Bolstering first-year success through digital tools





About the Pullias Center for Higher Education

The mission of the Pullias Center for Higher Education is to bring a multidisciplinary perspective to complex social, political, and economic issues in higher education. Our work is devoted to the key issues of college access, retention, and accountability for students from underserved communities — and the effectiveness of the colleges and universities that serve them. Both directly and through our research, we engage with institutional leaders, policymakers and the community at large to address the major challenges in ensuring educational equity today.

The Pullias Center is located within the University of Southern California's Rossier School of Education, one of the world's premier centers for graduate study in urban education.

The **Digital Equity in Education** webpage houses a variety of resources for students, educators and practitioners interested in employing digital tools for college access and success. The team for this project includes: Zoë Corwin, Tattiya Maruco, Maria Romero-Morales, Christine Rocha, and Jude Paul Dizon. We are indebted to the administration and staff of California State University, Dominguez Hills (CSUDH), in particular to Mayra Soriano, for collaborating on this project — and to our administrative support colleagues and undergraduate research assistants at the Pullias Center. http://pullias.usc.edu/digitalequity/

The **Get Schooled Foundation** is a national non-profit helping young people thrive in high school, college, and early career jobs, through a unique blend of compelling digital content, gamification, and personalized support and engagement.

Project Lead Zoë B. Corwin currently directs the Digital Equity in Education project for the Pullias Center. Her research focuses on college preparation programs and access to financial aid for low-income and minoritized students, college pathways for foster youth, the role of social media and games in postsecondary access and completion, and the intersection of skateboarding, schools and society.



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Introduction





To ease the transition to college for *at-promise* students from historically marginalized communities, many colleges and universities host programs designed to provide academic support and bolster sense of belonging on campus. Yet, postsecondary institutions often struggle with how to effectively engage students in these programs. Some institutions have limited financial and staffing resources to address the needs of high numbers of students. Even postsecondary institutions with strong first-year support programs are challenged to attract and sustain robust student participation.

To address the challenges of fostering a sense of belonging and ultimately improving academic success, USC's Pullias Center for Higher Education and the Get Schooled Foundation partnered with CSUDH to create an online tool called *Toros Charge On!* Building on the success of a digital college access *intervention* implemented in high schools across California, the *Toros Charge On!* campaign was designed to assist students in navigating campus resources and learning skills conducive to college success. The approach did not "reinvent the wheel" in terms of programming. Instead, the project was designed to amplify services already implemented by on-the-ground practitioners and increase first-year persistence through an engaging, scalable, and cost-effective digital ecosystem. Objectives of the digital approach include bolstering sense of belonging on campus, building financial literacy, promoting self-care, cultivating study skills, and fostering meaningful use of summer break.

Digital approach: an overview

The *Toros Charge On!* approach educated students about campus resources and skills conducive to college success through three methods: (1) an online platform, (2) an individualized textline, and (3) a gamified structure.



Tailored content on digital platform https://getschooled.com/toroschargeon

A website housed CSUDH-specific content pieces, such as how to talk to your college professor, how to earn extra cash in college, how to get a good night's sleep, healthy eating habits, how to survive your first CSUDH finals week, and more.

1:1 textline connecting students with guidance experts

The texting platform provided text alerts specific to campus deadlines and resources and offered students the opportunity to ask questions of a college success practitioner.







Recognition strategies

Students earned points for completing online activities and/or could be entered into a drawing to win gift cards to the campus bookstore or a \$1,000 scholarship.

Digital approach: online platform

Young people are inundated with technology. Emails, social media, texts, and online games compete for students' attention. Consequently, the project team was strategic and parsimonious about what to post online. Information was organized around a series of digital badges. Badges consisted of 8-10 content pieces related to a specific first-year milestone. To maximize consumption, the curated online content was released and promoted based on the CSUDH academic calendar.



