course planner to select courses that meet major and graduation requirements, and match intended credit load
	3. Verify a plan with an advisor, who can provide personalized guidance
Emphasize Deadlines	We emphasized real deadlines related to credit uptake. We sent emails and texts right before the deadline to add a course, letting students know it was their last chance to reach the 15 credit mark for this semester. We also notified them of the upcoming drop deadline (i.e. the last day to drop without a "W" grade).
	★ *TIP: Future applications could also call out in-person registration dates on campus as well as late registration deadlines.*
Provide Help	Advisors are the primary source of help for questions related to courses or credits. Where possible, we provided **direct links** to portals where students could schedule appointments with an advisor. We also listed specific questions that students should raise with their advisors so they would feel prepared for a productive conversation.
	Ideally, Credit Momentum messages would come directly from a student's advisor, and tools would be integrated into in-person advising sessions so that students can ask questions directly.

Sample Content: Credit Momentum
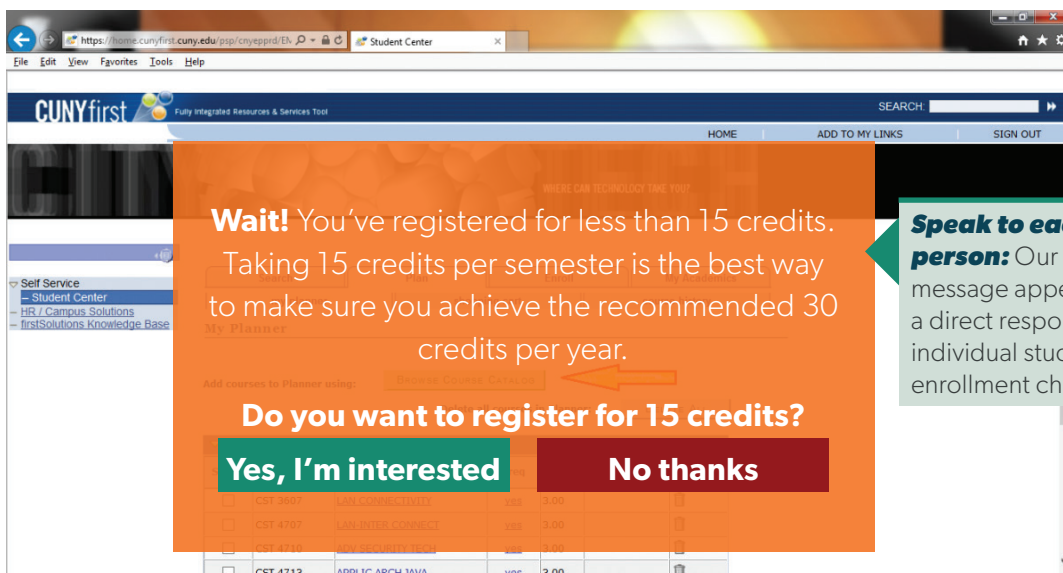
Example email

[School name] recommends 30 credits in your first year

CUNY — THE GREATEST URBAN UNIVERSITY IN THE WORLD

Dear *|FNAME|*,

This **Sunday, September 2nd** is the last day to add a course.

Taking at least 30 credits in your first year puts you on track to graduate on time. Take a few minutes to review your schedule and consider **adding another course**.

Click Here to Add a Course Now

If you haven't planned your courses for this semester, click here for your Course Planner.

Sincerely,

Cara

Your CUNY Academic Resources Aide

School Name
Address
Unsubscribe

Consider frequency: We sent frequent messages (about one email and one text per week) in the month leading up to the enrollment deadline.

Emphasize deadlines: We sent students timely reminders about their last chance to add a course for the semester.

Wait! You've registered for less than 15 credits. Taking 15 credits per semester is the best way to make sure you achieve the recommended 30 credits per year.

Do you want to register for 15 credits?
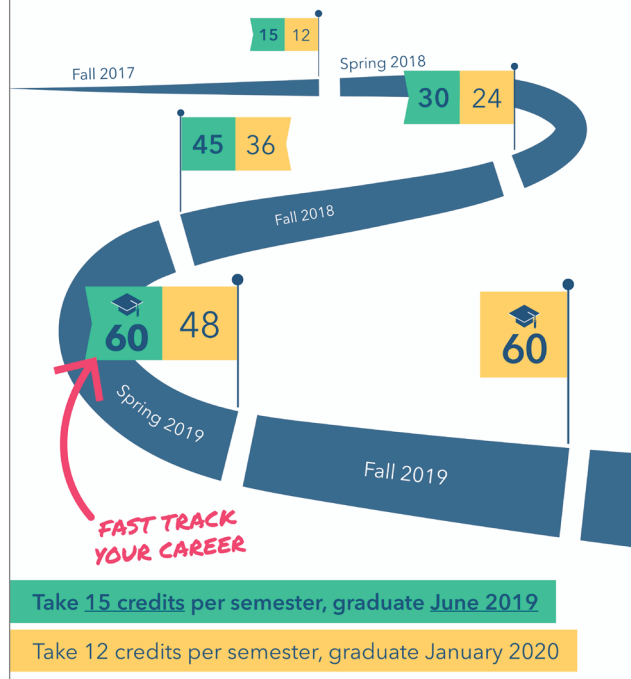
Yes, I'm interested   **No thanks**

Speak to each person: Our pop-up message appeared as a direct response to individual students' enrollment choices.

When do you want to graduate?

How many credits you take each semester will determine when you graduate. You need 60 credits total.

