

### Summary

Hundreds of thousands of American community college students drop out for financial reasons. Federal financial aid promises vital support for these students in the form of grants and loans, so long as students meet certain eligibility requirements. But the “shapeless river” of the community college experience, as Judith Scott-Clayton has termed it, means that students often lack structured assistance to overcome obstacles that, if ignored, can scuttle needed aid.

At many community colleges—including Valencia College in Orlando, FL, recent winner of the Aspen Prize for Community College Excellence—the challenge of registering for courses represents one such obstacle. Under federal regulation, students’ financial aid may be reduced if they select courses defined by the school as outside their declared course of study. About one in seven Valencia students is at risk of losing some aid for this reason in any given semester.

What leads community college students off track? First, little guidance is often available on how to evaluate one course against thousands of others. Labyrinthine online platforms make checking these against degree requirements difficult. When students do plan to register for required courses, small hassles make it less likely they’ll follow through. Warning emails contain confusing language that may backfire by discouraging students from re-registering.

At Valencia, we re-designed two emails that the school sends to students during registration: the first to provide general information about how to register, and the second to warn students when they have selected “non-compliant” courses. We reinforced the link between decisions and actions by highlighting courses that satisfy degree requirements over those that don’t and by improving the structure of information students need to know to register.

Few would believe that a low-cost re-design of two administrative emails would influence student outcomes. But after testing these on a sample of about 10,000 Valencia students during the registration process for the Spring 2015 semester, students became eligible for an additional \$150 in financial aid. This number was even higher for minority students. The more than \$1.5 million gained in potential aid eligibility at Valencia highlights the meaningful role that school-student communication plays in helping students at community colleges navigate tough parts of their academic career, gain access to critical financial aid and take another step towards earning a degree.

### Highlights

- ▶ Students need assistance to overcome common obstacles that may prevent receiving financial aid
- ▶ Current registration emails contain confusing information that can discourage action
- ▶ Re-design of two administrative emails by reinforcing link between decision and actions gained an additional \$150 of aid eligibility per student

## Defining the Problem

Valencia, one of America's top community colleges, features a renowned in-person advising system and state-of-the-art technological platforms to guide students through difficult choices. Yet one out of every seven students in Valencia's Associate of Arts program ends their semester with at least one course deemed not to comply with their major. Through initial discussions with Valencia administrators and students on campus, it became clear that, despite the help offered by in-person advising and information technology, many students had difficulty registering for the courses they wanted. Data collected through Atlas—the school's online student-facing portal—showed that it takes students an average of five separate attempts to register for every full-credit course.

Beyond the hassles of registering, potentially serious financial repercussions await community college students who choose the wrong courses. Under Department of Education regulations, the amount of financial aid students receive depends on their registration for courses the school deems to be “compliant” with their chosen “program of study.” This means that students registering for courses not required for their degree risk losing access to hundreds of dollars in much-needed funds (Valencia students with at least one noncompliant course are offered \$217 in aid less on average than those who are fully compliant, even accounting for other factors). Any low-cost solution that helps students stay on track could therefore advance the completion prospects of hundreds of thousands of students across the country.

### Highlights

- 1 of 7 students at Valencia end semester with one non-degree related course
- Students at Valencia attempted an average of five tries to register for every full-credit course
- Registering for classes not required for degree creates high-risk of losing financial assistance

## Problem Diagnosis

To choose classes, a community college student must first flip back-and-forth between many pages, scroll through long pull-down menus and choose keywords to optimize complex search algorithms (at Valencia there are around 1,000 courses, each with an average of 17 sections). To avoid being overwhelmed, Valencia students report sometimes taking shortcuts: some may just go with the catchiest course titles or those that are memorable for simply appearing close to the top of the page. Most students we interviewed begin by browsing instructor reviews on “ratemyprofessor.com” rather than major guidelines, course descriptions or titles.

Whether browsing in print or online, most community college students receive little written, in-the-moment guidance on the aspects of the choice that matter, such as relevance to their majors and thus their financial aid packages. In a survey, Valencia students say: “When looking up classes to register on Atlas, the lay-out is sometimes confusing and it is hard to follow and distinguish between each individual class...The important parts, like registering for classes, finding books, paying fees, [are] hidden away.”