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Digital approach: 1:1 textline — connecting students with guidance experts

Many of the CSUDH students who participated in the digital campaign commuted to campus. As a result, they often were not actually on campus when they had a question about their education or student life. College experts managing Get Schooled's textline interacted with students in three ways: (1) by sending students information about college, financial aid, and campus events, (2) by posing questions and engaging in text-based conversations, and (3) by responding to student-initiated questions. By personalizing text exchanges, Get Schooled aimed to build trust with textline users so they were more likely to engage with the messages sent. Due to the nimble and responsive nature of the textline, students received timely and personalized guidance about campus activities, class registration and financial aid application deadlines, and other reminders to support them along their educational journey.

Mon, Jan 20, 2:01 PM

Hello! Good luck on the first day of spring semester tomorrow, we hope you have a great day!

Fri, Jan 24, 1:30 PM

Welcome back to this semester. We are celebrating your resiliency! What were you most proud of last semester?

Mon, Feb 3, 4:20 PM

Hey! Are you thinking about what to major in? Learn about careers and majors here: http://lil.ms/3lke/51yiw2

Digital approach: recognition





During engagement with *Toros Charge On!* campaign, students learned about and accessed college and financial aid support through articles, videos, games, quizzes, a discussion board, online badges and a texting campaign. Get Schooled's gamified online and texting platforms incentivized engagement through the individual accumulation of points for completing the online activities and badges. Students, then, could redeem the points for

prizes at an online Reward Store. Additionally, after completing each CSUDH-specific badge, small incentives, such as ride-share, coffee, and other gift cards, were unlocked and available for redemption in the Rewards Store. After completing four CSUDH-specific badges, students qualified to enter into one of several drawings to win a \$1,000 scholarship.

Research findings: engagement

Implementation: In the 2018-2019 academic year, first time, first-year students registered for the online platform program by accepting an invitation to create a *Toros Charge On!* Get Schooled account using their @csudh.edu email address or "opting in" via text. Approximately one third of CSUDH first-year students participated in the campaign. We tracked engagement by (1) analyzing activity on the Get Schooled server and (2) interviewing students and CSUDH staff about their reaction to the campaign.



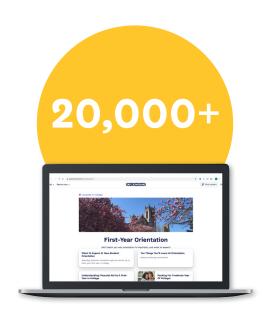
students who used the online platform



students who used the 1:1 textline



Digital Badges Completed
(indicator of high level of engagement
with the digital platform)



Content Pieces Consumed
(i.e., articles, quizzes, videos,
participation on discussion board)

Research findings: first-year persistence outcomes

Snapshot of the 2018-2019 first time, first-year cohort. The majority of first time, first-year students at CSUDH were Latinx (72.7%), Pell-eligible (75.5%), and first-generation (64.4%), with 55.9% of non-*Toros Charge On!* students and 54.4% of *Toros Charge On!* participants reporting being both Pell-eligible and first-generation college students. Average high school GPA for non-*Toros Charge On!* students was 3.14 and 3.19 for *Toros Charge On!* participants. Level of participation in first-year orientation activities varied, with higher rates of participation for *Toros Charge On!* students (note: USC staff had representatives on site during orientation events in order to recruit student participants).

When holding the above student demographics, previous achievement measures, and participation in college orientation activities constant, regression results indicate that voluntary participation in the *Toros Charge On!* campaign was significantly related to three first-year persistence measures:

First-Year Persistence Outcomes for Toros Charge On! Compared to Non-Toros Charge On! Students

	Toros Charge On! students	Non-Toros Charge On! students
Average # of units completed	25.83*	22.3
	(SD = 0.35)	(SD = 0.37)
Average GPA	2.69*	2.37
	(SD = 0.79)	(SD = 0.97)
% of students enrolled in their next consecutive year		
(Fall 2019)	83.2%*	69.4%

^{*} p < 0.001. Note: Averages shown are the raw descriptive data

The regression model for first-year GPA explained approximately 17-18% of the variation, while the other models explained approximately 5-10% of variation in the outcomes.