15 | 12

Fall 2017

Spring 2018

30 | 24

45 | 36

Fall 2018

60 | 48

60

Spring 2019

Fall 2019

FAST TRACK YOUR CAREER

Take **15 credits** per semester, graduate **June 2019**

Take 12 credits per semester, graduate January 2020

30 credits per year = **less tuition $$, on-time graduation, and achieving your goals sooner.** Plan w. your advisor today. [link to advisor website]

Counter present bias: This infographic illustrates the relationship between current credit load and time-to-finish.

Anchor to a desirable reference point: We aimed to make 15 credits the reference point (instead of 12) so credit loads close to 15 would feel typical

Counter present bias: This text concretizes the future benefits of taking a higher credit load now.

The **First Year Success (FYS)** Campaign

The goal of the First Year Success campaign is to increase students' persistence to graduation by tackling three sets of first-year challenges at once using a year-long comprehensive messaging approach that supports students more globally than an individual intervention can.

We designed and tested one version of this campaign, which ran throughout the 2018-2019 school year. Full results and lessons learned from this campaign can be found in the appendix.

Our First Year Success interventions include:

1. FAFSA materials, adapted from the FAFSA campaign above.

2. Mindset materials, adapted from the Mindset campaign above.

3. Credit Momentum materials, adapted from the Credit Momentum campaign above.

4. A recommended year-long messaging calendar, which staggers the three messaging streams—FAFSA, Mindset, and Credit Momentum—so that each topic is raised when it is most relevant but students don't receive too many messages at once.

Below, learn how we applied behavioral design and communications principles when creating our First Year Success campaign materials. These deliberate choices are important to keep in mind as you run this campaign or think about creating your own comprehensive messaging campaigns.

Keep in Mind: The First Year Success campaign addresses several different topics, and as with previous campaigns, **it is important to ensure that students only receive content that is relevant for them.** This is especially important in a comprehensive campaign like First Year Success: if students who have already renewed FAFSA continue to receive "urgent" renewal reminders, they may lose trust in whomever sent the reminders, and begin to ignore important content related to other topics such as course enrollment or academic resources.

When we ran our First Year Success campaign, we divided the content into three distinct messaging streams (FAFSA, Mindset, and Credit Momentum) so that students who renewed FAFSA would no longer receive FAFSA content but could continue to receive important information related to Credit Momentum and Mindset. Similarly, students who enrolled in at least 15 credits were removed only from messages related to credit uptake, and those who completed the Mindset video activity or survey stopped receiving reminders about those activities, but continued to receive other booster content.

Our process for conducting these list updates was similar to previous interventions: we pulled relevant data and then removed students from the specific messaging stream that would be irrelevant for them. When planning your First Year Success campaign, **it is helpful to assign a dedicated "list manager"** to ensure that messages are sent only to the correct students.

Communications Principles In Action: First Year Success[x]

🔊 Grab Attention	
Channel	This campaign primarily used **texts** and **emails** adapted from the FAFSA, Mindset, and Credit Momentum interventions. **Blackboard announcements** displayed brief reminders and reinforced the text message and email content. ⭐ *TIP: Even more direct channels, such as in-person advising sessions, orientations, or classroom activities, may increase the impact of your messages. Posting links to these materials on school intranet sites or student portals will also increase their visibility.*
Timing & Frequency	First Year Success covered three different topics across an entire school year. In order to avoid inundating students with too many messages at any given point, we carefully timed each topic to coincide with relevant events or deadlines in the academic school year: • **FAFSA** reminders went out from October, when it first opened, until June, the priority deadline for filing. • **Credit Momentum** messages were concentrated around the school class registration cycle, with messages becoming more frequent as course registration deadlines approached. • **Mindset** aimed to capitalize on the fresh start that students experience at the beginning of a new semester, concentrating the most important messages in the first two weeks of classes, and then following up with monthly messages that reinforced positive student mindset and offered specific strategies for student success during finals.
Subject Lines	First Year Success took advantage of A/B tested subject lines from earlier messaging campaigns, reusing those that got high open rates and basing new subject lines on the style and tone of those that had previously been successful. Resources for A/B testing can be found here.
Sender	The best sender is always a **real, well-known and trusted person** who can also provide help if students have questions. Since we couldn't send our text messages and emails from one person, we created a fictional persona, Cara (the CUNY Academic Resources Aide), to approximate a real person and make messages feel a little more personalized. This seems to have been effective among many students; we heard stories from campus staff that students showed up to offices mentioned in the messages, asking to speak with Cara.

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[x] First Year Success pulls directly from FAFSA, Mindset, and Credit Momentum content. See each intervention page for more details on communications in action.

