



# **Two successful approaches to deploying chatbots that support students**

**39th Annual Conference on The First Year Experience**

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#FYE20

# Co-presenters, and chatbot initiative managers

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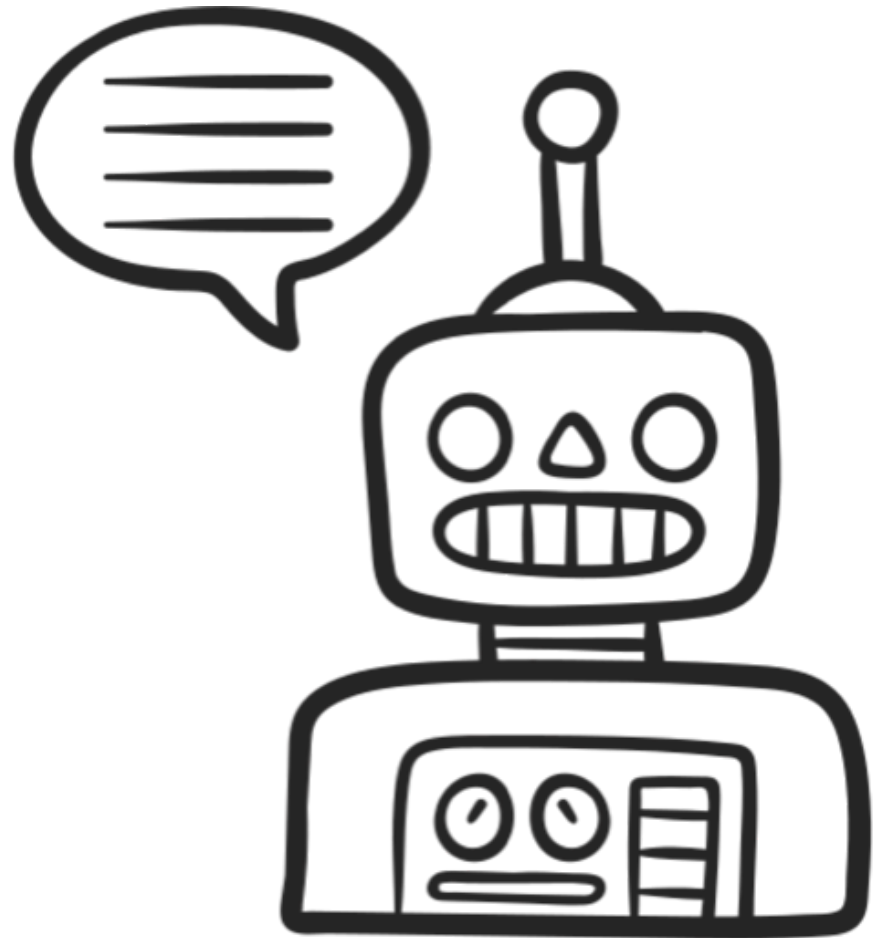
Associate Director of Student Success Innovations, Office of the University Provost

**Arizona State University**



# What is a Chatbot?

- AI enhanced
- Conversational messaging
- Text based platform

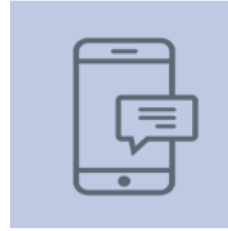


# Chatbot Structure



## Knowledge Base

- Student-Centric
- Robust and Learning
- 24/7 access
- Student Guide
- Friendly
- Relatable



