

Summary

It's well-documented that a postsecondary degree—either bachelor's or associate's—is incredibly beneficial for American adults. People with advanced degrees are more engaged with their jobs, earn 20% to 70% more annually, and score higher on multiple measures of life satisfaction than those with just high school diplomas. Yet 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 low completion rates are driven in part by high rates of failing or withdrawing from classes. In addition to setting back students academically, failing or withdrawing threatens students' financial well-being because the majority of federal and state financial aid programs have strict academic requirements related to GPA and course completion. Students that fail or withdraw may become ineligible for financial aid and therefore unable to pay for college.

At West Kentucky Community and Technical College (WKCTC), course failure and withdrawal are frequent events for many students. Their students have free access to a Tutoring Center to help them with their coursework. However, very few students use these tutoring services. WKCTC has tried to address this problem by providing students with information about the services available through their website and during new student orientation. Yet this solution has not brought about the results WKCTC had hoped for. To address this, the college brought in ideas42 to identify behavioral factors at play and design potential solutions, focusing on students' limited use of academic support services.

Our diagnostic work found that, in fact, many students are aware of the Tutoring Center, but they are not necessarily thinking about tutoring at the times when they may need it most. Furthermore, feedback on coursework is not provided to students at the optimal times to encourage use of tutoring. The first graded assignments are generally not returned until mid-way through the semester, at which point visiting the Tutoring Center may feel difficult and overwhelming for students. For students that did choose to seek tutoring, the steps associated with scheduling an appointment create hassles and may cause students to procrastinate on completing the task. Finally, faculty at the college play a large role in guiding students toward support services and students that are struggling will often turn to their instructors first for help. Yet, faculty at WKCTC were not getting involved enough (suggesting tutoring, offering help accessing it) to successfully bridge the gap between students and the Tutoring Center.

Based on these insights, we designed an intervention consisting of 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. We tested these emails in a randomized controlled trial (RCT) in order to measure their impact.

Our results showed that our interventions successfully encouraged students to make better use of tutoring services available and prompted faculty to connect students with tutoring. The student emails made students

Highlights

- ▶ WKCTC students frequently withdraw from or fail classes, yet very few students use free, on-campus tutoring services
- ▶ Students were not thinking about tutoring at the times when they may need it the most and faculty were not getting involved enough to bridge the gap between students and tutoring
- ▶ Behaviorally-designed emails led 34% more students to go to tutoring and tripled the number of faculty sending tutoring referrals.

34% more likely to go to tutoring, and they attended 53% more tutoring sessions overall. The faculty emails tripled the number of faculty who sent tutoring referrals to students.

These outcomes show that simple and inexpensive interventions in a postsecondary institution, such as well-designed emails, focusing on both students and faculty can have a powerful effect on students seeking help. 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.

Defining the Problem

Many factors contribute to high failure and withdrawal rates, including lack of preparation for college-level course work, poor class attendance, insufficient time devoted to study, and low use of academic support services, among others. For this project, ideas42 and WKCTC focused on the low uptake of on-campus tutoring services.

In the fall of 2013, only 4% of WKCTC students participated in at least one tutoring session, using less than 50% of the Tutoring Center's capacity for academic support (calculated using current staffing availability). During this same semester, 32% of students completed less than two thirds of their attempted credit hours and 31% earned a GPA of less than 2.0. These low course completion rates and GPAs suggest that a significant proportion of the WKCTC student body could benefit from additional out-of-class academic support.

The WKCTC Tutoring Center advertises its services in a limited capacity, with the primary outreach being conducted during new student orientation at the beginning of the fall semester. The Tutoring Center staff visits a limited number of developmental and introductory-level courses during the semester to introduce the Tutoring Center and encourage students to utilize their services. Following this introduction, faculty and administrative staff can refer students for tutoring services through the Starfish student success platform. When referred through Starfish, students receive an automated email alerting them that they have been referred to tutoring, with no further reminder alert or follow-up from the Tutoring Center.

Highlights

- ▶ In the fall of 2013, only 4% of WKCTC students participated in at least one tutoring session
- ▶ The Tutoring Center is used at less than 50% of capacity
- ▶ Low course completion rates suggest that a significant portion of students could benefit from tutoring

Diagnosis

During the diagnosis phase, we analyzed relevant data to better understand student demographics and patterns in academic success, conducted interviews with WKCTC students and administrators, observed on-campus advising services, and reviewed Tutoring Center communications and materials. Through this process, we uncovered a number of behavioral bottlenecks that reduced the likelihood that students would sign up for on-campus tutoring sessions.

First, the availability of tutoring was not salient to students. Students were introduced to the Tutoring Center during orientation, but this was not sufficient to keep tutoring top of mind on a regular basis. In addition, the Tutoring Center had recently

Highlights

- ▶ Tutoring was not top of mind on a regular basis
- ▶ Feedback on coursework is not provided to students early in the semester

moved from a prominent and highly visible location in the student center, to a less visible, more isolated location on the second floor of the library.

