

LONE STAR COLLEGE

**Using Data Mining and Predictive Analytics
for Advising to Increase Student Success**

About



- Public Community College in Houston, Texas
- Six campuses
- Over 90,000 students
- Significant and sustained growth

Introduction



Sharing how we changed our strategy

- Creating a Data Team
- Merging predictive analytics and marketing
- Creating segmented populations
- Nudges
- Tracking returns on investments
- Overall impact

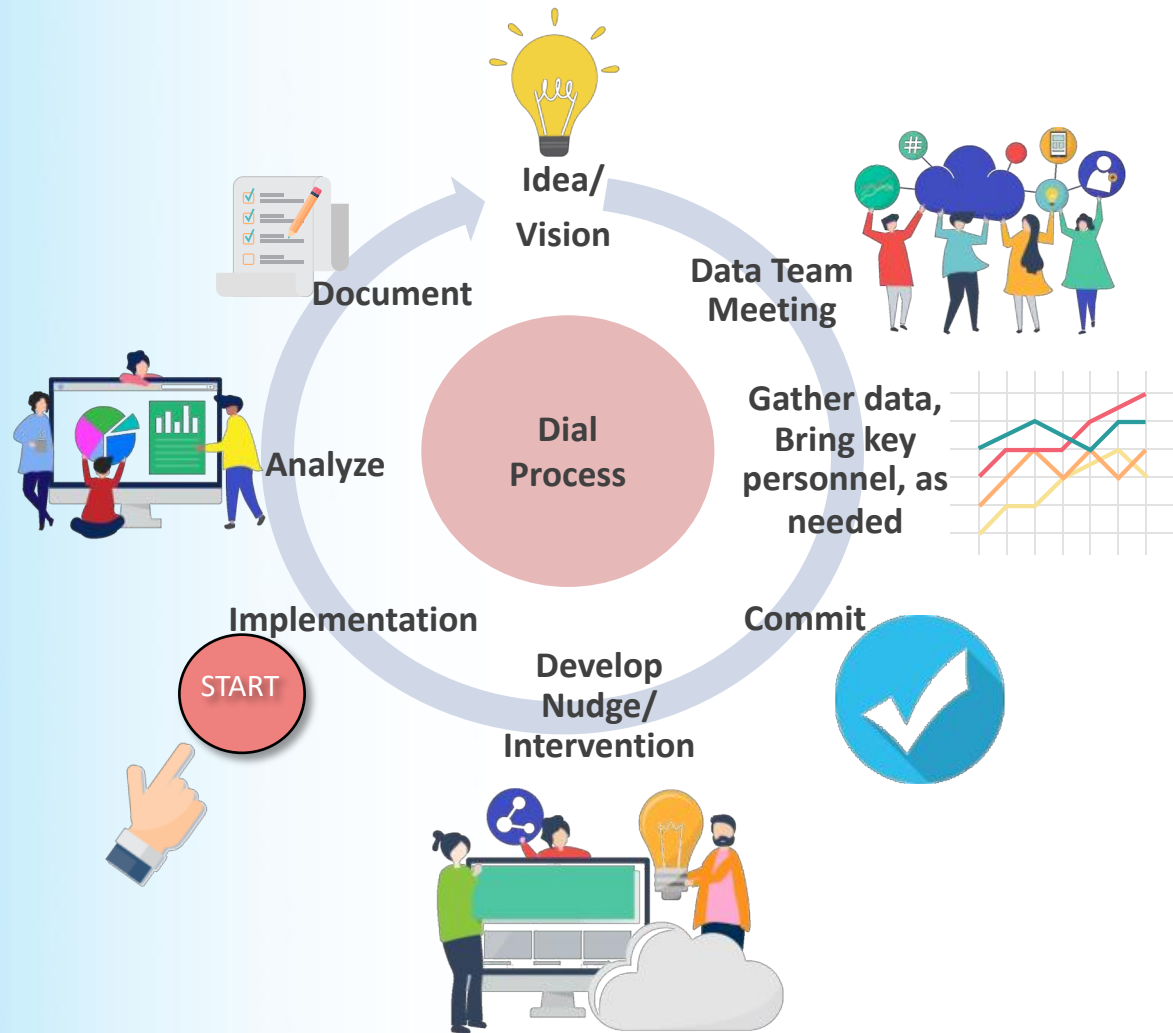


Data Team

Members Involved

- VP Student Success
- Dean of Enrollment Services
- Academic Dean
- Director of Learning Center
- Faculty Counselor
- Director of Student Success
- Analyst
- Dean Enrollment Services
- Outreach Manager
- Advising Manager
- Enrollment Manager
- Faculty
- Academic Dean
- Assistant Dean (Center)

Data Team Process



Cross-Disciplinary Collaboration



- Boosting student engagement, success, recruitment and retention.
- Utilization of tools to analyze current and past student data and determine likelihood to persist.
- Hundreds of campaigns launched targeting students, specific demographics, GPA, living radius to campus, and likelihood to persist percentages.