## Campaigns

- Targeted
- Strategic
- Timely
- High Impact
- Student Engagement
- Coordinated

Meet students where they are to get  
them where they're going



Personalization



Relationship  
Building

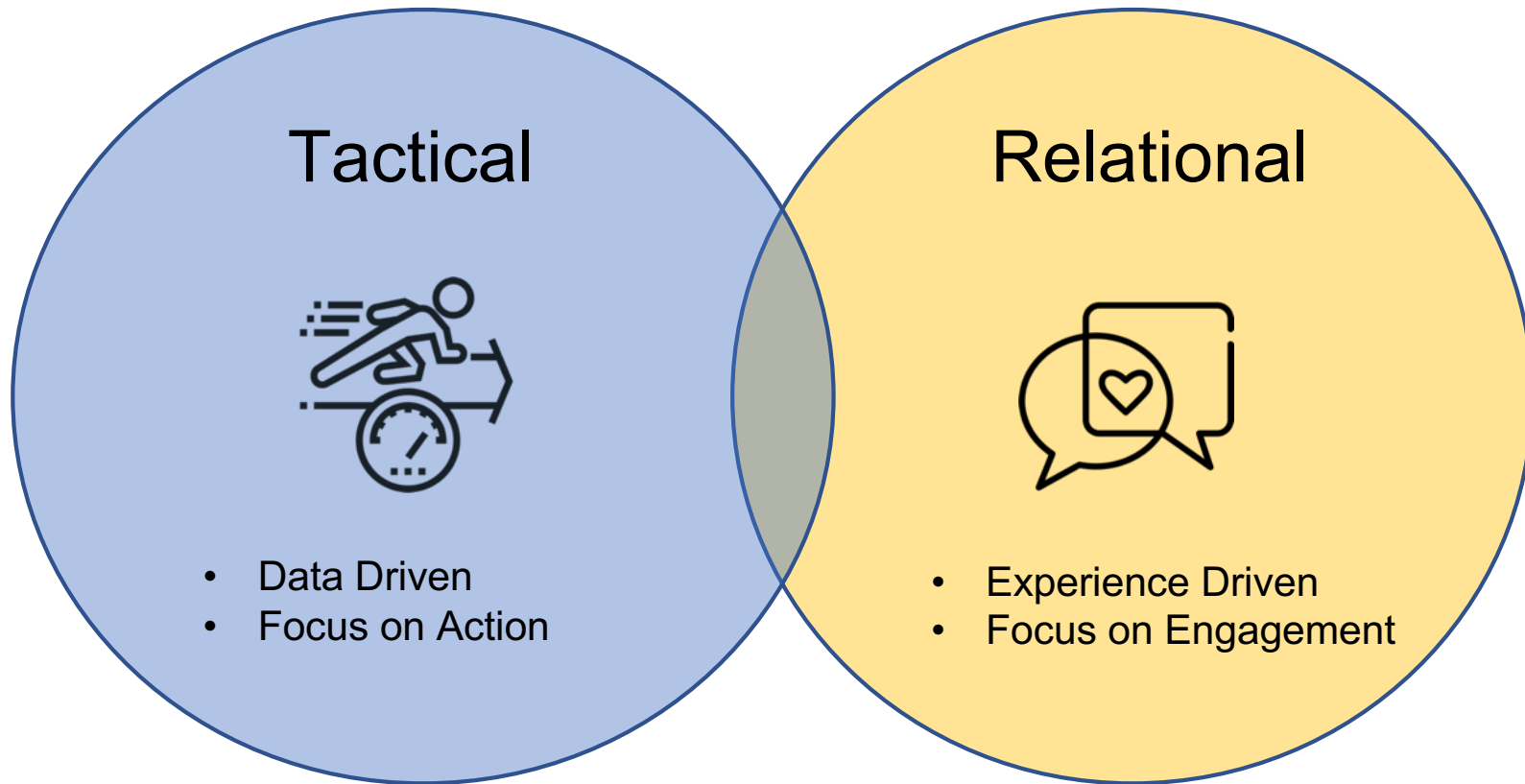


Instant  
Fulfillment



Anytime,  
Anywhere

# Chatbot Deployment







**Text nudges have been shown to increase matriculation rates by up to 11% points**



# Meet Pounce



Reminders



Guided Tutorials



Surveys



Targeted Human Support

We're doing it #thestateway

# Pounce Engagement



**185,211**

total messages (RCT)

