Nudging for college success

A look at applying behavioral science to postsecondary persistence
Today, holding a college degree is perhaps more vital than ever before. American adults with a bachelor’s or associate’s degree are employed at higher rates, earn between 20% and 70% more annually, are more engaged with their jobs, and report higher levels of life satisfaction. Despite the well-documented benefits of college degrees, enrolling in and graduating from college remains an elusive accomplishment for many people. Of the three million high school graduates in 2013 (including GED recipients), one million of these students did not enroll in college the following fall. For students that do enroll in college, making it all the way to graduation is not a guarantee. In 2014, only 29% of students at two-year institutions completed a two-year degree within three years. At four-year institutions, only 59% of students graduated within six years. These statistics represent a lost opportunity for both the individual to succeed, and for the nation, which increasingly depends on a workforce with the high-level knowledge and skills to compete in a global economy.
What’s also evident from the grim picture painted by these statistics is that successfully earning a college degree is no easy feat.

The college experience presents a myriad of challenges above and beyond the often demanding academic coursework and study required. Time management in a relatively unstructured environment (often for the first time in a student’s life), balancing social and academic demands, independently managing finances, and planning ahead for a post-collegiate career are just a few of these unexpected challenges. However difficult, these aspects of college life are part of what makes it such a valuable experience for students. Grappling with these secondary challenges outside of coursework can be a crucial learning experience itself. But it’s also clear that along with the beneficial, skill-building challenges that students encounter along the way to college success, there are many other elements of the college process that do little but amount to unnecessary barriers on the road to completion.

Take, for example, a seemingly straightforward task like selecting which courses to take each semester. It seems easy on the surface, yet complex and sometimes overwhelming course catalogs can lead many students to register for credits that do not count toward degree requirements, increasing the time necessary to graduate, or in some cases even jeopardize their financial aid eligibility and potentially undermine their ability to pay for college – or both. Many challenges like these can be classified as “behavioral barriers” – unsuspecting obstacles that somehow loom large in preventing individuals from successfully following through on their intentions. Unfortunately, the American postsecondary experience is fraught with these behavioral barriers.

Over the past 18 months, ideas42, a nonprofit behavioral design lab, has been working with community colleges and universities across the country to identify specific behavioral barriers embedded in the road to a degree, design solutions to address these barriers, and test them for impact. At its core, behavioral science helps us understand human behavior and why people make (or don’t make) the decisions they do. It teaches us that context matters, that asking the right questions is critical and that simple solutions are often available, but frequently overlooked or dismissed. It is an essential discipline for identifying the subtle but crucial contextual details that can have a disproportionate impact on outcomes like graduation.

Our postsecondary portfolio is comprised of a diverse range of over 15 individual projects, all ultimately aimed at increasing college degree completion and supporting student success at every stage in the college experience – from pre-admissions to post-graduation. The full results from this portfolio will attempt to take a holistic look at the student experience throughout their time in the postsecondary landscape, but in this brief we’ll have an introductory look at a few of the more common obstacles students face in the college process, and highlight a number of rigorously-tested behavioral solutions with the potential to make a real difference.
Affordability and Financial Aid

For many students, one of the biggest considerations in the decision to attend college is affordability. Can they make it work financially or not? With tuition and other school-related costs (books, fees) to consider, not to mention general living expenses while they study, college is an expensive proposition no matter how you look at it. The Federal government currently offers some assistance to make college more affordable in the form of financial aid and grants. However, in order to qualify for this aid, prospective and continuing students must submit a detailed application to the government every year – a standardized form titled the Free Application for Federal Student Aid (FAFSA). Despite the availability of aid, statistics show that nationwide, students leave more than $2.9 billion in free federal grants unused each year, simply because they do not apply for it. The federal government recently announced positive changes to this process, however some critical bottlenecks remain that behavioral solutions can help overcome. Our research demonstrated that future deadlines, such as the “priority deadline” for the FAFSA that most colleges offer, can be easy to forget and hard to accurately plan for. Moreover, hassles in the financial aid application process itself, like collecting detailed financial information about family income and taxes, as well as physically completing the 10-page application form, can be enough to deter many students from starting an application at all.