Segmenting Target Population



- Identify target populations and segment for maximum return on investment.
- Nudges are mindful, short, and personal.
- Mobile application push notification, MyLoneStar Portal Ads, Social Media Marketing, Google Ads, Text, Email, Phone



Predictive Analytics

Lone Star College – Specific Data

- Excel
 - Illume
 - Student Information System
 - PowerBI
-
- Personalized Predictions that are timely, accurate, actionable
 - Pinpoint at-risk students *hiding in plain sight*



Insight & Hypothesis



- North Harris found that African American students tend to enroll later than their non-African American peers
- DIAL Working Group filtered found that:
 - African American students enrolling 44 days or less before start of term were less likely than average to persist
- Hypothesis: Given the trend in African American enrollment, a strategic message, tailored using persistence predictions, may drive this population of students to register or pursue relevant registration resources.

Campaign Design & Delivery

In addition to the emails, North Harris advisors were briefed on the campaign and were able to tag advising exchanges to the campaign through Inspire for Advisors.

Reason for Outreach
<i>Select one or more...</i>
BEST - Action Plan
FTAC - Action Plan
ZERO - Action Plan
SXTY - Action Plan
ALGR - Action Plan
Campaign: Low Persistence, High GPA
Campaign: North Harris-African American Students, Registration

Target Population: North Harris, African American Students, Very Low / Low / Moderate Persistence

Subject Line: Reach your goals in 2017

Dear [Student Firstname],

We know this time of year can be busy and stressful. Registration for 2017 classes is an important first step toward reaching your goals; we are here to help.

Selecting courses can be confusing, but it is something you need to do. I've attached a step by step guide on how to register for classes. If you need further assistance, come visit an advisor or call us at 281.618.5481 to get the help you need. We are open over the holidays with hours listed below. Speaking to an advisor over the phone or in person is a great way to kick-start your success into 2017.

Don't forget to ask your advisor about how to take advantage of payment plans, which open on December 21, 2016 and end on January 7, 2017.

Remember, we are here to help you succeed! There are many resources available to ensure that your journey at Lone Star College is a success.

We look forward to working with you!

Results




4,690 students were included in the campaign and 2,864 students were matched using PPSM. In comparing the participant students with the comparison group, after matching, we saw a:

1.6% (percentage point) Lift in Persistence!

This equates to **46** additional persisting **African American students!**

'Course Drop Notice-Please Read!' Campaign



STUDENT SERVICES

Dear ,

Please be advised that you have been dropped from your EDUC 1300 course for non-payment. EDUC 1300 is a required course for all first-time in college students and carries with it a hold that prevents registration.

We, at Lone Star College-North Harris, would like to assist you in re-enrolling in one of our EDUC courses so you can complete the remainder of your registration for classes. If you would like to enroll in one of our EDUC 1300 courses, listed below, we can assist you by completing your registration via email.

LSC-North Harris EDUC 1300 courses

If you would like to enroll in one of the above EDUC 1300 courses, send an email to nh-studentservices@lonestar.edu from your my.LoneStar.edu email address and include your student ID and course requested. We will enroll you and send confirmation to your my.LoneStar.edu email account.