Once students know the classes they want, they must track course codes, cross-check with other identifying codes, and ultimately type them into an online form. If a number is wrong or they have already taken a given course, an error message will appear, and they will have to start again. As frustration builds with each failed

### Highlights

- Valencia students take shortcuts in registering for classes due to difficulty of sorting through information
- Important information is hidden away on online system
- Students must cross-reference information to successfully register; usually takes multiple attempts

attempt—students attempt to register more than five times per class on average—students lose focus on their plan, making it even less likely they will go back and find alternatives.

When Valencia students do register for a course outside their major, no immediate warning is given for this more serious error. Instead, students receive a system email—which they may not see until the following morning—asking them to fix the problem. This email may not clearly guide students in how to remedy the situation or what the consequences may be if the student does nothing. Further, the email’s tone could sound threatening or punitive to students, who may avoid paying attention to it as a result. “After all,” a student may think, “the system let me register for those classes—wouldn’t they stop me from doing so if something was wrong?”

## Intervention Design and Training

Our diagnosis yielded several insights and potential avenues for behavioral intervention design. Students may interact with several of Valencia’s student services while selecting courses. More active counseling may help reinforce students’ intention to register for the right classes; course browsing materials could do a better job of guiding students towards the courses that matter for their financial aid awards; and a more streamlined online interface might reduce the chance for distraction, hassle or loss of focus in picking courses.

To change each of the above would involve substantial operational challenges and investment. However, email communications from the administration to students provide a low-cost venue for testing how appropriate outreach can “nudge” students to use existing technology and materials more fruitfully, yielding results that are relevant to many other institutions beyond Valencia. We therefore chose to re-design two simple emails sent by Valencia to students: (1) a **pre-registration email** blast sent out to all students laying out instructions and procedures for the upcoming registration cycle, and (2) a **post-registration email** generated when a student has registered for a course outside of those eligible for financial aid under their declared major, intended to help the student take corrective action.

Both re-designed emails used simple phrasing, clear layout, and a conversational tone to make it easier for students to understand what they need to do and why. To spur students to action, they combined a friendly, personalized touch with a clear mention of the possibility of losing “hundreds of dollars” in financial aid eligibility. Numbered action steps—with embedded links so students could take action right at the moment of reading them—framed the most important information in the order that would produce best results for the student, for example:

**Step 1.** Choose the right courses

**Step 2.** Visit “My Education Plan” to make sure you’re not repeating classes

**Step 3.** Check your ticket time

The emails also made a point of highlighting only those courses that fit with a student’s major by linking to an online listing of Associate of Arts major requirements. For students who needed extra help, both emails contained clear information on how to find advisors and make an appointment.

### Highlights

- More sympathetic engagement can help students take action to correct mistakes
- A more streamlined interface for registration could reduce hassles for students
- “Nudging” students to take action using email communications can be cost-effective

Finally, to ensure that students noticed and opened the emails in their inbox, we chose subject lines that conveyed the urgency of the message using a frank and action-oriented (e.g. “You need to fix your registration”) rather than frantic (e.g. “URGENT!!!”) tone.

## Test

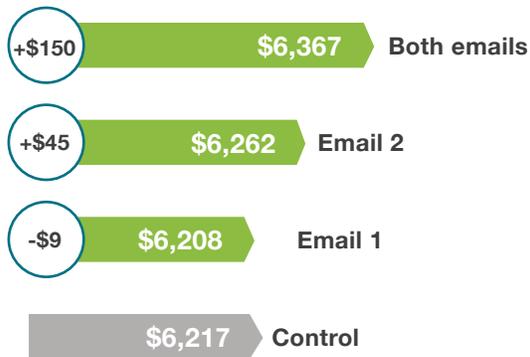
To test the effectiveness of the re-designed emails at Valencia, we randomized 10,102 Associate of Arts students into four groups receiving only the re-designed “Pre” email, only the re-designed “Post” email, both re-designed emails, or neither. We ran the test during the registration period for Spring 2015 semester, occurring between early October 2014 and mid-February 2015.