**1.5 million**

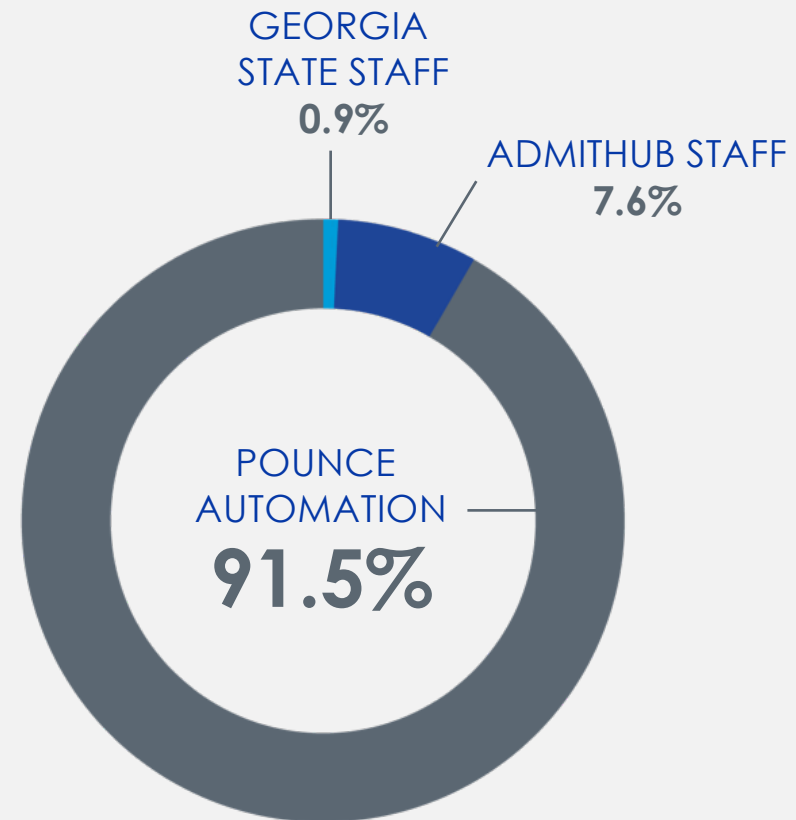
Currently

**90%**

of students engaged

**63%**

of students engaged  
in 3 or more sessions

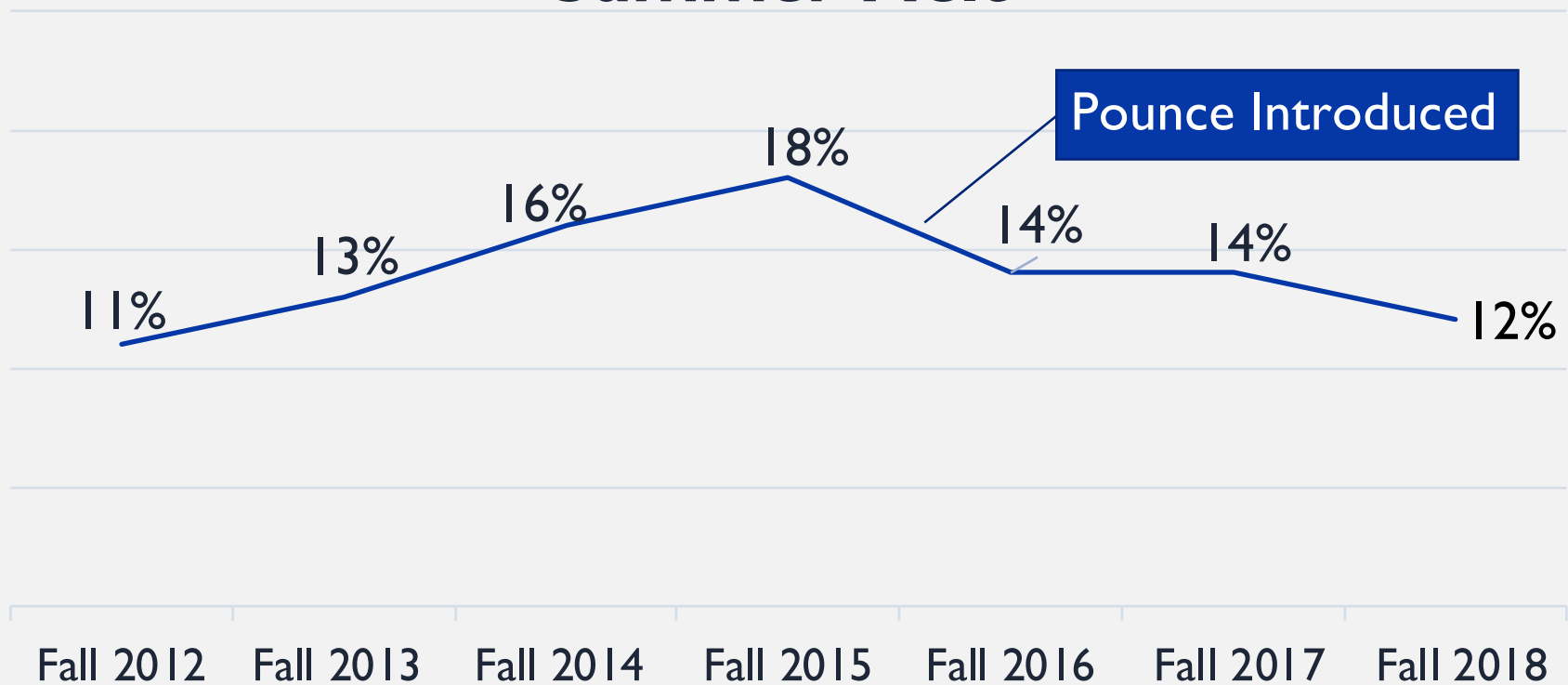


We're doing it #thestateway

# Pounce Admission Results



## Summer Melt



We're doing it #thestateway

## Student Satisfaction



80%

GAVE POUNCE  
4 OR 5 STARS

94%

RECOMMENDED  
GEORGIA STATE  
STUDENTS USE  
POUNCE AGAIN

“I love **Pounce**. It's not pushy.”

“I'd rather **get a text** than an email.”

“I liked how **convenient** it was. I didn't have to look through my emails, I just went to my text.”

“The language doesn't sound like a machine.  
**It's chill.**”

“I like how it was **personalized** to me.”

We're doing it #the**st**ateway

# Barriers to Retention



Complete your FAFSA!  
PAY your balance!  
REGISTER for classes!  
See your ADVISOR!  
Apply for GRADUATION!



We're doing it #thestateway

# Campus Collaboration

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We're doing it #thestateway



# Retention Chatbot Campaigns



Hey **First Name** 🙋 Looks like your immunization hold is preventing you from registering this semester. 😞  
Having trouble taking care of your immunizations?  
(REPLY Y/N)

Y Yes

Good News: 🙋 GSU Student Health Services has options where you can pay little to zero cost for your immunizations! 📞 Call 678-891-3866 in you're interested or have any ?s.

N No

Great! The registration deadline is 01/17, make sure to submit proof of immunization by then! 🙋 FYI: GSU Student Health Services has options where you can pay little to zero cost for your immunizations! 📞 Call 678-891-3866 in you're interested or have any ?s.


Hey **First Name** ! Looks like you still have a balance \$ & we don't want your classes to be dropped. 😞 Check PAWS to see your balance. Do you still plan to take classes this Fall 🍂? (Y/N)

Y Yes

Great! 🙋 FYI - If your aid doesn't cover your balance due & you're not ready to pay in full by the deadline, you can sign up for a payment plan. Visit [bit.ly/gsu\\_pay\\_plan](https://bit.ly/gsu_pay_plan)

N No

That's okay. 😞 Make sure to log in to PAWS & drop your classes ASAP so you won't be charged. \$