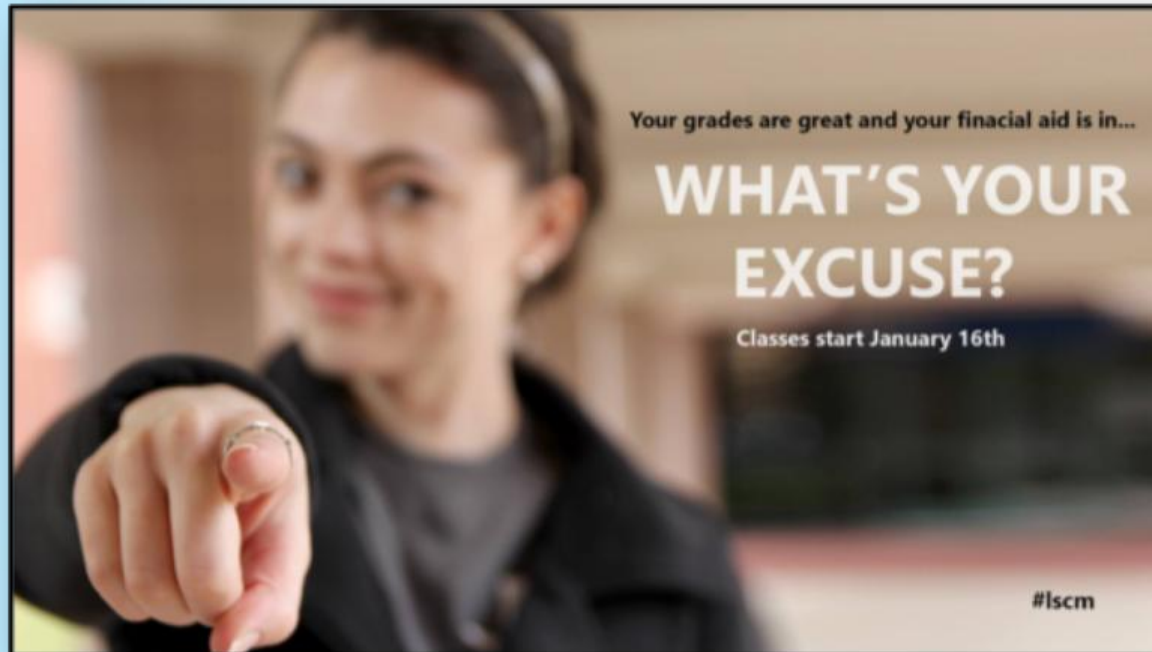
We look forward to serving you as a student at Lone Star College-North Harris.

If you would like to sign up for an EDUC 1300 student at one of our sister colleges, please visit the link to sign in your [myLoneStar](#) account.

Hope to see you soon!
LSC-North Harris Student Services

- FTIC students: 85 students targeted who were drop from the Student Success course for non-payment.
- E-mails: 192 emails over 5 days campaigns (double emails, mylonestar and personal email address)
- 104 of the emails were opened (approx. 55%)
- \$10.05 Ad Spend
- *39 students enrolled*
- Financial Impact = \$156,000

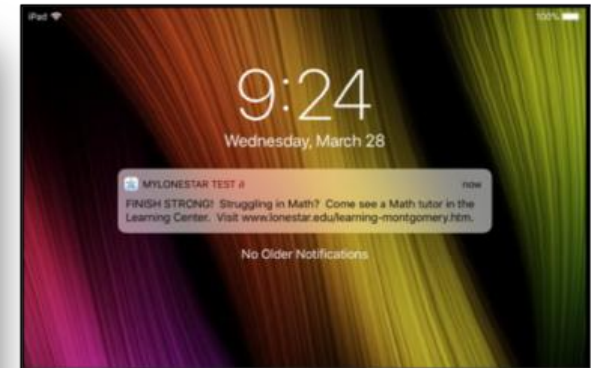
'What's Your Excuse?' Campaign



- 1,000 Students; High GPA, 15-mile radius; Financial Aid Awarded, Enrolled in fall/not spring
- 22.6% Yield Rate (*226 student registered in first 3 days*)
- Financial Impact = \$904,000
- \$238 Ad Spend
- \$1.05 Conversion per Student



'Finish Strong' Campaign



- 306 Students struggling in Math
- Nudges: Online Mobile Inbox Notification, Mobile App Notification, Online Portal Ad, Targeted Facebook Ad
- 26 Student visits to tutoring in first three days and persisted
- \$0.60 Ad Spend
- Campaign's financial impact: \$140,000



'English for Nursing' Campaign



- 142 pre-nursing student who have not taken ENGL 1301
- Nudges: Online Mobile Inbox Notification, Mobile App Push Notification, Online Portal Ad, Targeted Google and Facebook Ads.
- 9 Students enrolled in first three days of campaign (*now at full capacity*)
- \$57 Ad Spend

LSC Data Team



The purpose of the LSC Data Team is to collaborate, communicate, develop, and initiate System-Wide campaigns to increase student success with the use of predictive analytics and behavioral economic marketing strategies.