Second, feedback on coursework (in the form of graded assignments or exams) is generally not provided to students until mid-way through the semester. Thus, students may not be aware that they could benefit from tutoring services until it is too late. At that point, visiting the Tutoring Center for the first time may feel difficult, overwhelming, or coming too late in the game.

Third, steps associated with scheduling a tutoring appointment, which include finding an adequate time slot for an appointment and either calling the Tutoring Center or signing up in-person, create hassles, which may cause students to procrastinate on completing the task. Students who already feel behind in coursework and stressed may be especially overwhelmed by these hassles.

Finally, faculty play a large role in guiding students toward support services, yet few students receive actionable encouragement from professors and instructors to make use of on-campus tutoring services. Very few faculty use tutoring referrals as a way to guide students toward help and the referrals that are sent are impersonal and vague and rarely are followed-up on. We hypothesized that faculty may not be aware of how or when to refer students to tutoring; making a referral may not be salient at the optimal time(s); and small hassles involved in submitting a referral may lead faculty to indefinitely defer the action.

- The steps involved in scheduling a tutoring appointment create hassles, leading students to procrastinate on the task

Intervention Design and Testing

Over the 2014-2015 school year, we launched three different email communication interventions to encourage uptake of tutoring services and ultimately improve student academic success and completion.

Experiment 1 (Fall 2014):

We started with an industry standard email about tutoring: a template email from the Starfish Retention Solutions platform that is sent to students when they are referred to tutoring. We redesigned this email to simplify the information presented, personalize the greeting, make the key pieces of information the most salient, and include clear instructions for how to schedule a tutoring appointment. We also designed three reminder emails to send out at critical times during the semester.

To evaluate the effectiveness of our email package, we worked with WKCTC to conduct a randomized controlled trial (RCT) during the fall semester. All 4,624 WKCTC students were divided equally among two treatment groups and a control group. One treatment group received our redesigned email and three reminder emails. The other treatment group received the industry standard email about tutoring. The control group did not receive any direct emails about tutoring, reflecting the standard WKCTC communications plan. All students continued to receive standard college communications sent to the entire student body, some of which included information about the Tutoring Center.

The behaviorally-designed email package had a significant effect on uptake of tutoring services for those students new to tutoring. Among those new to tutoring, students in the behaviorally-designed email condition attended

Highlights

- Behaviorally-designed emails sent to students at critical times during the semester increased uptake and use of tutoring
- A similar email campaign sent to faculty increased the number of faculty sending tutoring referrals to students

significantly more tutoring sessions (80 sessions) than those in the industry standard email (56 sessions) or no email (33 sessions) conditions — representing more than double the number of sessions the control group attended.¹

Experiment 2 (Spring 2015):

Building on our experiment from the fall semester, we redesigned a series of nine emails about tutoring to be sent out over the course of the spring semester. We increased the number of emails to be sent, to keep tutoring top of mind for students, and tailored the email schedule to prompt students to utilize the Tutoring Center at optimal times throughout the semester. Across these emails, we included strategic messaging that highlighted positive social norms, reinforced the message that good academic standing was necessary for financial aid eligibility, emphasized peer testimonials, and referenced student and faculty success stories, among other components.

To assess the effectiveness of this redesigned email package, we worked with WKCTC to conduct an RCT during the spring semester with the 3,004 students receiving financial aid, who need to meet strict academic requirements in order to maintain aid eligibility. Students were randomly assigned to a treatment group that received our package of nine emails or a control group that did not receive any direct emails about tutoring. All students continued to receive standard college communications sent to the entire student body, some of which included information about the Tutoring Center.

The behaviorally-redesigned email package had a significant effect on the uptake of tutoring services, and even more so than the one we tested in Experiment 1. Among those students that were eligible to utilize the Tutoring Center (meaning they were taking at least one class for which tutoring was offered), students in the behaviorally-redesigned email condition were 34% more likely to attend a tutoring session than those in the no email condition (from 5.0% to 6.7%).² In addition, we observed that students in the behaviorally-redesigned email condition attended 53% more tutoring sessions than those in the no email condition (from 171 to 263 sessions).³ In an online survey conducted at the end of the semester, students in the behaviorally-redesigned email condition reported more positive perceptions of the Tutoring Center and of students that use the Tutoring Center, and were more likely to know how to access tutoring, as compared to those in the no email condition.

Q: *Considering the emails you received about the WKCTC Tutoring Center, which one (or ones) do you think most inspired you to make a **tutoring appointment or seek academic support?***

STUDENT: “The initial email I received got me to start thinking about the tutoring center. I decided to keep it in the back of my mind in case I felt like I needed help.”

Q: *Considering the emails you received about the WKCTC Tutoring Center, which one (or ones) do you think most inspired you to make a **tutoring referral or discuss tutoring with your students?***

FACULTY: “The first ones during the semester. It was a good reminder to make it known to students early on and to not wait until it was too late.”