Project Spotlight
Increasing on-time FAFSA applications from continuing students

At Arizona State University (ASU), only 18% of continuing students file the FAFSA before the school’s March 1st priority deadline. Applying before the deadline ensures students are able to apply for all possible sources of aid, which might diminish after March 1st and affect their total financial aid package. To boost the number of students applying before the priority deadline, ideas42 and ASU designed an email-based intervention featuring carefully crafted, timely messages to students. For a subset of these students, we also sent emails directly to parents. Families receiving behaviorally-informed student and parent emails were 72% more likely to file by the priority deadline (50%) compared to those receiving ASU’s existing communications (29%). Furthermore, we found that our intervention led to more FAFSA submissions by the start of the next school year (73% vs. 67%) overall, indicating that the emails not only encouraged students to file earlier, but also motivated more students to complete the FAFSA altogether.

RESULTS:
More continuing students submitted the FAFSA before the priority deadline

<table>
<thead>
<tr>
<th></th>
<th>50%</th>
<th>44%</th>
<th>40%</th>
<th>29%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both student and parent emails</td>
<td>Both student and parent emails</td>
<td>Parent emails only</td>
<td>Student emails only</td>
<td>Control</td>
</tr>
</tbody>
</table>
Boosting Retention Rates

Of those students who do successfully pass the financial aid hurdle, a significant number do not return for their sophomore year. At four-year institutions, one in five students drop out at the end of freshman year, and at two-year institutions, that number rises to an alarming one in three. Adjusting to college life is inarguably a challenge for all students, and the reasons for this high dropout rate are varied. Taking a behavioral perspective shed light on what is perhaps an under-appreciated factor contributing to these low retention rates - the powerful role that an individual's mindset and self-perception plays. For many first-time college students, academic rigor and administrative hassles, fears of not fitting-in or belonging, and a lack of positive feedback in a new, often unstructured social environment can trigger feelings of self-doubt and negative self-identities such as not being college material or not looking or acting like someone who belongs in college. While seemingly a small factor, the everyday stress of college life can actually reinforce negative identities and lead students to question whether they truly belong in college in the first place. For some, it creates a dropout point.

Project Spotlight

Boosting retention rates for first-time Freshmen

At San Francisco State University (SF State), 18% of first-time freshmen fail to return for sophomore year. Using the voices of SF State students, we designed an intervention built to bolster social belonging by reframing students' narratives about their struggles adjusting to college life. Specifically, we sought to frame early struggles in college as normal for anyone adjusting to a new environment, rather than being an indication that they don't belong. The intervention had three key elements: an online student testimonial video shown to incoming freshman, a brief questionnaire designed to reinforce social belonging, and follow-up messaging using each student's individual questionnaire responses.

We observed promising results among a group of at-risk students participating in Metro Academies, a high-touch support program at SF State. Metro students who got our intervention were 10% more likely to return for sophomore year than their program peers not receiving the treatment. Treated Metro students also completed more credits and earned higher GPAs than their peers in the control group. The retention rate and GPA for the treated Metro students even exceeded the SF State average.

RESULTS:
Increased Sophomore Year Registration Rates for at-risk First-Year Students

<table>
<thead>
<tr>
<th>Social Belonging Intervention</th>
<th>91%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>83%</td>
</tr>
</tbody>
</table>
Timely Completion

Once they’ve cleared the crucial freshman-retention hurdle, completing a college degree on time, for example a bachelor's degree in 4 years, becomes a focus for many students. All students face limits on the amount of financial aid they’re eligible for, and even if they’re not maxing out, every additional semester in school represents a lost opportunity to earn income and develop experience in the work force. However, about 33% of students will spend more than six years in school earning a bachelor’s degree. Various barriers prevent students from completing their degrees in a timely manner, including accumulating credits that don’t count toward a degree, failing or withdrawing from classes, and changing majors, among others.

Choosing their course schedule is a critical decision that students make each semester, yet one that often leads students in the wrong direction from the beginning. At the time of course selection, students may not be aware of their degree requirements, and thus course eligibility may not be a primary consideration in these decisions. Furthermore, selecting an eligible course that fits into a tight schedule can be a tedious process when course options are often not presented in ways that make it easy to identify or compare options. Switching majors or selecting a major well into a college career can easily lead students to accumulate credits that are unnecessary for their ultimate degree path. Compounding all of these obstacles is the fact that potentially helpful pieces of feedback on course selection from the school, such as a degree progress “audit” from an advisor, often don’t arrive in time for a student to take corrective action.