2x2x2

**ACT Campaign
Financial Aid Campaign**

ACT Campaign LSC-North Harris

ACT NOW!

You are closer than you think at Lone Star College-North Harris

Are you planning your future? Lone Star College-North Harris is here to help. Visit the links below to view programs that may interest you.

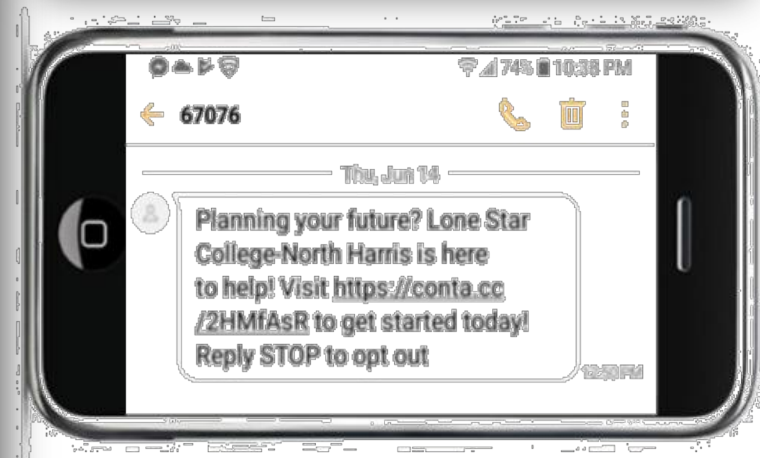
Want to see what programs we offer? View our [Programs of Study](#)

Need help with career planning or plan to transfer to a university? [Visit the CAST Lab](#)

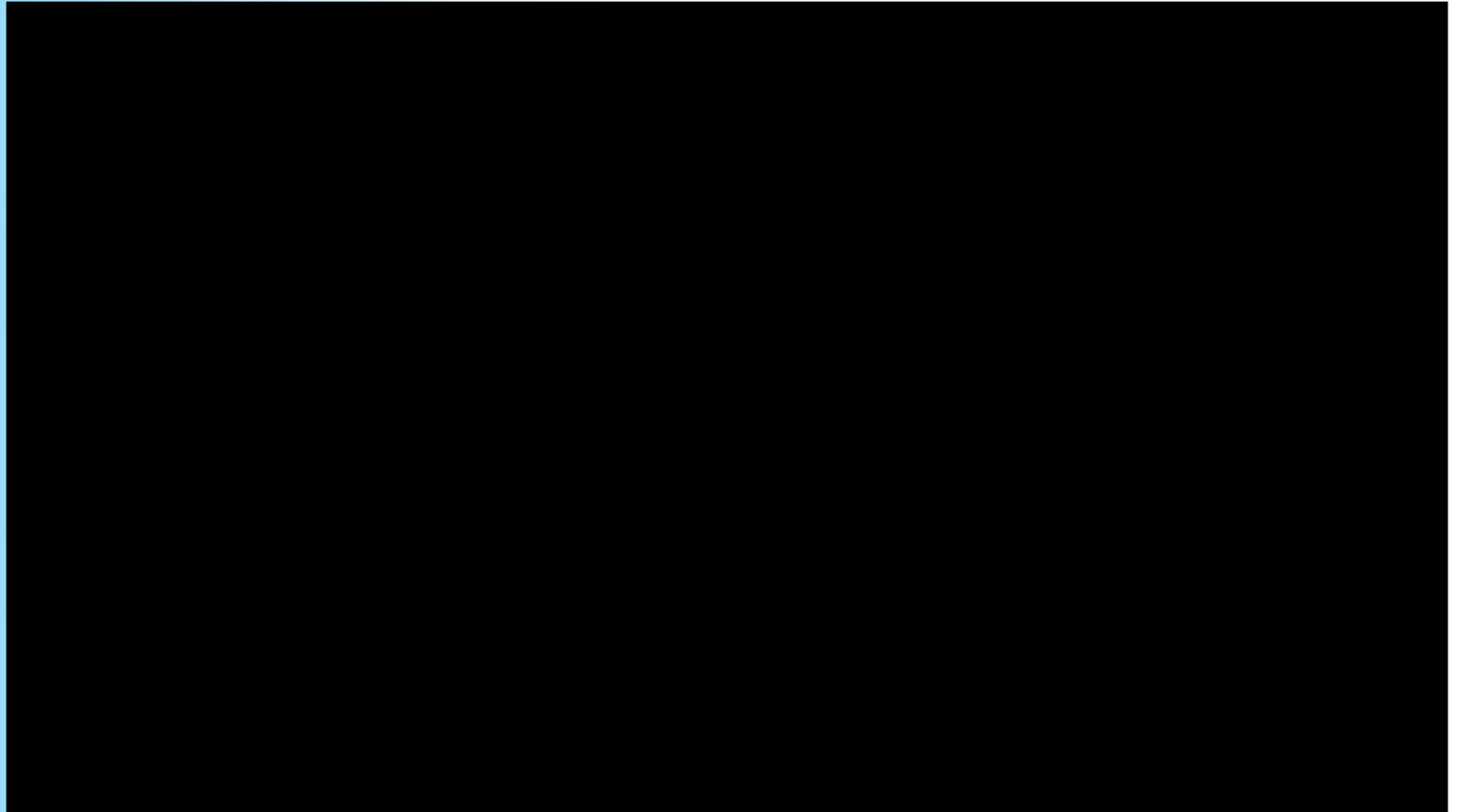
Get started today!