Know Your Audience

Word Choice	We relied on **simple language,** avoiding overly technical terms or jargon to ensure students understood the message.
Tone & Voice	Tone and voice varied based on the topic of the messaging and how close to a deadline the message was being sent. For instance, first reminders adopted a casual, friendly tone to make students aware of an action or behavior. As the deadline approached, the tone became more urgent with phrases like: "last chance," "urgent," or "deadline."
Framing	First Year Success used positive and negative framing at different times, in hopes that what didn't move one student might move another to take action. The appropriate frame also varied by topic: • **FAFSA** messages used loss framing leading up to the priority deadline to accentuate the real, negative consequences of failing to act. • **Mindset** messages relied on gain framing, encouraging students to think positively about their abilities rather than worry about negative outcomes. • **Credit Momentum** messages used mostly gain framing to connect a reward (graduation) with an action (more credits now), though some messages shifted to a loss frame to highlight the consequence of a low credit load (delayed graduation).
Graphics & Formatting	Emails were kept simple and uncluttered by reducing the amount of text and making the call-to-action front and center. We used icons and graphics to make the emails more visually interesting and to help break up chunks of text. When large amounts of information was included, it was presented in a list that clearly enumerated steps and used buttons with embedded links to direct students to additional information.
Personalization	We used several strategies to personalize First Year Success emails and text messages: • We updated contact lists before each message so that only students who had not completed a task received an email instructing them to take action. For instance, for the Mindset campaign, only students who hadn't watched the student video or completed the writing exercise were reminded to complete the activity, and only students who had not renewed the FAFSA received nudges to take action. • We also included the student's first and last name in some email subject lines, the body of emails, and text messages using mail merge. • As in previous interventions, we incorporated school specific logos, color branding, and specific school locations, phone numbers, addresses, etc. ★ *TIP: Personalizing content even further by including information relevant to each student's individual situation, or at least a particular subset of students, would be even more effective at capturing attention. For example, sending a FAFSA related message to students who applied during the previous year but didn't receive any aid, encouraging them to try again this year, would be better than sending that particular message to every student.*
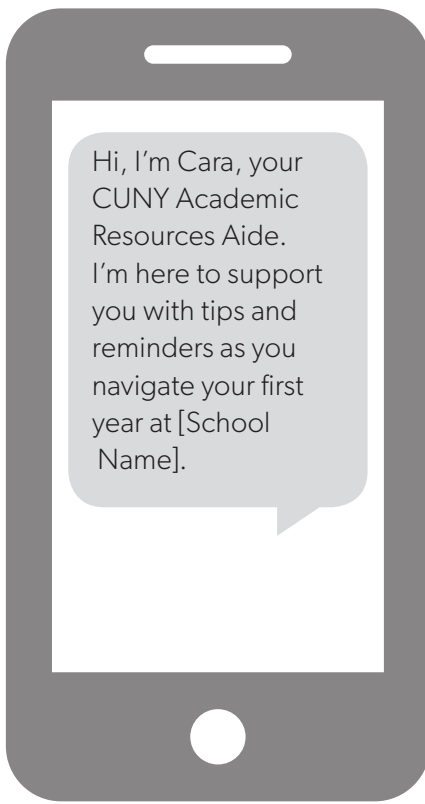
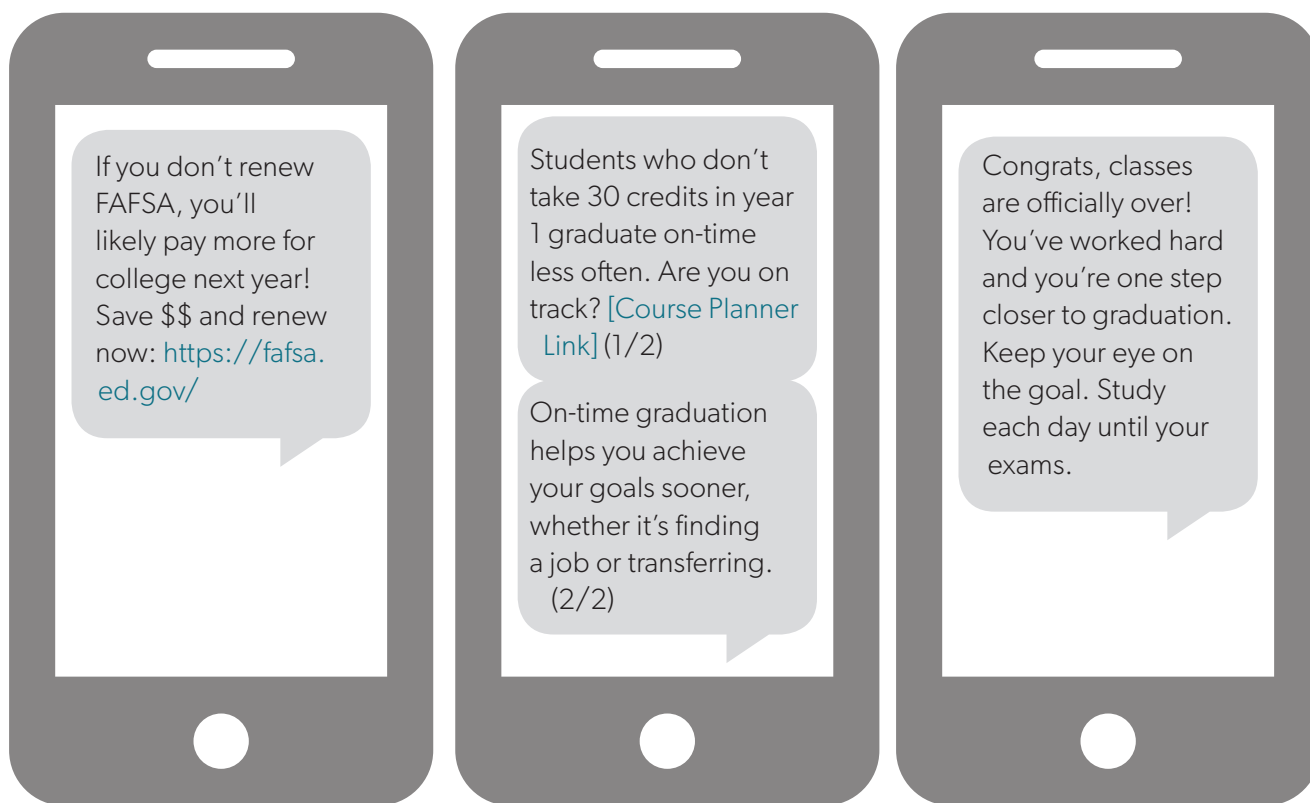|	Make Action Easy
Give Concrete Action Steps	We designed each message to get students **to take action:** whether it be to renew FAFSA, register for 15 credits, or take advantage of tutoring. For each of these topics, we clearly outlined the instructions necessary to take action—what to do, where to do it, and how to get help.
Emphasize Deadlines	We emphasized relevant deadlines throughout the year, such as the FAFSA priority deadline and the last day to add courses. Our messages made these deadlines increasingly prominent as the deadline approached: we often **put deadlines at the top of emails**, bolded or written in red. Where there are no real school-based deadlines, like in the case of watching the new student video in the Mindset stream, we created artificial deadlines to spur students into action.
Provide Help	Almost every message included information about where students can go to ask for help or clarification, including: • Applicable campus staff with whom to follow-up • Relevant offices or departments • Locations of offices or departments, circled on a map • Hours of operation

Sample Content: First Year Success

Example text messages

Provide Help: Our First Year Success messages carried students through their full first year, providing helpful tips, reminders, resources, and encouragement along the way.

