



Rewards and Recognition in Support of Student Retention

Best Practice, Research and Case Studies

Student Performance Summary

A growing body of academic research validates the use of recognition and rewards programs to engage students and motivate the behavior necessary to generate positive academic outcomes.

Program	Outcome Highlights
Opening Doors <i>Source: "Rewarding Persistence" by Richburg-Hayes et al, MDRC, 2009</i>	<ul style="list-style-type: none">• Increased student course registration by 7%.• Increased persistence. Students 30% more likely to re-enroll.• Increased # of credits earned by 3.5 credits.
Student Achievement and Retention Project <i>Source: "Incentives and Services for College Achievement: Evidence from a Randomized Trial" by Angrist et al, American Economic Journal, 2009 Thornton, NBER, 2004</i>	<ul style="list-style-type: none">• Students had higher GPAs and earned more credits.• Outcomes persisted even when incentives not offered.• Incentives increased the rate at which students sought academic support.
University of Amsterdam <i>Source: "The Effect of Financial Rewards on Students' Achievement: Evidence From a Randomized Experiment" by Leuven et al, CEPR Discussion paper, 2003.</i>	<ul style="list-style-type: none">• Students with high math skills and higher educated fathers had higher passing rates and earned more credits with rewards.• Incentives can only have an impact if the requirements are feasible.

Executive Summary

College retention persists as a complex and challenging problem. While college enrollment in the United States has increased steadily over the years, rates of college completion have remained flat. The statistics reveal the severity of the problem:

- Approximately two-thirds of students who begin at a four-year college or university earn a bachelor's degree within five years.
- Approximately one-third of students who begin at a community college earn an associate's degree or a bachelor's degree within six years.

The reasons for these statistics are abounding, highlighting the multi-variant nature of the problem. The result is devastating for students, higher education institutions, and society at large. Fortunately, reform is in motion. Education Secretary Arne Duncan noted that the budget includes a \$500 million grant program for new federal-state-local partnerships to improve retention and graduation rates, particularly for low-income college students. In addition, organizations such as the Gates Foundation and MDRC, to name a few, are exploring innovative strategies through empirical research to address the issue. uBoost is a tool that builds off of research findings, designed to help colleges and universities efficiently implement identified best practices.

The highlighted studies reveal the effectiveness of various strategies to increase student achievement and retention. The strategies explored include the use of financial incentives with and without student support services connected to target student performance/achievement.

Case Studies

Opening Doors MDRC - Louisiana

Using a random assigned study, MDRC examined the effects of a performance-based scholarship with an incentive component to encourage academic success and persistence in two Louisiana community colleges. The program targeted low-income parents, offering students in the program group \$1,000 for each of two semesters (\$2,000 total) if they met two conditions: They had to enroll in college at least half time and maintain an average grade of “C” or better. Students could receive additional financial aid (federal Pell grants). Program counselors monitored students’ progress and physically distributed the checks three times during the semester (beginning, middle, and end). Students in the control group received standard financial aid and college services.

The study findings highlight the effectiveness of the performance-based scholarship program on course registration, persistence and overall social and psychological outcomes.

- The program increased student course registration (by 7%) in the first semester. In addition, students eligible for scholarship were more likely (by 6.4%) to register full-time, even though only half time was required for scholarship.
- The program increased persistence. Students in the program group were 30% more likely to register in the second semester than students in the control group. Long-term analyses highlight that students in the program group were more likely to enroll in college, by 6.5 percentage points, up to four semesters, although results diminished over time.
- The program increased the number of credits students attempted and earned. Students in the program group earned 3.5 more credits than the control group students through the fourth semester after random assignment.
- The program had positive effects on a range of social and psychological outcomes. Students were surveyed 16 months after they began the study and reported more positive feelings about themselves and their performance and indicated that they were more engaged.

As with any study, researchers are left with more questions to explore. However, according to the researchers, “...it has also produced some noteworthy results and appears to offer a promising intervention to increase students’ persistence in pursuing their postsecondary education.” Backed by the Gates Foundation, MDRC launched a replication of this study in 2008 in California, New Mexico, New York City, and Ohio to determine whether such scholarships are as effective in different geographical locations, for different target groups, with different amount of financial incentives, and over varying durations.

Review the full report: *Rewarding Persistence: Effects of a performance-based scholarship program for Low-Income Parents* by Lashawn Richburg-Hayes, Thomas Brock, Allen LeBlanc, Christina Paxson, Cecilia Elena Rouse, and Lisa Barrow.

STAR - The Student Achievement and Retention Project Canada

A randomized study of students at a Canadian college evaluated the effects of strategies (academic support coupled with incentives) designed to improve academic performance among college freshmen. The Student Achievement and Retention Project (STAR) randomly assigned students to one of three treatment groups. One treatment group was offered an array of support services, including access to mentoring by upper-class students and supplemental instruction. A second treatment group was offered substantial cash awards, up to the equivalent of a full year's tuition, for meeting a target GPA. The third treatment group was offered a combination of services, support services as well as cash awards for performance. The control group was offered standard support services.