- [Apply for Admissions](#)
- Send us your [high school/college transcripts](#)
- Complete the [Pre-Assessment Activity](#)
- Complete [placement testing](#) or submit test scores to Lone Star College
- Get a [Bacterial Meningitis Vaccination](#) or complete a [Conscientious Objection form](#)

Register Today!



Financial Aid Advertisement | Social Media LSC-Montgomery



Financial Aid | E-mail LSC-North Harris

Good news! Your financial aid has been awarded!

Lone Star College-North Harris is ready to help you register for **fall 2018** classes.



Check your [myLoneStar](#) and Register today!

Don't forget, fall classes begin on **August 27, 2018**. Register now to secure the classes at the best times!

Need help registering for classes?

Come in to speak with an Advisor or email NH-Advisor@LoneStar.edu.

Have questions about your Financial Aid?

Live chat with Financial Aid [here](#) or email them at FACC@LoneStar.edu.

Good news! Your financial aid has been awarded!

Lone Star College-North Harris is ready to help you register for **fall 2018** classes.



Check your [myLoneStar](#) and Register today!

Don't forget, fall classes begin on **August 27, 2018**.

Login to myLoneStar to complete your [checklist items](#).

- Apply for Admissions
- Complete the [Pre-Assessment Activity](#)
- Take the [TSI placement test](#), or [submit your test scores](#)
- Satisfy the [bacterial meningitis vaccination](#) requirement
- Register for [New Student Orientation](#)

Need help preparing for the TSI test?

Attend a **FREE** TSI Review Session! Click [here](#) for summer session dates.

Need help with your checklist items?

Visit the Admissions Office or email NH-StudentServices@LoneStar.edu

Have questions about your Financial Aid?

Live chat with Financial Aid [here](#) or email them at FACC@LoneStar.edu.

Previously Enrolled

Prospective Students

Preliminary Campaign Results

ACT

	<i>Nudged</i>	<i># Yield</i>	<i>% Yield</i>
<i>MC</i>	1,662	238	14%
<i>CF</i>	3,220	469	15%
<i>KC</i>	8,830	262	3%
<i>NH</i>	3,154	427	14%
<i>TC</i>	748	71	9%
<i>UP</i>	1,017	150	15%
Total	18,631	1,617	9%

Financial Aid

	<i>Number</i>	<i># Yield</i>	<i>% Yield</i>
<i>MC</i>	1,662	370	22%
<i>CF</i>	3,220	735	23%
<i>KC</i>	1,571	405	26%
<i>NH</i>	3,154	633	20%
<i>TC</i>	748	112	15%
<i>UP</i>	1,017	251	25%
Total	11,372	2,506	22%



Data Team Projects' Results

Orientation Nudges

- 50% reduction in no-shows

Drop List Nudges

- 30% fewer students dropped

Summer Melt Nudge

- 2,225 students
- 549 enrolled (25%)
- \$600,000 increase in revenue

Overall Impact in Last Two Years



- 11% Enrollment Increase
- Increased Class Density
- 18% increase in FAFSA
- 30% increase in students enrolling in 15+ credits
- 48% increase in financial aid awards (869) compared to FY17

Thank You

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