Use a trustworthy sender: A real, known person is best. We created a fictional persona to approximate a real person and make messages feel personal.

> Hi, I'm Cara, your CUNY Academic Resources Aide. I'm here to support you with tips and reminders as you navigate your first year at [School Name].

If you don't renew FAFSA, you'll likely pay more for college next year! Save $$ and renew now: https://fafsa.ed.gov/

Students who don't take 30 credits in year 1 graduate on-time less often. Are you on track? [Course Planner Link] (1/2)

On-time graduation helps you achieve your goals sooner, whether it's finding a job or transferring. (2/2)

Congrats, classes are officially over! You've worked hard and you're one step closer to graduation. Keep your eye on the goal. Study each day until your exams.

Apply loss or gain framing: For FAFSA messages, we used loss framing to emphasize the consequences of not renewing. For Credit Momentum messages, we used both loss and gain framing to show the benefits of taking 30 credits as well as the consequences of taking fewer.

Example Credit Planner

Student's Graduation Plan

You've already earned **30 CREDITS** and you have **15 CREDITS** in progress. Keep up the good work by planning your next semesters!

Your recommended credit load is populated below. Try other options by choosing a credit plan from this menu:

Choose a Plan ▾

2020-2021

Fall 2020	Winter 2020	Spring 2021	Summer 2021
⊖ 12 credits ⊕	⊖ 3 credits ⊕	⊖ 0 credits ⊕	⊖ 0 credits ⊕
+ Add Courses	+ Add Courses	+ Add Courses	+ Add Courses

+ Add Year

CU NY

Tip:
Click + Add Courses to enter the classes you plan to take. For help, see DegreeWorks ⧉ or contact your advisor.

Back   Review Plan

Design for scarcity: The Credit Planner accounts for the many obligations students have outside of school and suggests flexible options for reaching 30 credits per year.

Counter present bias: Through messaging and resources, we encouraged students to take a moment to plan for the future.

The **Second Year Success (SYS)** Campaign

The goal of the Second Year Success campaign is to help more continuing students follow through on their intention to graduate and transfer to a four-year school. The intervention breaks down the many steps and decisions that make up the transfer process and provides insight into how a student's chosen courses, academic performance, and financial aid eligibility might impact their ability to transfer.

We designed and tested this campaign during the 2019-2020 school year, sending messages to the same students that we messaged during First Year Success. Full results and lessons learned are pending.

Our First Year Success interventions include:

Keep in Mind:
   The Second Year Success campaign was initially designed for second year students, but much of the content would also be helpful to students in earlier semesters. When we shared drafts of our "explainer" documents with students and staff, many told us they wished they could have known (or shared) the information sooner. When implementing these campaigns at your school, consider sharing this content with students as early as possible—especially the materials that address how to build relationships with professors, how to choose the right courses, and how to navigate questions about course withdrawal.

1. One page PDF Explainer documents that provide important information about the transfer process (e.g. Transfer Checklist) and how course selection (e.g. Articulation Agreements), academics (e.g. Withdrawal), and financial aid availability (e.g. Covering the Cost of College) could affect it.

2. A Transfer Terms Glossary that defines jargony transfer related words.

3. A Blackboard Transfer 101 Course that publishes Announcements and houses all of the Explainers, the Glossary, a set of Youtube videos focused on building strong academic habits, a calendar of school specific transfer events, and a list of offices and people to reach out to.

4. Emails that introduce the topics highlighted on Blackboard each month.

5. Texts that remind students to go to Blackboard and explore the available materials.

Below, learn how we applied behavioral design and communications principles when creating our Second Year Success campaign materials. These deliberate choices are important to keep in mind as you run this campaign or think about creating your own transfer related messages.

Communications Principles In Action: Second Year Success

📢 Grab Attention

Channel	**Blackboard:** structured like a course, "Transfer 101" served as the central hub and the main storage and reference point for the Announcements and series of "Explainers."
	Emails: encouraged students to visit Blackboard and provided context around the highlighted transfer related topic.
	Texts: reinforced Blackboard and email takeaways and encouraged students to take concrete action—e.g. read the latest Explainer, schedule time with their advisor, or act before an impending deadline.
	⭐ *TIP: Provide SYS tools in-person during an orientation, advisor or professor meeting and explain how to utilize tools like the Transfer Checklist. Print handouts and leave them in obvious locations in offices relevant to the subject matter.*
Timing & Frequency	**Timing:** we introduced transfer steps early in the semester to allow students to make a plan for completing each one. Where deadlines to make an informed choice existed (e.g. around course selection or withdrawal), we timed relevant messages to deliver important information at least a month before that deadline passed. As a general rule, the earlier the better.
	Frequency: messages were spaced out by five days whenever possible and were sent at the following frequencies: *Blackboard announcements:* two to three per month; *Emails*: about two per month; *Text messages:* three to five per month
Subject Lines	**Descriptive subject lines** told students what topics were highlighted each month. In A/B tests, those that mentioned withdrawal and transfer seemed to catch students' attention most often.
	Successful Subject Lines:
	• IMPORTANT: Talk to an Advisor BEFORE Withdrawing from a course
	• Course Withdrawals Can Shift your Transfer Plan
Sender	We sent our messages from a persona called Cara (CUNY Academic Resources Aide) because our campaign spanned multiple schools. Ideally, the sender would be school-specific so it appears relevant and trustworthy.
	Potential senders: an academic or transfer advisor, a financial aid advisor or professor depending on the subject matter. If sending from an individual person isn't possible, try a pseudonym related to transfer (e.g. Transfer Success Team).