A photograph of the Georgia State University Student Center building. The building is a multi-story structure with a prominent sign that reads "GEORGIA STATE UNIVERSITY" and "STUDENT CENTER" below it. A blue logo is to the left of the text. In the foreground, a large group of students is walking across a paved plaza. Several blue callout boxes with white text are overlaid on the image, pointing to different areas. The top-left box contains the title "Retention Bot RCT Outcomes". Below it, a line of text states "Differences between treatment and control group are shown in parentheses." Four other boxes are positioned around the student plaza: "Early Registration (10%)" on the left, "Resolving Holds (22%)" in the middle-left, "Reducing withdrawals for students with a balance (50%)" in the middle-right, and "Engaging with Financial Aid (33%)" on the right.

## Retention Bot RCT Outcomes

Differences between treatment and control group are shown in parentheses.

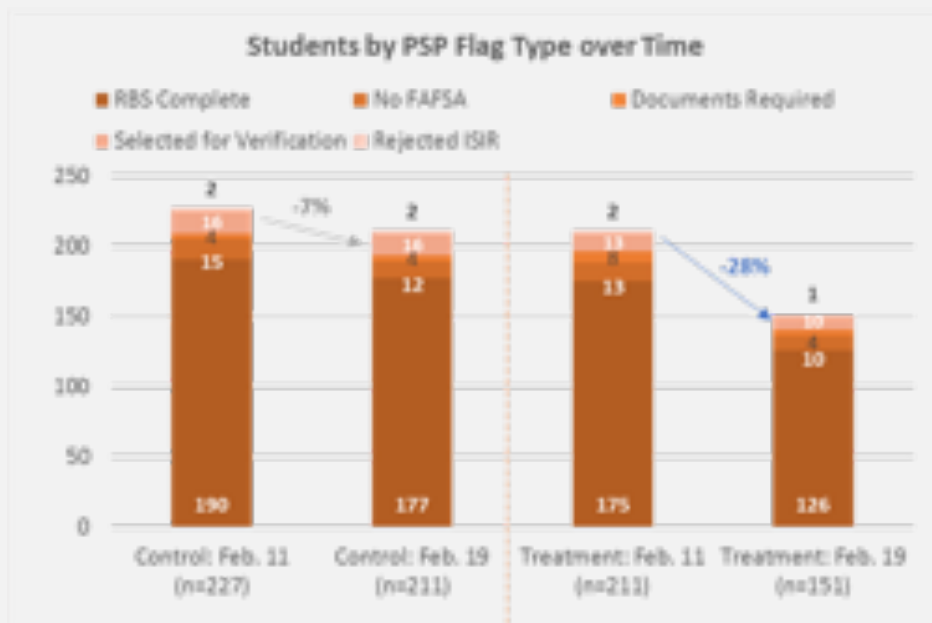
Resolving Holds (22%)

Reducing withdrawals  
for students with a  
balance (50%)

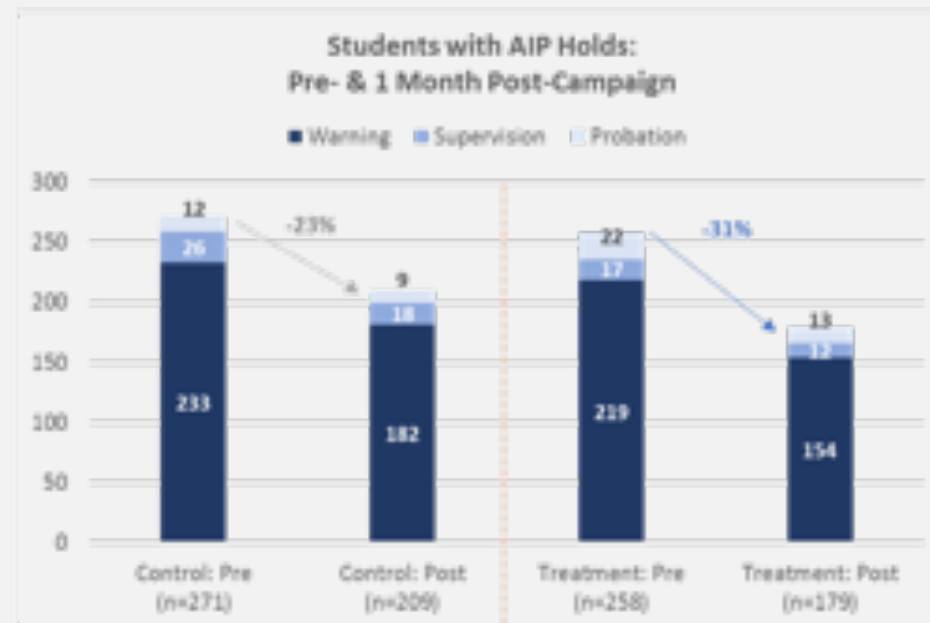
Engaging with  
Financial Aid (33%)