We found that exposure to our re-designed emails led to relatively large gains in the overall number of credits students registered for and similar-sized gains in their total financial aid award amounts (grants and loans included). The average aid award for students receiving both re-designed emails rose by \$150.28 per student for the Spring semester compared with students who received neither email. Minority (nonwhite) students saw the greatest Spring semester increases of all, with

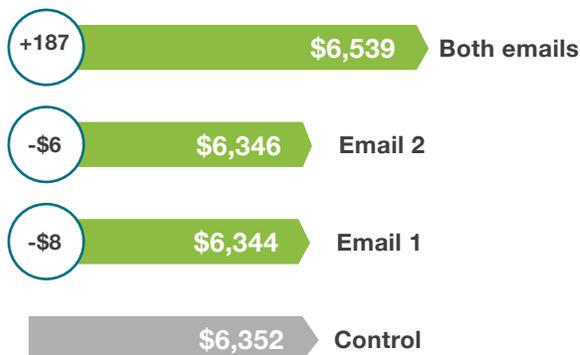
\$186.82 more in aid awards per student.

### Increases in Offered Aid

For All Students



For Minority Students



## Highlights

- ▶ Through email interventions, average financial aid award rose by \$150.28 per student.
- ▶ This amount was higher for students that traditionally need more help, such as minority students
- ▶ Improved communications can be used together for greater effect

Corresponding increases in credit load suggest that these improvements resulted from a more streamlined, guided, and focused registration process overall. Students exposed to both re-designed emails passed an additional 0.22 credit-hours (a 3% overall increase), even when accounting for extra credit-hours attempted.

Interestingly, the results also show that neither email intervention was responsible for meaningful improvements in either financial aid or academic indicators *on its own*; rather, most gains resulted from their *combination*. It may be simply that the second re-designed email worked more effectively when it triggered a memory of the information in the first re-designed email, or that students may have opened the second email more often due to the first email’s influence. Perhaps students who received both re-designed emails *interpreted* these together as Valencia’s attempt to engage with them more positively and proactively. With the large volume of emails students receive from the school in a semester—many

of them sounding serious and perhaps threatening—students may appreciate what seems to be a coordinated effort by the administration to communicate more effectively. Whatever the channel, one email alone seemed not to be enough to grab students’ attention and spur them to action.

## Lessons for the Future

Our results demonstrate that community colleges should seek to communicate better with students—particularly those from traditionally disadvantaged backgrounds—at moments when they face difficult choices and actions. This is especially important when systems cannot be easily made more effective. Administrators must remember that less can sometimes be more: throwing more and more information at students may only scatter their focus and make choices harder. Stern words about frightening consequences may discourage students from paying attention. Helpful, friendly, personalized communications may do a better job of spurring action than those along the lines of “IMMEDIATE ACTION REQUIRED.”

Better guidance doesn’t always mean overhauling online interfaces, upgrading systems, or hiring counselors—instead, context-based tweaks in existing systems that take advantage of insights from behavioral science can have outsized impacts on completion outcomes.

How outsized exactly? A back-of-the-envelope calculation shows we created a total of \$1,518,129 in new potential financial aid eligibility across our sample of 10,102 students, with only a small human resources investment from Valencia’s side to facilitate implementation. What’s more, students receiving both emails would enroll in and pass 2,222 additional credit hours—with incalculable value for their completion prospects. Given such a cost-effective toolkit, using behavioral insights to improve communications seems like a good investment for any institution that prioritizes student outcomes.

For community college students, course registration is not merely the gateway to a degree path: it may also be a lifeline to receiving critical financial aid. At such an important moment in a student’s academic career, schools must proactively ensure that students are receiving critical messages in the way that best sets them up to take appropriate action. That such behavioral insights may be applied so readily and at such low cost makes it all the more imperative for schools to find opportunities to nudge students towards completion.

### Highlights

- ▶ Effective communications often have a positive tone, use matter-of-fact subject lines and make action steps clear
- ▶ Email communications can be low-cost to implement; simple tweaks may yield great results