🔍 Know Your Audience

Word Choice	The transfer process requires students to understand potentially confusing or jargony terms like "Articulation Agreement" and "Course Equivalency." Rather than avoiding key terms, we created a **"Transfer Terms Glossary"** page on Blackboard with succinct definitions and referred students there.
Tone & Voice	Using Cara (*see Sender*) we spoke in a **professional but friendly tone** that helped lend credibility to the advice we provided.

Framing	We used a mixture of **positive and negative frames** in this intervention to drive home different perspectives. **Positive frames** emphasized what students have to gain by taking control of their transfer process and seeking help. Reminding students of what they have to gain, can motivate them to take action. **Negative frames** were used to raise the salience of future consequences for ill advised academic or financial decisions, like unnecessarily withdrawing from a course and losing financial aid as a result. Pushing students to think before they act in ways that may be harmful to their long-term goals may help them make better choices.
Graphics & Formatting	SYS emails, Explainers and Blackboard announcements were more text heavy than we would normally recommend because they needed to convey so much important information. To make up for this we always put the **key takeaway and action steps near the top** and used strategically placed graphics & design to break up the text. Paragraphs were limited to a few sentences each, with bolding or underlining to highlight the most important parts. ★ *TIP: Have advisors and professors provide materials to students in person, so they can explain the context and next steps and avoid having to create such text heavy emails or announcements.*
Personalization	We used students' **first names** to make messages feel more personal. Materials were created to **target specific challenges** of students who intend to transfer, making them feel more relevant. Every email was customized with the logo and colors of the school those students attended. ★ *TIP: For an even more personal approach, walk students through relevant materials during advising sessions, explaining how each topic applies directly to them.*

📋 *Make Action Easy*

Give Concrete Action Steps	We focused on **one key action,** regardless of the current topic: **make an appointment with an advisor** to get help with transfer, financial aid, academic or other issues. The transfer process is complex and everyone's situation is different so we made seeking help easy by giving detailed instructions about where to go, who to talk to, and how to call or go online to schedule an appointment. In the Transfer Checklist and Roadmap we provided step-by-step instructions for how to move forward.
Emphasize Deadlines	We created **artificial deadlines** for early transfer steps that lack formal, intermediate due dates to inspire students to make continual progress and not leave time-intensive tasks (e.g. asking for letters of recommendation) until it's too late. We used texts to nudge students around **formal deadlines** and placed them prominently, in bold and/or underlined, at the top of emails.
Provide Help	We made students aware of the range of issues that professors and advisors can help with—from questions about financial aid to letters of recommendation to choosing the right four-year program—and who they should contact for a given question type. To make getting help as easy as possible, we **included links** to advisor scheduling platforms, contact information, and office locations.

Example transfer checklist

YOUR TRANSFER CHECKLIST

CU NY

Complete the steps below to make sure you're on track to transfer to a four-year school!

Save this checklist somewhere you'll see it often
(e.g. screenshot on your phone or print & keep it in a school notebook)

Take these steps THIS semester

By: May 2020

☐ **Set a study plan for the semester** (20 MIN) Watch these Study Habit videos.

☐ **Create a list of 4-6 four-year schools** (30 MIN) Research 4 CUNY schools and 1 or more non-CUNY schools.

☐ **Choose courses that transfer to your four-year school** (40 MIN) Review "About Articulation Agreements" and "Choosing Courses 101" on Blackboard to ensure your BMCC credits will transfer.

☐ **Follow up with your assigned advisor** (30 MIN) Bring a list of schools and courses you plan to take next semester.

☐ **Schedule a campus visit to a four-year school** (10 MIN TO SCHEDULE) During your visit, talk to the transfer coordinator in the admissions office.

Take these steps NEXT semester

By: December 2020*

☐ **Finalize your list of schools** (1 HOUR) Use experiences from campus visits and transfer fairs to make your decision.

☐ **Research submission deadlines** (30 MIN) Schools may have different deadlines. Record these in a calendar.

☐ **Research scholarship opportunities here** (1 HOUR) Note: some scholarship applications are due before transfer applications.

☐ **Check if your schools & scholarships require letters of recommendation or essays** (30 MIN) If so, visit the writing center for essay help & review "Letters of Recommendation 101" for tips on how to ask your professors.

☐ **~2 months before your applications are due,** open the "Transfer Application Checklist" on Blackboard and follow the steps.

❗ ***September 15, 2020** is the deadline to apply for transfer if you want to begin at a CUNY four-year school in Spring 2021. If you are applying in September, get started on these items during Summer 2020.*

See Your Assigned Advisor for Help

M-F: 9-7 **Sat:** 10-6 **Sun:** 11-4
199 Chambers St, Room S108
Academic Advisement and Transfer Center

✉ eadvisement@bmcc.cuny.edu
☎ (212) 220-8315

199 Chambers St

Give concrete action steps: We designed one page "Explainer" documents to provide specific, concrete steps that students could take to prepare for transfer.

Select the right channel: We created a "course" on Blackboard to serve as a central hub for transfer resources. Students were directed to Blackboard via text and email reminders.