Use of the support services was highest among women and for students in the combined group, highlighting that incentives had an immediate short-term effect of increasing the rate at which students sought academic support. The findings indicate that students in the combined group had higher first year GPAs, earned more credits, and continued to outperform the rest of the STAR population in the second year, in spite of the fact that incentives and services were available only in the first year. The program had no effect on men.

Review the full study: *Incentives And Services For College Achievement: Evidence From A Randomized Trial* by Joshua Angrist, Daniel Lang, and Philip Oreopoulos.

University of Amsterdam Amsterdam

A field experiment conducted at the University of Amsterdam studied the use of financial incentives to improve passing rates on credit exams. An earlier study (implemented in 1999-2000) exploring the impact of financial rewards for fulfilling all first year requirements before the start of the next school year increased passing rates to 50%, previously 28%. Those involved in the design and evaluation of this study attributed this increase of the passing rate to the reward.

After implementing a variety of ineffective additional interventions to improve passing rates such as providing extra guidance, increasing teaching hours, and offering more intensive courses, the University revisited the use of financial incentives. To further study the effect of financial rewards on student achievement, researchers randomly assigned economics and business students into three groups. In the high reward group students were promised a bonus of 681 Euro for completing all first year requirements by the start of the next school year. In the low reward group, students were promised a bonus of 227 Euro for this achievement and in the control group students did not receive a reward.

The study reports mixed results. For the full sample, there was no effect of the rewards on achievement, measured by passing rates and number of collected points. There were similar achievement levels in the reward groups and control group. However, students with high math skills and students with higher educated fathers showed higher passing rates and collected more credit points when assigned to the high rewards group. Researchers conclude that in this study the requirements for the rewards were too demanding for the average student. “Only students for whom the reward requirement is feasible respond to incentives.” This key finding emphasizes the fact that “...incentives can only have an impact if the requirements are feasible.”

Review the full study: *The Effect of Financial Rewards on Students' Achievement: Evidence From a Randomized Experiment* by Edwin Leuven, Hessel Oosterbeek, and Bas Van Der Klaauw.

Best Practices

Research and experience identify best practices to address the problem of retention. The underlying idea is that higher education institutions need to improve a student's academic integration, a core construct in Tinto's interactionalist theory of college departure (1975, 1993). Academic integration "pertains to the student's perception that they feel affiliated and congruent with the academic communities of a college or university (Braxton & Lien, 2000; Tinto, 1975, 1993)." Since academic integration means something different for every student, this must be achieved through a variety of strategies and practices. By design, uBoost enhances such best practices, offering colleges and universities an efficient and cost-effective solution to improve student retention and achievement.

Develop and foster a culture of enforced student success by treating all students as if they are "at-risk".

Research highlights that delay typically starts in the first year. Frequent review of metrics (i.e. registration, logins, participation, assignment completion, etc.) and regular communication and contact with the student are essential.

- Implement an "early alert" program – uBoost can monitor activity within the LMS and automatically generate and send messages to both the student (directing them to support services) and the academic counselor (for personalized follow up).
- Recognize and reward key behaviors – uBoost can reward specific behaviors identified to improve retention such as attendance, course registration, etc. Recognition can be more intense in the first year given research shows this is a critical period.
- Give students an end in sight – uBoost can track and review student progress towards degree completion, recognizing key milestones (i.e. reaching the "tipping point" of 20 credits suggests a higher likelihood of graduation).

Implement sound recruitment policies and practices that are in line with the college or university's mission, strive to explain program goals and set clear expectations for success.

Develop and deliver comprehensive quality support services such as: pre-matriculation academic advising, orientation courses, tech literacy training, academic tutoring, peer tutoring, etc. – all designed to meet the needs of a diverse student population (i.e. non-traditional students).

- Research shows that incentives have an immediate effect on increasing the rate at which students seek and use academic support. uBoost can track and reward use of support services as defined by the college or university.

Promote and nurture learning communities, proven to build engagement and academic integration.

- Learning communities can be formed around areas of interest (cohorts), tutoring or mentoring opportunities, course work, etc. uBoost can encourage engagement in learning communities by recognizing and rewarding patterns of participation such as timely and consistent discussion posts, thought leadership, creation of a profile, etc.
- Extend and strengthen the learning community from class to cohort to school to personal community – uBoost can send data feeds recognizing achievement to the college or university web page and/or social networking sites such as Facebook.

Involve faculty in all program components that build relationships as they are the key service providers.

Faculty should participate in orientation programs, focus on facilitating retention through their teaching (via meaningful curriculum and multi-dimensional instructional strategies), etc. Faculty must be high-quality (in content and pedagogy), approachable, and supportive.

Course curriculum must be relevant and meaningful. Course structure must be designed to promote rich interaction. Familiar tools such as IM, blogs, etc. should be effectively integrated to encourage learning and maintain student engagement.

References

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