Edquity grantees cross the finish line at Compton College

Evaluation brief, February 2021

Edquity offers a new way for college students to seek **emergency financial support** through a mobile app. The goal of emergency aid programs—a tool that colleges, community programs, and the <u>federal government</u> have all reached for to work against growing inequality during a pandemic and recession—is to meet financial needs where and when they arise. By helping to pay for a car repair or a new laptop, emergency grants are intended to head off the financial struggles that can slow or stop students' progress.

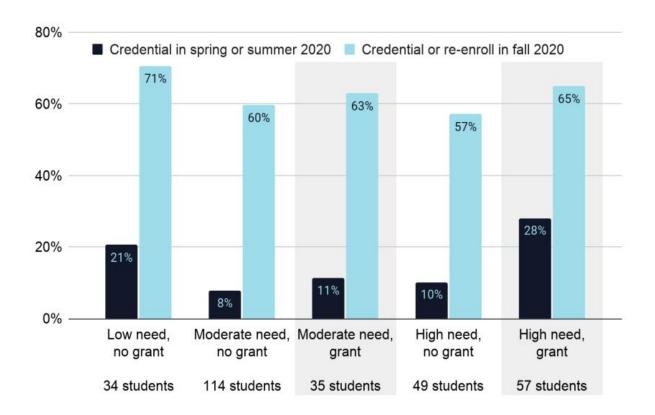
Edquity uses an **algorithm** to quickly sort through student applications and assess where aid dollars will have the greatest impact on college completion. Students provide some information about their <u>financial situation</u> and their educational goals. In a few minutes the app calculates a score. Higher scores, signaling higher need, are prioritized for grants. The app verifies some information with the college and arranges to deposit cash in eligible students' accounts immediately.

This brief describes how the process worked for 289 students at Compton College, a community college in Los Angeles, California, where students have struggled to put food on the table during the pandemic. All of these students applied for \$250 of financial support starting in May 2020, during the middle of the spring term. Ninety-two of them received aid offers. The vast majority of students completed the whole process and got their funds within two days of initiating their application. Following up six months later, Compton College shared with Edquity how many of the applicants had finished an associate degree or certificate and/or remained enrolled.

Using this sample, this brief seeks to **provide preliminary evidence** on Edquity's approach. The analysis will compare college outcomes for groups of students who made it to different stages of the application process. One of those stages was a random lottery, employed by Edquity to distribute a small number of grants among a large group of students with moderate need. This random element has the positive side-effect of creating a natural comparison group for analysis.

The results are summarized in the figure on the next page. Grant recipients (shaded in gray) had higher rates of continuation than non-recipients with similar needs. **As a group, the grant recipients were twice as likely (22% versus 11%) to cross the finish line and earn credentials** in spring or summer. The rest of this brief provides more detail and interpretation of this result, and discusses alternative approaches to rigorously estimate the effects of Edquity grants for different student groups and college outcomes.

The **figure shows** spring/summer 2020 graduation rates and fall 2020 re-enrollment rates for five groups. None of the 34 applicants with low Edquity scores (signifying lower estimated financial need) received grants. Among the 149 applicants with moderate Edquity scores, 35 were randomly selected to receive grants and completed a verification process. Among the 106 applicants with high Edquity scores, 49 did not complete verification and did not receive grants while the other 57 did receive grants.



Need scores were assigned based on objective financial measures, and grants were prioritized from higher to lower need. A verification process ruled out some high-need students while a randomization process was used for moderate-need students.

Among all 289 students, the rate of attaining a certificate or degree by the end of summer was 14 percent, but that **graduation rate varied widely across the groups**: 28 percent among students with high need who received grants, down to 8 percent among students with moderate need who did not receive grants.

The rate of persistence (either attaining a credential by summer or re-enrolling in fall) was 62 percent overall. The **variation in persistence across groups took on a different shape** with the highest rate among students with low need (71 percent) and the lowest rate among students with high need who did not receive grants (57 percent).