Early Registration (10%)

# Retention Chatbot Impact



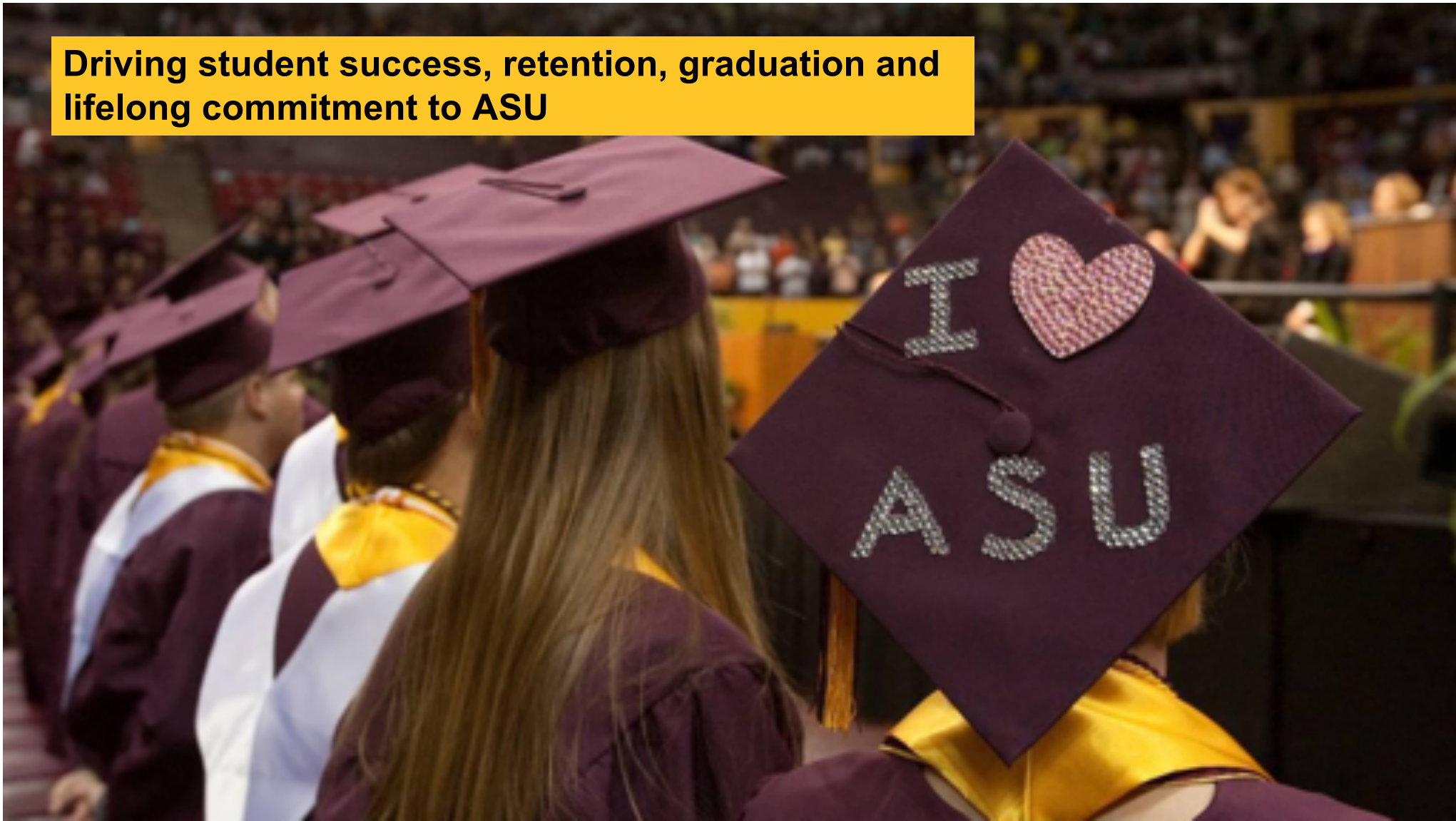
**Treatment: 28% Reduction**  
**Control: 7% Reduction**