Make resources salient: Maps make resources stand out and capture students' attention

Example Blackboard Portal

TRANSFER 101

CU NY | BMCC BOROUGH OF MANHATTAN COMMUNITY COLLEGE

Transfer 101 - BMCC
Announcements
Transfer 101 Resources
Transfer Events & Dates
Study Tips
Contact Your Advisor
Additional Resources
Transfer Terms Glossary

Course Management
Control Panel
Content Collection
Course Tools
Evaluation
Grade Center
Users and Groups
Customization
Packages and Utilities
Help

Transfer 101 Resources

Build Content ⌄   Assessments ⌄   Tools ⌄   Partner Content ⌄   Discover Content

Welcome to Transfer 101!
Enabled: Statistics Tracking
The Blackboard only toolkit that will help guide you through your associate degree so you can transfer to a four-year college sooner and smoother!

Below, find lots of downloadable resources related to academic and transfer success. Explore the rest of this Blackboard only course for study tip videos, a calendar of transfer events and other helpful resources.

By the end of this year you will be more prepared for transfer and many steps closer to your ultimate educational and career goals. **Now is the right time to start thinking about transfer!**

Transfer Checklist
Enabled: Statistics Tracking
Download Your Transfer Checklist

Complete this checklist in order to graduate and transfer to a four-year school. Now is the time to start planning!

Mark your transfer progress so far!

CUNY THE GREATEST URBAN UNIVERSITY IN THE WORLD

Hi *|FNAME|*,

Always give yourself more time than you think you'll need when planning for transfer. There are important things you need to do before you even apply. **Follow these steps:**

1. Check the completed steps on your **Transfer Checklist**. You're getting there!

2. Set deadlines for yourself: plan for *when* and *how* you will complete the other steps on the **Checklist** before this semester ends.

3. Review the **Transfer Roadmap** to understand what you'll do in later semesters and extend or shorten your transfer timeline, if necessary.

Reminder: Practice good study habits that will help you now and at a four-year school. Your grades can affect your transfer goals as well.

All the best,

Cara

Your CUNY Academic Resources Aide

P.S. Are you ready to start applying this fall? Use your **Transfer Application Checklist** to begin the first steps in the application process.

School Name
Address
Unsubscribe

Help people plan:
We encouraged students to save more time than they think they need for transfer planning.

Leverage graphics & formatting:
We used bolding, underlining, and images to highlight key takeaways in emails that needed to include a lot of text.

Reset overly-optimistic expectations:
We told students about the potential consequences of withdrawing from courses, and encouraged them to contingency-plan by talking to advisors.

After 3/19, withdrawing from a class = a W on your transcript. Read how that could impact your transfer plans [Ws Explainer Link] (1/2)

Do the benefits of withdrawing outweigh the costs? Meet with your professor & advisor to determine the best option. The final withdrawal deadline is 3/19! (2/2)

Conclusion

This toolkit summarized insights from a five-year collaboration between ideas42 and CUNY. We hope this guide will serve as a valuable resource for any practitioner seeking to adapt our campaigns and to build their own.

If scaled, these interventions could have a meaningful impact on persistence and success for many students. The FAFSA intervention—which itself builds on successful campaigns at multiple institutions—could put **millions** of additional financial aid dollars in students' hands. FAFSA interventions are low-cost (each email or text generally costs less than $0.50 per student) and very high reward. The other campaigns included in this Toolkit have shown similar potential for impact.

Still, we know that "nudge" campaigns alone can't address every barrier students face on their educational journeys; when so many students have significant obligations outside of school, oftentimes a message or online tool won't be enough to help a student raise their GPA or feel like they belong in college. So, it is important to combine messaging campaigns with structural changes and more comprehensive supports that alleviate scarcity and provide thoughtful, in-person guidance to those who need it most.[xi]

Finally, we hope the process of "learning what works" doesn't end here. Context matters: what works at one school or for one set of students may not work equally as well at another school or with a different group of students. Continuing to rigorously evaluate programs and policies will equip schools to direct resources toward the approaches that are most impactful for their specific students.

Behavioral science interventions—rigorously evaluated, adapted for context, and applied at scale—alongside broader behaviorally informed policy and programmatic changes, will help more students fulfill their goals to graduate and achieve a bright economic future.

[xi] To learn more about applying behavioral science to alleviate scarcity, read ideas42's "Poverty Interrupted" brief: http://www.ideas42.org/wp-content/uploads/2015/05/I42_PovertyWhitePaper_Digital_FINAL-1.pdf

Results Appendix

Below are the results and lessons learned from each iteration of the interventions detailed in this report. We've also included findings from three additional interventions that we did not focus on in this report (Tuition Assistance Program, Placement Tests, and College Melt).

FAFSA

A text and email intervention aimed at increasing the number of students who renew the FAFSA by reducing hassles and uncertainty around the FAFSA renewal process.

RCT	Results	What We Learned
FAFSA 1 Spring & Summer 2016	**Email Intervention (Phase 1):** On average, students in the treatment group were 1.27 percentage points more likely to renew FAFSA than students in the control group (3.27% increase, p<0.10). **Text Message Intervention (Phase 2):** Among late-filers (those who hadn't renewed FAFSA by the priority deadline), students in the treatment group were, on average, 2.86 percentage points more likely to renew FAFSA than students in the control group (13.68% increase, p<0.10). A follow-up analysis showed no effect on academic performance or subsequent enrollment.	• FAFSA reminders show promise in the CUNY community college context. • Weekly text messages sent later in the year may help increase renewal rates among later filers.
FAFSA 2* Spring 2017	This intervention included a **combination of emails and text messages.** On average, students in the treatment group were 9.70 percentage points more likely to renew FAFSA than students in the control group (31.24% increase, p<0.001).[xii] A follow-up analysis showed no effect on academic performance or subsequent enrollment.	• A combination of emails and text messages appears highly effective, and may yield stronger results than emails or texts alone. • Over the year following this intervention, students in the treatment and control groups returned to school at equal rates. This suggests that it may be necessary to combine FAFSA messages with other campaigns (such as Mindset) in order to meaningfully impact semester-over-semester enrollment.