The difficult question is: what would have happened for grantees had they not received grants? To help answer this question, the outcomes of the other student applicants who did not receive grants can serve as a comparison group or proxy. There are two primary options for choosing comparison groups. Both options are informative about—but may not exactly capture—what truly would have happened for grantees had they not received aid.

Option 1: Sticking to the **randomized group** with moderate need is likely to produce the most reliable estimates, since the only difference between grantees and the other applicants is the outcome of a random lottery. However, limiting the analysis to a group that had only moderate need might understate the impact that grants had on students with greater need (as measured by the Edquity score).

Option 2: Incorporating **all applicants**, the grantees differ from the other applicants on score, verification, and other factors. Rigorous studies of need-based financial aid for college typically do not rely on aggregate comparisons like this one, because the recipients of grants have much lower incomes and face other disadvantages relative to students who never received aid. Comparisons of their outcomes do not isolate the effects of aid, because they also capture major underlying differences. Underlying differences are smaller in the case of Edquity at Compton College, where a relatively homogeneous group of students all expressed an acute need for funds.

If the selection process is working properly and identifying students with the greatest ability to benefit from aid, then **Option 2 may still understate the effect of Edquity grants**. The non-grantees may attain better college continuation outcomes than what the grantees would have attained without aid. That appears to be true for the low-need group, who had relatively higher rates of graduation and persistence even without grant aid. However, some high-need students did not receive aid because they did not pass verification, and it is not clear whether their (generally lower) outcomes are a good proxy for high-need students who completed the process. More data from student records could be helpful.

With these caveats in mind, the table on the next page reports **statistical tests** for differences in outcomes associated with grant receipt. Though the figure above shows variation across groups, it is important to account for sample size and other factors before concluding that grantees had significantly improved outcomes. The table uses a regression to adjust estimates to control for different application dates and different application scores across students.

For the randomized group with moderate need, a smaller sample of 149 applicants, the estimates of increased graduation and persistence among grantees were **not statistically significant**. The increase in the rate of persistence was smaller (5.8 percentage points) than

the increase in the rate of completion (7.4 percentage points). That smaller difference suggests that for the students who did not graduate, the rate of re-enrollment in the fall was higher among the non-grantees than among the grantees.

	Number of applicants	Increase associated with grant receipt	<i>p</i> -value
Option 1: Moderate need (randomized) group			
Credential in spring or summer 2020 (%)	149	7.4	0.279
Credential or re-enroll in fall 2020 (%)	149	5.8	0.630
Option 2: All applicants			
Credential in spring or summer 2020 (%)	289	12.1	0.027
Credential or re-enroll in fall 2020 (%)	289	7.3	0.401

Each increase (in percentage points) is estimated from a regression of an indicator of the outcome on an indicator for receiving a grant offer, plus indicators for each scoring level and each application date. Standard errors are robust to heteroskedasticity. The estimated difference in **bold** was statistically significant at the 5 percent level (*p*-value<0.05).

Analyzing all applicants—while accounting for differences in the Edquity score and application date—the estimate of increased graduation was **12.1 percentage points**, a statistically significant difference. Waiting the full 6 months to observe re-enrollment in the fall, the difference was again smaller and not statistically significant: students who received grants had a rate of persistence that was 7.3 percentage points higher, but with a wide confidence interval that does not rule out that the grants had no effect on this outcome for this sample. Taken together, these results suggest that grants may have a greater impact on students near the finish line.

To sum up, the initial evidence is positive, but **more data collection is needed** before drawing stronger conclusions about this new platform for delivering emergency grants. In the most balanced comparison, among applicants with moderate need who were subject to random assignment, the increases in outcomes for grantees were not significant. However those increases might understate the effects for grantees with higher need. In a broader comparison that incorporated all applicants with low, moderate, and high need together, the students who received grants in mid-spring had markedly higher rates of finishing degrees in the spring or summer.

This brief was prepared by <u>Drew M. Anderson</u>, Economist, working as an independent contractor for Edquity and using data shared by Edquity and Compton College. This is a preliminary evaluation of Edquity's platform specifically and is not intended to yield broader conclusions for research.