



Foreword

The idea of nudging is everywhere these days, but don't be fooled: not all nudges are created equal. If the goal is improved outcomes, precision matters. What we've seen in our work at Civitas Learning is that to be precise in nudging, four key elements should come into play – opportunity, signal, approach, and impact.

An opportunity is a data-inspired insight – an institution–specific finding that shows the potential for an intervention to work by illustrating the delta in the student outcomes. For example, one of our partner institutions found that African–American students, in particular, who register late have a significantly lower persistence rate when compared to students who register two–or–more weeks before the term start. This is an opportunity to improve persistence outcomes by encouraging those students to register earlier for the next term.

The nudge becomes even more precise when the opportunity is combined with a signal – a prediction of the likelihood that a student will succeed, in this example, to persist. Using strong signal in combination with the opportunity insight to target outreach could mean, for example, only nudging only those students who registered late last semester but also have less than a 50% likelihood to persist; or it may mean modifying the message based on likelihood to persist. This kind of combination often stops unnecessary outreach to students who may be in a opportunity category but not in need of strategic outreach, e.g., they only registered late last semester because the college canceled one of their classes.

Next, comes the messaging approach to the nudge. How do you communicate to students when your goal is to improve their persistence or completion likelihood? We've found that mindset principles are an effective way to increase outcomes improvement. In addition, using positive psychology approaches that emphasize belonging, mattering, growth mindset or normalization in messaging improves effectiveness. Technical, bureaucratic, or overly formal messaging, however, often has a negative impact on student success outcomes. Guiding, testing, and tuning this messaging approach over time is essential—it's why the last element matters so much.

Once a nudge is sent, how do you know if it worked? Understanding the impact of a nudge is critical for learning and becoming more precise over time. By comparing students who received the nudge to similar students who did not, we can understand whether the nudge was effective. The learnings and outcomes from each nudge inform the next in a cycle of improvement.

Far-too-many initiatives, including the growing number of nudge initiatives, take a "spray and pray" approach to implementation. Of course they are launched with the good intentions, and the broad approach is taken in an effort to help as many students as possible. But we know through experience that to move the needle, to really make an impact for all students, precision matters. And precision improves as we all learn together. So as you take the time to read through the following ebook, let's also commit to measuring, sharing, and learning more about how nudging can make a difference for striving students.

Laura Malcolm

Co-founder & Senior Vice President of Outcomes & Strategy

Mark Milliron, Ph.D.

Co-founder & Chief Learning Officer

Introduction

If you're facing stagnated student success outcomes or a student persistence challenge, you aren't alone. Higher education's persistence and graduation rates have remained relatively the same during the past 10 years, while investments in facilities, technology and people have skyrocketed to the tune of \$300B.9

Institutions across the country are faced with the same challenge. They are pouring energy and resources into improving outcomes for students without a complete and sharply focused picture of their student population. As a result, they are struggling to move the needle on positive outcomes for students. For example, it may come as a surprise to learn that many highly performing students will not make it to graduation. Yet, these students often go undetected until it is too late to get them back on track.

In fact, in a recent study of more than 4 million student records², we learned that 98% of institutions lose more students with GPAs above 2.0 than below and, in fact, on average 44% of the students that leave an institution actually have a GPA of 3.0 or higher. Simply put, just because students are doing well in school does not mean that they will stay in school. Digging into their data, Lone Star College (LSC) discovered that at their institution, 78% of their students who leave before completing a degree have GPAs over a 2.0 and 41% have over a 3.0 GPA. Surprised? So was LSC. Because of their high GPA, these students were not "flagged" for outreach or support. But, the reality was that they were losing these students.

At-risk students were hiding in plain sight. But now, they had a timely, precise signal — specifically, student-level prediction scores — that something was off track for those high GPA students and that they were at risk of not completing. They hypothesized that these students, who demonstrated strong academic performance and low prediction scores, may be dealing with external factors, like financial pressures and the challenge of balancing school with other life obligations, that were limiting likelihood to succeed.

What can institutions, like LSC, do to impact the academic careers of students with low persistence predictions? When common triggers don't capture the full picture of student risk, how can you find opportunities to impact student success and scale the right support to the students who need it the most?

Equipped with the strongest signals of success and risk — derived from their own institutional data — along with expert resources, our partner institutions, like Lone Star College, are able to take data—inspired, simple actions that affect positive outcomes for students. They're now deploying "nudges," or strategic student communications intentionally designed to affect outcomes by changing students' mindset and motivating student behaviors that will positively impact persistence and graduation.

