

## Summary

The benefits of a college education are well established: relative to those with just a high school degree, those with a bachelor's degree make over \$1 million more during their lifetimes, are more satisfied with their jobs, have greater social mobility, and even have better health outcomes. However, the skyrocketing expenses of pursuing higher education are putting these benefits out of reach for many Americans. To address this problem, the U.S. government has created a number of programs to make college more affordable and increase rates of graduation. One highly-touted initiative, the Federal Work-Study program, offers students on-campus part-time jobs to help finance the costs of postsecondary education. Studies have shown that on-campus jobs, more than off-campus employment, increase student engagement across a range of helpful areas like faculty-student interactions and collaborative learning. On-campus jobs are also associated with higher graduation rates.

Despite the well-documented financial and academic benefits to students, work-study jobs remain unfilled at universities across the country. Arizona State University (ASU) experienced similar challenges with its Student Engagement and Employment Development (SEED) Program: just 11% of the 2,046 eligible students applied for SEED jobs in Fall 2014. Consequently, only 20% of jobs were filled—leaving \$684,000 in funds for eligible students on the table.

Educators initially attributed low uptake of work-study jobs to students' disinterest and lack of engagement with the jobs being offered by the SEED program, and brought in ideas42 to examine the potential underlying behavioral factors at play in this problem. In our diagnosis of the situation, however, we uncovered several novel insights about other potential barriers that could be contributing to the low uptake at ASU. Many students don't have the correct understanding of the financial and academic benefits of work-study jobs. Additionally, there are several complicated steps, representing hassles to students, involved in the application process that likely prevented many of those who were interested in SEED jobs from successfully following through on completing their application. Finally, many students simply did not remember the deadline to apply for jobs, were not reminded of it, and missed it.

With these insights in mind, we designed an intervention consisting of a series of behaviorally informed emails to increase applications to SEED work-study jobs. These emails addressed our identified barriers and utilized best practices from behavioral science for email communications. We tested the effectiveness of these emails through a randomized controlled trial (RCT). Relative to existing standard ASU emails, our behaviorally designed emails increased the number of SEED applicants by 28% and the total number of applications by 56%.

These results have important implications for how to increase student interest in work-study jobs and reduce the gap between students' *intentions* to apply for these jobs and the actions needed to *actually* apply for them. Our work at ASU also uncovered interesting insights for effective student communication that can be applied across a range of issues such as academic achievements and other pressing problems in the world of financial aid.

## Highlights

- ▶ On-campus jobs increase student engagement and are associated with higher graduation rates
- ▶ At ASU in 2014, only 11% of eligible students applied for SEED jobs, leaving \$684K in funds on the table
- ▶ Behaviorally-redesigned emails increased SEED applicants by 28% and applications by 56%

## Defining the Problem

Work-study jobs are an important part of policymakers' efforts to help students pay for college, offering an alternative to costly loans. Importantly, these jobs are linked to academic benefits such as increased student engagement, the development of important career skills, and higher graduation rates.

Recognizing the benefits of work-study positions, ASU began an initiative to expand and enhance work-study positions for freshmen on campus in the fall of 2014. The SEED Program created 450 new positions on campus that offered bi-weekly mentorship meetings and access to unique career services. However, of the 2,046 students who were eligible and invited to participate in the SEED Program, only 11% (215 students) applied. And of those applicants, only 90 were successfully hired for a SEED position, leaving 360 jobs open and \$684,000 in unused funds on the table.

Partnering with ASU, we set out to understand the behavioral barriers preventing students from applying and design an intervention to increase applications.

### Highlights

- ▶ Work-study jobs offer an alternative to costly loans
- ▶ SEED Program had low uptake in 2014, with only 90 hires for 450 open positions

## Diagnosis

To understand the context in which students decide to apply to work-study jobs, we conducted focus groups and interviews with both students and financial aid office staff at ASU. Students shared many common concerns and misperceptions about work-study. Some had heard that to do well academically, they should not work during their first year on campus; others saw work-study jobs as menial low-wage jobs not useful to their careers; still others incorrectly believed the application deadline had already passed or that there wasn't an application deadline at all.

We also reviewed the SEED application process to understand other obstacles that might prevent students from applying. We learned that applying requires several key pieces of information that could derail a student's intention to apply, including a resume and references.

From this initial work, we created three behavioral diagnoses that informed our email design: (1) students do not have an accurate "mental model" of work-study jobs, indicated by their misunderstanding of the financial and academic benefits of work-study jobs, (2) a number of additional steps, or "hassle factors," involved in the application prevent interested students from completing their applications, and (3) there is no clear moment of choice to apply because the application deadline is not noticeable, or "salient," enough.