[xii] Note that the 31.24% increase may be unusually high; the IRS tool that pre-populates some FAFSA data for students was not working that semester, making it harder for students to complete the application without our help. Therefore, we believe the number of students in the control group who renewed FAFSA was lower than normal.

FAFSA 3* Spring 2018	This intervention included a **combination of emails and text messages** that aimed to establish whether one-way or two-way messaging capabilities had a greater impact on outcomes. On average, students in the treatment group were approximately 4-7 percentage points more likely to renew FAFSA than students in the control group (7-13% increase, depending on the school, p<0.001). We did not observe a significant difference in renewal rates between students who received two-way and one-way texts.	• The combination of emails and text messages continues to show strong results across schools. • Simple two-way text messages (where students can reply to prompts with "YES" or "NO") do not outperform one-way texts. • If scaled to 50,000 continuing students across six CUNY community colleges, SPI's FAFSA intervention could potentially provide students with up to $16 million in additional federal aid.
FAFSA 4* Academic Year 2018-2019	We did not observe a significant difference in renewal rates between those who received early, less frequent FAFSA messages and those who received later, more frequent FAFSA messages (64.4% compared to 63.7%). On average, students who received FAFSA messages starting in October filed *earlier* in the year than those who began receiving messages in February.	• While both timelines resulted in similar renewal rates by the priority deadline, there may still be benefits to earlier, less frequent messaging. For example, earlier messaging could help students secure their aid as early as possible, and also reduce administrative burden close to the deadline.

These interventions used the June 30th priority deadline as the cutoff date for analyzing renewal rates, due to the associated benefits of refiling by that deadline. In some states, less state aid is available to students who renew after this date. Regardless, these interventions have been effective at helping students file by the deadline. These interventions also build off of the Arizona State University FAFSA interventions, which used the university's priority deadline to ensure students received their maximum financial aid package.[27]

MINDSET

A multi-media intervention aimed at increasing student persistence rates by normalizing college challenges and helping students build positive identities around belonging at a CUNY community college.

RCT	Results	What We Learned
Mindset 1[xiii] **Fall 2016**	On average, students in the treatment group were 2.3 to 3.4 percentage points (p<0.10; p<0.05) more likely to enroll in the subsequent semester, representing a 3% increase in persistence.	• This low-cost, online intervention, implemented only as an implied requirement, had a positive impact on students, although the effect is marginally significant.
Mindset 2 **Spring 2017**	We did not observe a significant difference in subsequent semester enrollment or GPA between the treatment and control groups.	• A mindset intervention may have more impact among students beginning in the Fall semester, who may be less affected by structural barriers impeding persistence.

[xiii] This intervention was built on a previous San Francisco State University intervention that increased the retention rate and GPA among students in an additional support program for students from underrepresented groups: https://www.ideas42.org/wp-content/uploads/2016/12/I42-718_Brief_SFSU_3.pdf

CREDIT MOMENTUM

A multi-media intervention aimed at increasing the number of students who register for at least 15 credits per semester by reframing 15 credits as normal and recommended and through the use of planning tools.

RCT	Results	What We Learned
Credit Momentum Fall 2017	**Enrolled in 15 or more credits:** On average, students in the treatment group were 4.3 percentage points more likely to enroll in 15 or more credits in Fall 2017 (p<0.10). This marginally significant effect represents a 32% increase in the proportion of students enrolled in 15 or more credits. **Number of credits attempted:** We did not observe a significant difference in the number of credits that students attempted between treatment and control. **Grade Point Average:** We did not observe a significant difference in GPA between treatment and control.	• A Credit Momentum nudge campaign shows promise in the CUNY community college context. • Due to structural barriers (for example, significant obligations outside of school), some students may not be able to take 15 credits per semester, and a more flexible "30 credits per year" messaging approach may be more effective.
Credit Momentum Spring 2018	**Attempted 15 or more credits:** On average, students in the treatment group were 1.4 percentage points more likely than students in the control group to attempt 15 or more non-remedial credits in Spring 2018 (27.5% increase, p<0.05). **Attempted 30 or more credits:** We did not observe a significant difference in the proportion of students who attempted 30 credits per year. **Number of credits attempted:** We did not observe a significant difference in the number of credits that students attempted between treatment and control. **Grade Point Average:** We did not observe a significant difference in Spring 2018 GPA between treatment and control. **Subsequent semester enrollment:** On average, students in the treatment group were 2.1 percentage points *less* likely to enroll in the subsequent semester (2.5% decrease, p<0.10).	• SPI's behaviorally informed Credit Momentum campaign appears to be successful in encouraging a higher proportion of students to attempt 15 or more credits during the intervention semester. • The boost in credits is concentrated around the 15 credit mark, as students likely reacted specifically to messaging around "15 credits per semester." • This effect did not carry over into the subsequent semester, suggesting that without additional support and reminders, students may not achieve 30 credits per year. • We observed a small negative effect of treatment on subsequent semester enrollment, and found that this effect was concentrated among students who performed in the bottom 60% in high school (measured by College Admissions Average). This suggests that some students may not have been prepared to succeed with a higher credit load. While attempting 15 credits per semester is correlated with student persistence, some students may require further academic support in order to *pass* these additional credits.

FIRST YEAR SUCCESS

A year-long intervention that seeks to increase persistence to graduation by supporting first year students through several sets of barriers in a more comprehensive way.