And, it's working. In fact, after sending just two timely, personalized and encouraging emails to a precisely targeted group of high GPA students, at-risk more than 200 students who would have otherwise left the institution re-enrolled at Lone Star. This represented \$173,000 in additional retained tuition revenue for the term after just one strategic nudge campaign.

What is a Nudge?

Nudges are small pushes in the right direction that do not require prescribed actions, but encourage certain behaviors. They should be precisely targeted to the right student. When students are presented with a nudge sent from a trusted person, they have the freedom to make their own choices with information about behaviors we know are more strongly associated with positive persistence and graduation outcomes.

"We forget the simplicity of a nudge and how effective that kind of outreach can be, especially when it's timely and personalized. Instead of automatically sending the same message to all students, we can dramatically move the needle on student outcomes when our actions are informed by a stronger signal on what's impacting our students." ³

- Dr. Rito Silva, Del Mar College VP of Student Affairs

In many cases, these simple, scalable actions can help current students improve their outcomes while the institution evaluates, implements, and measures longer-term strategies.

This isn't about doing one more thing. It's about doing one thing with added precision and scalability. It's about making the most of your limited resources and time with an effective, proven solution that will get more students across the stage.

What kind of results might you see with a strategic nudge campaign to the students who needed it the most?

Impact on Student Sentiment

The first effect of a nudge campaign is often student feelings and perceptions. Belonging⁴ and Mattering⁸ are critical concepts to understanding student mindset and motivating them towards behaviors that lead to positive outcomes. They are at the core of what makes for an effective strategic nudge campaign.

Students often don't feel like they belong in college. This could be because they are first generation students or because they are struggling either academically or socially. Telling a student that other students feel the same way they do and affirming that they do, indeed, belong in college can have a powerful effect on his or her motivation to keep working hard.

An important part of feeling connected to a community is the sense that you matter to the people in that community. If you feel like others in the community are interested and concerned about you, it can influence your behavior within the community. It is common, especially institutions that feel large to a student, that students do not feel like they matter to the community. This affects students' sense of belonging. Telling students that their success matters to people at your college or university can positively influence sense of belonging at your institution and encourage behavior leading to successful outcomes.

Affecting Behavior Change

The most effective strategic nudge campaigns influence student mindsets to affect positive behavior change. When designing your campaign, be sure to consider these key principles:

Inspire development & growth mindset in your students.

All students face challenges during educational journey. How students perceive those challenges can determine whether they ultimately reach goals. If a student believes challenges cannot be overcome, or his abilities are fixed, he is less likely to push through the challenges he encounters along the way. However, if a student believes that she can overcome challenges over time and with effort, and that her abilities are not fixed, but can grow, she will respond resiliently when challenges arise. 12

Motivate student goal setting for mastery-learning.

How students perceive their goals may impact whether they succeed. Help students to become mastery–oriented by illustrating for them that the goal of college is not simply to earn good grades, but to learn new knowledge and skills that will help them throughout life. This will lead to better outcomes for students not only in college, but also in careers and life.^{3,6}

Validate & normalize student feelings.

Students may feel that other students do not feel or experience the same things they do. This can lead to a sense of isolation and loss of sense of belonging and connection. Reassuring students that feelings and experiences are normal, that other students have the same thoughts, and that there is support available, can reduce the stress and negative feelings. Normalizing the challenges of college and all its transitions can encourage students to utilize the myriad support mechanisms already in place on your campus. 10.11

Express empathy.

College students need to feel that professors, advisors, and others in the community understand what they are experiencing, are proud of accomplishments, saddened by failures, and believe they are capable of learning. Expressing empathy will increase a sense of belonging, mattering, connection, and self-confidence.⁷

Focus on Outcomes

Effective nudges come from precisely crafted strategies. While many student communications may be bureaucratic or transactional in nature and focus on short-term goals, nudges are designed to impact longer term goals by influencing mindset to affect a change in behavior that leads to persistence.

It is critically important to not overwhelm your students with a long list of resources or choices, and to be specific in what you're asking students to do. As you develop any strategic nudge campaign, consider these guiding questions to optimize outcomes:

What is the goal of your nudge campaign?
 What student behavior are you aiming to affect?

For example, change in mindset or beliefs, develop better time management/ study skills, or use campus resources.

What is the desired outcome?

For example, improving persistence within the target population.