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Research findings: first-year persistence outcomes

Regression results indicate, on average, *Toros Charge On!* participants experienced the following (compared to students who did not participate in the campaign):





An average 0.23 more cumulative first-year GPA points p < 0.001



More Units Completed

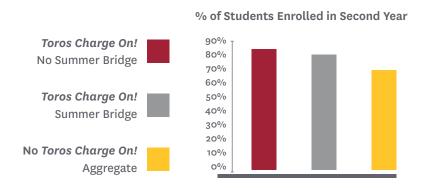
An average 0.68 more first-year units p < 0.001



More Likely to Enroll

An average 9% more likely to enroll in their second year p < 0.001

Results also suggest that *Toros Charge On!* was particularly beneficial for students who were not able to participate in other first-year events. For example, students who participated in *Toros Charge On!* and were not able to attend summer bridge experienced a slight boost in three first-year persistence measures: average cumulative GPA (β = 0.26, p < 0.001), number of units completed (β = 3.01, p < 0.001), and likelihood of enrolling in the next consecutive year (β = 3.01, p < 0.001). The below chart highlights this slight boost for students who participated in *Toros Charge On!* and were not able to attend summer bridge in comparison to *Toros Charge On!* students who were able to attend summer bridge and all students who do not participate in the campaign.



Research findings: implementation





Over the course of two years and in response to close collaboration with Get Schooled practitioners and CSUDH administrators, staff, and students, we learned several key lessons about implementing a wide-scale digital intervention on a postsecondary campus.

Strong campus support is key. The *Toros Charge On!* campaign was a pilot program run by non-profit practitioners who were supporting official campus activities and resources. The campaign was not integrated into campus systems. In order to successfully implement the campaign, we relied on support from campus administrators and staff. At CSUDH, first-year students are assigned to one of three advising homes. We worked closely with one of the directors as our campus point person. She secured buy-in from key stakeholders, coordinated activities, and provided

real-time feedback to the research and development teams. The three advising homes strategized about how to incorporate the *Toros Charge On!* campaign within their curricula. The directors set tasks and deadlines for academic advisors and peer mentors, shared promotional materials (e.g. posters, postcards), and assisted with disseminating prizes.

Administrator turnover, higher than anticipated enrollment, and competing priorities posed challenges to campus leads in supporting the program.

Onboarding activities are critical. Despite the online nature of the intervention, in-person trainings were helpful in establishing buy-in, communicating key goals, and setting up procedures for

Research findings: implementation

Hey Toro! We wanted to let you know that we will be on campus tomorrow at 10:00 a.m. in the Welch Hall visiting the *Toros Charge On!* community. We are holding instant drawings to win \$25 gift cards!





running the program. Trainings for advising home administrators, staff, and peer mentors were scheduled at the beginning of each semester. Trainings covered how to navigate each component of the *Toros Charge On!* tool (i.e. website, texting, gamification). Peer mentors appreciated when playful approaches were embedded into trainings (i.e., a scavenger hunt tour of the web platform engaged workshop participants while providing an overview of resources embedded in the site).

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Hybrid approaches are preferable. Online and texting components allowed content developers to offer services from remote locations — and interact with students at non-traditional times. Online resources were easily amended to meet changing informational demands, designed around aesthetics

that resonate with Gen Z, and engaged students in spaces where they spend time (i.e., on their computers and phones).

Whenever the USC team made in person visits to campus, we observed an increase in online and texting engagement. Visits were timed strategically, such as during summer bridge and summer convocation events to recruit student participants and when promoting the release of a new digital badge. Face-to-face interactions allowed the team to better understand the needs of students and CSUDH staff.

One-size-fits-all interventions do not adequately meet the needs of all students. CSUDH serves a majority of students of minoritized backgrounds. The cost to attend college poses serious challenges for students and most rely on financial aid