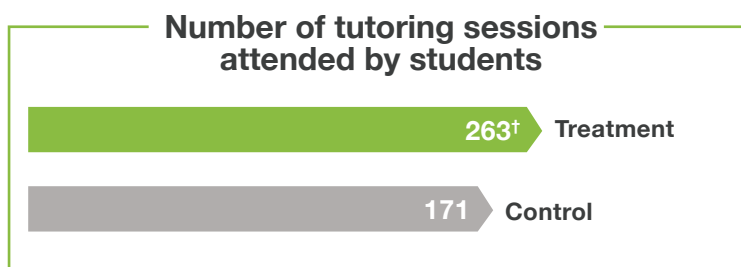
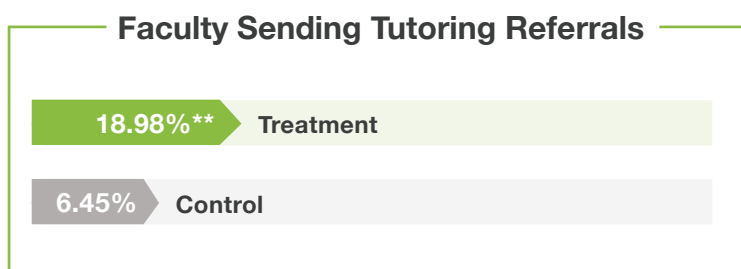
Experiment 3 (Spring 2015):

In the spring semester we also designed a behaviorally-informed email campaign about tutoring targeted at faculty. We created eight behaviorally-informed emails to be sent over the course of the semester to increase the frequency and quality of tutoring referrals sent to students. We designed the emails to include salient and actionable prompts to submit tutoring referrals, as well as including messaging to highlight positive social norms, foster positive faculty identities, emphasize peer testimonials, and reference student and faculty success stories, among other components.

To evaluate the effectiveness of our email campaign, we conducted an RCT with the 261 WKCTC faculty teaching in the spring semester. Faculty were randomly assigned to a treatment group that received our campaign of eight emails throughout the course of the semester or a control group that did not receive any emails about tutoring. All faculty continued to receive standard college communications sent to all faculty, some of which included information about the Tutoring Center.

The behaviorally-designed email campaign had a significant effect on faculty use of tutoring referrals. Faculty in the behaviorally designed email condition were three times as likely to send a tutoring referral as faculty in the control condition (from 6.5% to 19.0%).⁴ In an online survey conducted at the end of the semester, faculty that received the behaviorally-designed email campaign had an increased awareness of the services offered at the Tutoring Center, had more positive opinions of the Tutoring Center, and were more likely to know how students could access tutoring services, as compared to faculty in the control condition.

At the scale of the entire population of students on financial aid at WKCTC, we estimate that it would cost only \$12 for each additional student to use the Tutoring Center, and only \$2 per additional tutoring session. At the scale of the entire faculty at WKCTC, we estimate that it would cost \$30 for each additional faculty member who would send at least one tutoring referral.



† = significant at 90% level ** = significant at 99% level

Lessons for the Future

Our work with WKCTC provides several promising lessons for how to best encourage and support student help-seeking behavior. First, the strong results demonstrate the positive effect low-cost interventions like well-designed email communications can have, and we observed that repeated communications were, in this case, more effective than one-off emails. However, there are considerations and limitations for an email medium. The content must be engaging, and there is probably a drop-off point where communications become excessive and repetition may backfire.

Second, students and faculty provided feedback suggesting that positive and motivational messages were particularly well received. Students truly appreciate hearing positive encouragement and reinforcement, especially when many emails a typical college student receives can be neutral at best (and critical at worst). We heard from students that “encouragement was extremely valuable in motivating me to take action” and “sometimes [they] get frustrated and just need words of encouragement.” Both students and faculty provided positive feedback on the use of peer testimonials and personal stories in emails. However, it is important to achieve the right balance of sentiment and sharing to avoid coming across as insincere.

Third, in trying to encourage utilization of a service, we saw the importance of engaging not only the students, but also the staff and faculty at the college. Our results showed that faculty outreach to students can have a significant impact in encouraging students to utilize academic support services. We heard requests from faculty for more intimate connections between themselves and Tutoring Center staff. Building personal relationships, rather than just communicating impersonal information, is an effective way to motivate behavior change.

The results of our work with WKCTC show that designing simple, inexpensive emails featuring positive messaging can have an outsized payoff by increasing the types of behaviors that lead to student persistence, academic success, and eventually graduation.

Highlights

- ▶ Repeated communications are more effective than one-off emails as long as content remains engaging and repetition is not excessive
- ▶ Positive and personal messaging is encouraging for students and faculty alike
- ▶ Improving uptake of tutoring requires engagement with both students and faculty

Notes

¹ This increase in tutoring sessions attended is statistically significant ($p=0.04$)

² This 2.7 percentage point increase in use of tutoring services is statistically significant ($p=0.07$)

³ This 53% increase in tutoring sessions attended is statistically significant ($p=0.09$)

⁴ This 12 percentage point increase in tutoring referrals sent is statistically significant ($p < 0.01$)