### Highlights

- ▶ Students had a variety of concerns and misperceptions that led them to not apply for on-campus jobs
- ▶ There is a need to create an accurate mental model of on-campus jobs, eliminate unneeded steps in the application process, and help students remember the application deadline

## Intervention Design and Training

Using the insights uncovered from our initial work at ASU, we created a series of 12 emails to encourage eligible students to apply for SEED work-study jobs. The emails tackled the problem from several angles by:

- Emphasizing the money available, the access to mentorship, and the link between on-campus jobs and better academic outcomes
- Reducing small hassles by providing students with a sample ASU resume and a simple guide on who to list for references
- Clearly articulating the deadline in each email, offering a link to a scheduling tool, and nudging students to make a yes/no decision about applying while reading the email
- Incorporating general behavioral science best practices—appealing to the selectivity of the SEED program, employing “loss aversion” framing, etc.

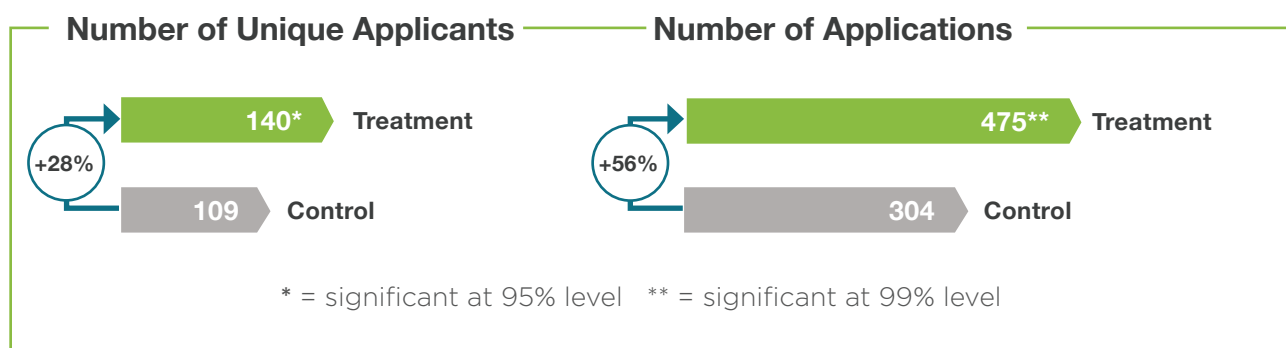
We tested these emails through an RCT among 2,335 freshmen eligible for SEED jobs in Spring 2015. Students were randomly assigned to receive either the ideas42 behaviorally-informed emails (treatment group) or the standard ASU emails about the SEED program (control group). While content differed, the frequency and timing of emails were the same between the treatment and control groups.

The outcomes of the testing were striking. Students opened 23% more of the behaviorally-informed emails (58% vs. 47%), and clicked through the content 60% more than in the standard emails (9.3% vs. 5.8%). As a result, 28% more students applied for SEED jobs (from 9% to 12%)<sup>1</sup> and 56% more applications were submitted by students in the treatment group (from 304 to 475 applications).<sup>2</sup>

We also saw a positive but insignificant change in the number of students hired for jobs in the treatment (55) relative to the control group (50). Due to unrelated operational challenges, the hiring process was significantly delayed and over 200 applications were never reviewed. While we were unable to see the full potential of the behaviorally-designed emails, even this modest increase helped the additional students earn an extra \$1,600 on average.

Highlights

- Emails were tested through a RCT with 2,335 eligible freshmen
- Behaviorally-informed emails increased the number of applicants by 28% and the total number of applications by 56%



## Lessons for the Future

Our work with ASU highlights a number of barriers surrounding student applications to work-study jobs and offers a low-cost scalable solution. At the scale of the entire pool of eligible freshmen at ASU, we increased impact and therefore cost effectiveness of the work-study communications, and we estimate that sending the redesigned emails would cost \$11 for each additional student who would apply to SEED and \$2 for each additional application.

Just as crucially, this project offers insight into creating more effective email communication for college students. With a low cost of implementation and just a few small changes, our campaign significantly improved open and click-through rates using principles of behavioral science. In this case, our most effective subject lines emphasized notions of status and selectivity inherent in the program (e.g., “You’ve been officially selected as a big deal” and “You have something other freshmen don’t”). Within the content of the email, it was more effective to frame click-through options as responses to a question (e.g., “Yes, I want a SEED job now”) than simply providing a link with a basic affirming statement (“I want a SEED job”). These principles can be used to make emails across a wide range of domains more effective.

Overall, this work adds to the growing evidence that behavioral science can tackle diverse challenges in higher education. It demonstrates the unique value of understanding the psychological and contextual factors that influence students’ decisions and actions. And, it provides an innovation that is more cost-effective and easier to scale than typical solutions. These same emails, with minor adaptations, can be used at colleges around the country to increase applications to work study programs—an opportunity for college students to earn potentially millions of dollars toward their education and reduce financial barriers to entering or remaining in the higher education system.

### Highlights

- Simple language changes in email subjects and content yield higher click-through actions and subsequent applications
- Email is low-cost and effective when tailored with behavioral approaches

## Notes

<sup>1</sup> The 3 percentage point increase in applicants is statistically significant ( $p = 0.04$ )

<sup>2</sup> The 56% increase in applications is statistically significant ( $p = 0.01$ )