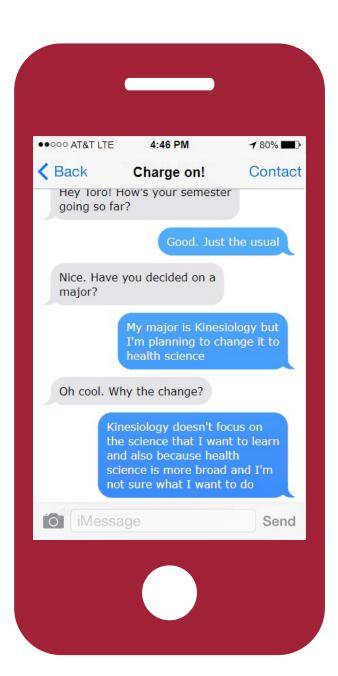
to afford tuition and other costs. Advising homes help support students by providing book vouchers and/or small grants to pay for additional education-related expenses. Commuting students are further challenged by having to allocate a budget for transportation. Understanding key issues facing students and responding accordingly is critical. Students appreciated the food and transportation gift cards available through the *Toros Charge On!* campaign as well as information tailored to their particular needs. Students who participated in the texting platform valued individualized responses to prompts and their self-initiated questions.

Meaningful incentives boost engagement. Small incentives drove sign-ups and short-term interactions with the web tools. The five \$1,000 scholarships offered during the school year worked effectively to generate deeper engagement with the *Toros Charge On!* web tools by incentivizing students to consume several points of information curated around a theme (i.e., financial aid, self-care).

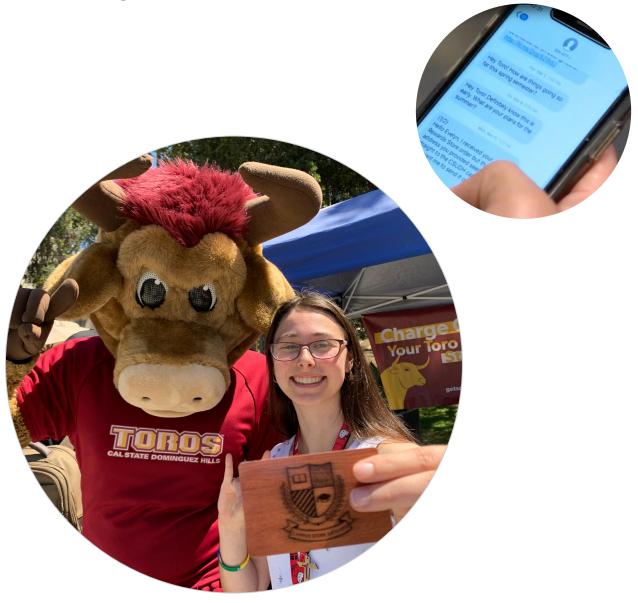
Avoid technology overload. Given that technology makes communication easy for institutions, it's easy to overwhelm students with information. With multiple emails hitting a student's inbox each day, students often do not read all emails and consequently miss out on resources.

Students are savvy about what constitutes meaningful technology use — and are particularly discerning about texting. Once students determined that a real person was responding to *Toros Charge On!* texts, they were more likely to engage with the texting platform.

Digital access issues persist. Students from low-income backgrounds run the risk of not owning digital devices conducive to completing college work (i.e., a student might own a smartphone, but not a laptop) and/or not having access to Broadband outside of campus. Laptop loan programs and complimentary Wi-Fi hotspots help ensure digital access; support from Information and Technology offices and student affairs practitioners help to foster digital literacy.



Next steps



Technology has the potential to connect postsecondary students with information and campus resources. Yet we are still learning about the best ways to engage students, track outcomes, and implement digital tools in scalable and sustainable ways.

Pullias Center researchers are interested in expanding our research and practice to reach more institutions and to create

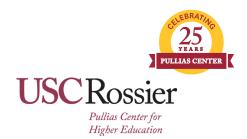
individualized tools that better serve students with unique experiences such as students who commute, student veterans, Dreamer and undocumented students, and/or students with experiences in the foster care or probation systems. At a time when postsecondary institutions are doubling down on efforts to level the playing field and mitigate student debt, we are committed to continuing to innovate in this space.

You get information and resources. It's good for freshmen. I learned about studying techniques and it helps me understand about the resources on campus like clubs.

Student on interacting with the web platform

I can't ask my parents for help. Especially being a DACA student. I can't apply for aid. So, I accumulate points and use them. It helps. Some people might not think it's a lot of money. But every little thing helps.

Student on gamification and micro-prizes



pullias.usc.edu
pullias@usc.edu

213.740.7218