Project Spotlight

Helping students register for eligible courses

At Valencia College in Florida, in any given semester one in seven students is at risk of losing part of their financial aid simply because they select courses outside their course of study per Department of Education regulations. For students, evaluating one course against thousands of others is challenging. Convoluted online platforms make checking courses against degree requirements difficult. The complexity of the process, ridden with small hassles, makes it less likely that students will register for required courses. The standard warning emails from Valencia aimed at providing corrective feedback on course selection have not been effective at fixing this problem.

RESULTS: Increased Average Financial Aid Awarded Per Student

$\text{\$6,367} \quad \text{Behaviorally re-designed emails}$

$\text{\$6,217} \quad \text{Control}$
Student Support Services

Once the course schedule has been set, actually earning credit hours from those courses is a requirement for timely degree completion. Failing or withdrawing from classes not only sets students back academically, but it also threatens students’ financial well-being, because the majority of federal and state financial aid programs have strict academic requirements like minimum GPA and course completion rates. To help students meet their academic goals, many schools offer a range of free academic support services. Yet, many of these services are plagued by perennially low student utilization. Why? Low uptake may be driven by misperceptions about the services themselves. In other instances there is a timing mismatch between when a student realizes they may need academic help and when they actually take action to seek that necessary help. Or, sometimes it is simply because of hassles, such as complex and time-consuming processes required for already frustrated students to seek and reserve tutoring and other academic services.

Project Spotlight

Expanding the use of on-campus tutoring services

At West Kentucky Community and Technical College (WKCTC), in any given semester only 4% of students participate in at least one tutoring session, which means they use less than 50% of the Tutoring Center’s capacity for academic support. To address this, ideas42 designed two sets of behaviorally-informed emails: one from the college to students, aimed at making the tutoring center more salient and accessible early on in the semester, and one from the college to faculty, discussing how and when to best encourage students to use tutoring.

The student emails made students 34% more likely to go to tutoring, and they attended 53% more tutoring sessions overall. The faculty emails led to a tripling in the number of faculty who referred students to use the Tutoring Center. Perhaps the most striking result was how strongly students and faculty alike appreciated and responded to positive and motivational messages, which can otherwise be hard to find in the typically stressful college experience (especially for students who are struggling). Fostering personal connection through individualized outreach and encouragement proved a powerful tool to motivate both faculty and students to actively engage in the types of behaviors that lead to student persistence, academic success, and eventually graduation.

RESULTS: Doubled the number of faculty tutoring referrals sent

<table>
<thead>
<tr>
<th></th>
<th>Treatment: 106 referrals sent</th>
<th>Control: 49 referrals sent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18.98%</td>
<td>6.45%</td>
</tr>
</tbody>
</table>

RESULTS: Increased number of tutoring sessions attended by students

<table>
<thead>
<tr>
<th></th>
<th>Treatment: 263 sessions attended</th>
<th>Control: 171 sessions attended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.71%</td>
<td>4.99%</td>
</tr>
</tbody>
</table>
As we’ll see with the full results of our postsecondary work, these behavioral bottlenecks and tested solutions are just the tip of the iceberg. Many other barriers exist, such as devoting adequate time to studying, accessing work-study jobs, and repaying student loans, among others. Individually and collectively these seemingly small barriers prevent students from successfully completing college and achieving their academic, professional, and personal goals. Applying behavioral science to these age-old problems in education provides a new lens with which to explore these barriers and inform the design of effective, low-cost, light-touch solutions that can be scaled to reach millions. In Spring 2016, ideas42 will release a comprehensive look at the results discussed here, as well as a close look at the remainder of our current work applying a behavioral perspective to provide a framework for improving the vast financial and academic pieces of the puzzle that comprises the college experience for students.

To be notified when this full report is released, sign up for ideas42 updates at ideas42.org/pse

ideas42 uses the power of behavioral science to design scalable solutions to some of society’s most difficult problems.
To find out more, visit us at ideas42.org or follow us @ideas42

ideas42