- What action should the student take as a next step?
 What is the call-to-action?
- When is the optimal time to send certain messages?
- To better align support with need and prioritize those most at-risk, what does the spectrum of risk look like within your target population?
- How will you measure the success of your campaign?
- How will you understand the impact of your campaign on sub-groups within the target population?

Effective Nudging Checklist

Through research with our partner institutions, we know that effective nudges (i.e., email messages that are part of a larger nudge campaign) follow a simple formula. When designing a strategic nudge campaign, be sure to include these guidelines:



Data-Inspired.

Nudges are not a one-size-fits-all strategy. There's significant opportunity to add precision and improve outcomes when each nudge is inspired by strong signal from student-level and institutional data insights and the prediction scores.



Short.

Keep it short... really short. Most students scan and read email selectively – if they read at all. A few short sentences with one main idea is best.



Personal & Authentic.

If an email looks, feels, and sounds like a template, it is unlikely to be read. And, the subject line can determine whether the student even opens your email. An email sent from or on behalf of a trusted campus resource, such as the student's professor or advisor, is more likely to be read and taken seriously than from a department or mass email distribution list.



Positive & Encouraging.

So much of the communication that students receive is task-oriented and impersonal in tone. Emails that bring a human connection to the conversation – that are empathetic with statements of encouragement such as, "I know you can do this," – work well.



Grounded In Mindset Principles.

Students' mindsets— their beliefs about themselves and their school setting—play a key role in motivation and achievement. Emails that apply mindset principles such as belonging, mattering, growth mindset, and social normalization, to help students persist and complete are particularly impactful.



Timely & Relevant.

Great nudges provide the right support at the right time to the right students. Make sure you know which students need which messages by understanding the specific student–level risk and the factors influencing their likelihood to persist.



Action Oriented.

Include one call to action in each email. Asking a student to do something specific makes it significantly more likely that they will do it and that it will have an impact.

Sample Nudge Campaign: Strategy, Sequence & Messaging for Precise Student Outreach

To illustrate what this looks like in practice, we've outlined a sample nudge campaign currently being used by institutions across our partner community.

This specific nudge series was designed to improve persistence by helping students with high GPAs and low persistence predictions develop a growth mindset. Growth mindset is the notion that if a student believes that she can overcome challenges over time and with effort, and that her abilities are not fixed, but can grow, she will respond resiliently when challenges arise.¹³

Opportunity for Impact:

High GPA Students are leaving the institution

Strong Signal:

Students with less than 50% likelihood to persist AND with GPAs of 3.0+

Hypothesis:

It's not just academics. Many students struggle with non-academic challenges, like financial pressures or balancing school with family obligations. Using empathy, normalization of their experience, and growth mindset approaches may help them overcome challenges when they arise.

Approach:

Each outreach builds upon the one that came before, shaping student mindset and influencing actions throughout the term.

Here's an example of a mindset nudge campaign:

1 DURING THE FIRST TWO WEEKS OF THE TERM

Send a nudge that normalizes the challenges of college and introduces the idea of growth mindset by asking students to remind themselves of their prior success (based on their high GPA) and the hard work and perseverance that got them there.

SAMPLE LANGUAGE:

- "As this semester starts, keep reminding yourself that hard work and perseverance will pay off in the end."
- A thought exercise as a call-to-action has the benefit of being powerful yet not requiring any
 additional resources beyond sending the nudge. They also provide students with cognitive tools
 they can use anytime to increase resilience when facing challenges.

2 AS THE STUDENT PROGRESSES THROUGH THE TERM — PERHAPS PRIOR TO MIDTERM EXAMS

Send a nudge that expresses empathy for the student journey and reinforcement of growth mindset messaging about the students' ability to overcome challenges on their path to their goals. As a call-to-action, ask the student to click a link to a resource that will help them through midterms, such as time-management tips.

SAMPLE LANGUAGE:

"Think of a time in the past you have successfully navigated all the stresses of life during midterms, and channel those thoughts. You can do this!"

• Linking to a resource as a call-to-action leverages existing resources without requiring additional time or new initiatives. The resources may be ones your institution has developed, or external resources.

3 AFTER MIDTERM EXAMS

Send a nudge that speaks to growth mindset by connecting students to their goals, normalize struggles and define success as the process of learning, not the outcome — and reaffirm their progress so far. As a call—to—action, ask the student to sign up or attend one of your institution's myriad support activities already in place for students, such as student clubs.

SAMPLE LANGUAGE:

"Learning engages the brain in so many ways and it's like exercise, sometimes it hurts a bit but pays off later with diligence and hard work. But it's hard to focus on studies when life feels like it's getting in the way. This is a great time in the term to connect your goals and set plans in motion to finish this term well and plan for next semester."