RCT	Results	What We Learned
First Year Success Academic Year 2018-2019	**FAFSA Renewal:** We see a statistically significant increase in FAFSA renewal by the June 30, 2019 priority deadline among first-year students in the treatment group. Students assigned to the treatment group were, on average, 4.96 percentage points more likely to renew the 2019-2020 FAFSA than students assigned to the control group. (8.11% increase, p<0.001).	• Texting and emailing students FAFSA reminders and nudges is an effective strategy for getting more students to renew early.
	Attempt at least 15 credits a semester: We find statistically insignificant increases in the proportion of students who attempt at least 15 credits in both the Fall 2018 semester and the Fall 2018 and Winter 2018 semesters combined. In the Spring 2019 semester, we find a statistically significant 3.1 percentage point increase in the proportion of students who signed up for 15 or more remedial and non-remedial credits (6.92% increase, p<0.05), and statistically insignificant increases in the proportion of students who attempted 15 or more remedial and non-remedial credits in the Spring 2019 semester and the Spring and Summer 2019 semesters.	• It appears that the multicomponent nature of the intervention eventually encourages students to attempt at least 15 credits a semester by their second semester of college. We suspect that for those students who do attempt 15 credits a semester, the positive Mindset messaging and additional supports help them succeed and pass a greater proportion of the courses attempted in their second semester.
	Credits passed in a semester: We do not find a significant difference between the proportion of students who pass exactly 15 credits or 15 or more credits in the treatment and control groups in the Fall 2018 semester. In the Spring 2019 semester, there is a significant increase in the proportion of treatment students who pass exactly 15 credits and 15 or more credits. Specifically, we find an estimated 1.9 percentage point increase in the proportion of treatment students who passed exactly 15 total credits (non-remedial + remedial) (27.14% increase, p<0.01) compared to control. We also find an estimated 2.7 percentage point increase in the proportion of treatment students who passed 15 or more total credits (non-remedial + remedial) (14% increase, p<0.01) compared to control.	• Other behaviors and actions, such as adopting a positive, growth mindset or attempting 30 credits per year, may be better suited for a channel other than text and email.
	Attempted 30 or more credits: We did not observe a statistically significant difference in the proportion of students who signed-up for or attempted at least 30 credits during the 2018-2019 academic year.	• In order to help students recognize that struggling is normal in the first semester of college, schools can introduce Mindset intervention content in situations that *require* students to watch the video and complete the reflective writing exercise (for example, First Year Seminars).
	Subsequent semester enrollment: We did not observe a statistically significant difference in any subsequent semester enrollment (i.e. Winter 2018, Spring 2019, or Summer 2019) following the Fall 2018 semester for students assigned to the treatment group compared to those assigned to the control group.	• Future approaches should work to address the structural barriers that likely keep many community college students from attempting 30 credits per year. For instance, more online and distance learning courses/credits may create flexibility for students who work full-time or have child care responsibilities.
	Semester and cumulative GPA: We did not observe statistically significant differences in semester or cumulative GPA over the course of the 2018-2019 academic year between treatment and control students.	

SECOND YEAR SUCCESS

A Blackboard based intervention that aims to help continuing students successfully graduate and transfer to a four-year school by simplifying the transfer process and putting academic and financial decisions into context. The Second Year Success campaign is currently active; **results are pending.**

TAP (Tuition Assistance Program)

A multichannel (email, text, intranet) intervention aimed at increasing the number of students who maintain New York State financial aid eligibility through a combination of study tips and helpful information about state requirements.

RCT	Results	What We Learned
TAP Spring 2018	We did not observe a statistically significant difference in the number of students who maintained their New York State TAP aid.	• The eligibility requirements for the TAP program are complex, and difficult enough to understand and explain that the SPI team found it challenging to get a consensus on how to communicate about the program across participating colleges. • The design of the TAP program also makes it difficult for some students to maintain eligibility given that the minimum GPA increases substantially over time. • While SPI implemented an intervention effectively, the null findings here suggest that the TAP program likely requires changes at the policy level to be more successful.

PLACEMENT TESTS

A paper-based intervention aimed at helping students overcome stress and stereotype threat immediately in advance of placement tests.

RCT	Results	What We Learned
Placement Tests Spring & Summer 2016	We did not observe a statistically significant difference in student performance on placement tests.	• Originally designed as an intervention to be delivered digitally via the computers used for placement testing, this intervention had to be moved to a paper-based version due to cost and logistical constraints. • In implementing the intervention, some proctors broke the randomization procedures, and offered the packet that they thought would be most helpful to the people they thought would need it—making our findings difficult to interpret. • Thus, while we found slightly negative effects on math performance in the treatment condition, it is impossible to say whether the apparently negative effects are due to the disruptive process of the paper intervention, the unobservable biases resulting from an imperfect implementation of the RCT, or the content of the intervention itself. • Improving placement test performance is important, so we recommend that any intervention aimed at this outcome should focus on helping students prepare for the upcoming exam in the weeks before the test.

COLLEGE MELT

A text message intervention that aimed to increase enrollment among students who'd been accepted to a CUNY community college but failed to matriculate to any school. Messages offered timely reminders to re-apply and informed treatment group students that the application and associated re-application fee were waived.

RCT	Results	What We Learned
College Melt Spring 2017	We did not observe a statistically significant difference in enrollment of accepted students.	• The College Melt intervention aimed to increase enrollment among students previously accepted to CUNY by reducing hassles associated with re-applying, and by waiving the associated fee. Our qualitative research revealed that many accepted students who didn't enroll still had a desire to attend college, and were open to attending CUNY. We hypothesized that reduced costs—both financial and cognitive—could help close this intention-action gap. • While this combination of reminders and reduced hassles wasn't more effective than a simple reminder in this experiment, we believe there is still an opportunity to help prospective students matriculate, even after time has passed. Perhaps a more effective intervention would focus on helping students navigate the re-application process and register for classes in their first semester. This would require more diagnosis among "melters" to ensure that their enrollment intentions still exist and to design an intervention that is better targeted to the barriers they face.

Endnotes

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