 Asking students to participate in a support activity as a call-to-action also has the benefit of not requiring any additional resources to support students beyond what is already allocated.

4 TOWARD THE END OF THE TERM OR SEMESTER

Send a nudge that reinforces the prior nudges and celebrates progress on their journey, not the end-point of the semester. As a call-to-action, ask students to visit their advisors, mentors, or a faculty member to discuss the next term.

SAMPLE LANGUAGE:

"Keep in mind that the adventure of this semester has stretched you, and that's a marker of a college education. You're here because we believe you have what it takes to be successful. Don't give up now! A little more hard work and dedication to your studies will help you finish strong."

• This call-to-action may be especially impactful for students in need of acute intervention, especially for students with very low and low persistence predictions.

Impact:

To ensure your campaign is measurable, be sure to define the hypothesis of the campaign, goal(s) of the campaign, eligibility and participation criteria to receive each nudge, participating students, plus campaign content, medium and logistical details. This framework is provided to Civitas Learning partners. Additionally, it is critical to leverage statistically rigorous impact analysis. This facilitates deeper analysis of campaigns, key initiatives and investments. When equipped with this information, institutional leadership will better understand what is working, for whom, under what context, and at what time. This will illuminate understanding about how to proactively improve student success in the most effective and efficient manner, and additionally, it will help focus limited resources.

Want to Learn More?

To aid partners in the development of messages that work, we created the Nudge Hub: a repository of personalized student messages grounded in positive psychology and development theories, including mindset principles such as belonging, mattering, normalization, goal setting, etc. Each message is designed with the goal of influencing student decision–making and driving actions that impact positive student outcomes. We've identified optimal times for student outreach, which are aligned with the realities of when students need encouragement the most. Further, we do this work together — in partnership with these colleges and universities — to get them to meaningful student outcomes rapidly. As a result, they're seeing the needle move at their institution and getting more students across the finish line.

- Visit us online to read more about our partner institutions' experiences with nudge campaigns.
- If you or your colleagues would like to learn more about nudge campaigns or related work, let's connect. Email us at partnerships@civitaslearning.com or call us at 512.692.7175. Current Civitas Learning partners can work directly with their Partner Success team.

About Civitas Learning

Civitas Learning is a student success company delivering the clearest path to improved higher education outcomes. The company's Student Success Intelligence Platform leverages each institution's unique data to find and distribute the strongest signals across the student lifecycle. These signals empower students to make the best possible decisions along their academic pathway. Advisors, faculty, and administrators can personalize support, scale meaningful action, and measure impact to dramatically improve student outcomes.

Today, Civitas Learning is a strategic partner to more than 300 colleges and universities, serving more than 7 million students. Together with our growing community of partners, Civitas Learning is making the most of the world's learning data to graduate a million more students per year by 2025.

Citations

- 1. Community College Daily. (2017). Nudge campaign yields big jumps at Del Mar.
- 2. Community Insights Report (2016). Austin, TX: Civitas Learning, Volume 1, Issue 2.
- 3. Eison, J. A. (1981). A new instrument for assessing students' orientations towards grades and learning. Psychological Reports, 48, 919–924.
- 4. Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. Sociology of Education, 70, 324–345.
- 5. Kuh, George D., et al. Student success in college: Creating conditions that matter. John Wiley & Sons, 2011.
- 6. Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. Journal of educational psychology, 92(3), 544.
- 7. Rendon, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. Innovative Higher Education, 19(1), 33–51.
- 8. Schlossberg, N. K. (1989), Marginality and mattering: Key issues in building community. New Directions for Student Services, 1989: 5–15. doi:10.1002/ss.37119894803.
- 9. Trends in College Spending: 2003–2013. (2016). Washington, D.C.: Delta Cost Project, American Institutes for Research.
- 10. Walton, G.M. & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. Journal of Personality & Social Psychology, 92(1), 82–96.
- 11. Walton, G.M. & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes among minority students. Science. 331(6023): 1447-1451.
- 12. Yeager, DS, Dweck CS. Mindsets that promote resilience: When students believe that personal characteristics can be developed. Educational Psychologist. 47: 302–314. DOI: 10.1080/00461520.2012.722805.
- 13. Yeager DS, Dweck CS. Mindsets that promote resilience: When students believe that personal characteristics can be developed. Educational Psychologist. 47: 302–314. DOI: 10.1080/00461520.2012.722805.