**Treatment: 31% Reduction**  
**Control: 23% Reduction**



**Driving student success, retention, graduation and  
lifelong commitment to ASU**



# Sunny, ASU's Chatbot

**Provides 24/7 service  
and connection to first  
year students through  
their preferred  
communication channel**



# Goal

Improve the service experience for first year students by eliminating time-consuming, transactional conversations

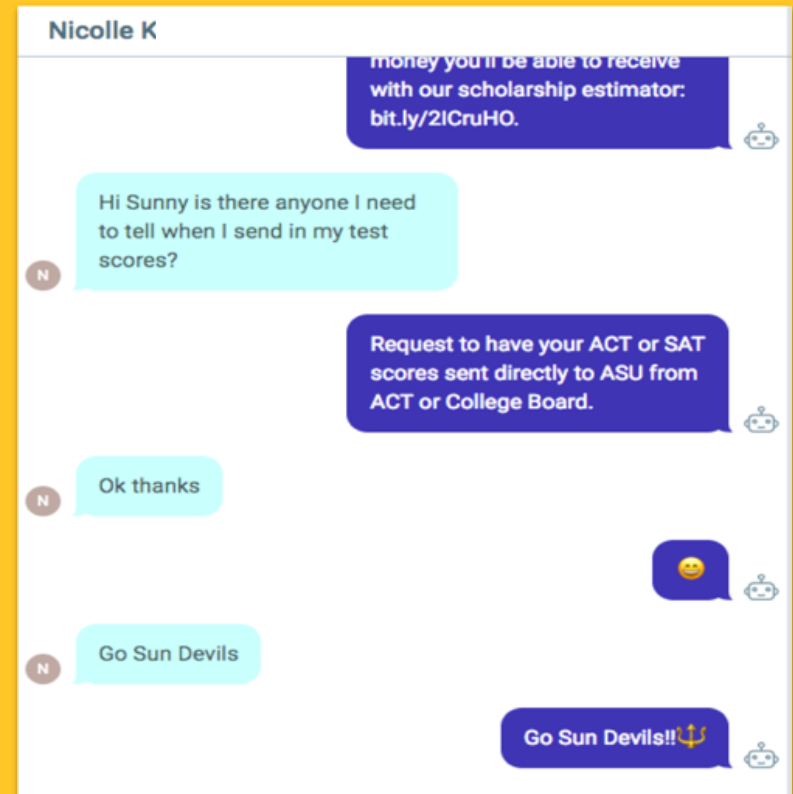




# Sunny's introduction

- First introduced to prospective students in February 2018
- Assists students through the admission process to course enrollment
- Continued to engage and support new first-year students, starting in Fall 2018

"Sunny really helped me with a number of issues. **Because of her I am enrolled in classes today.** She helped me set up an appt with my advisor! She also kept reminding me to send in transcripts and it was super helpful. I thought I had run out of time to go to school this semester but Sunny helped me think it was possible." - *Fall 2018 first-year student*

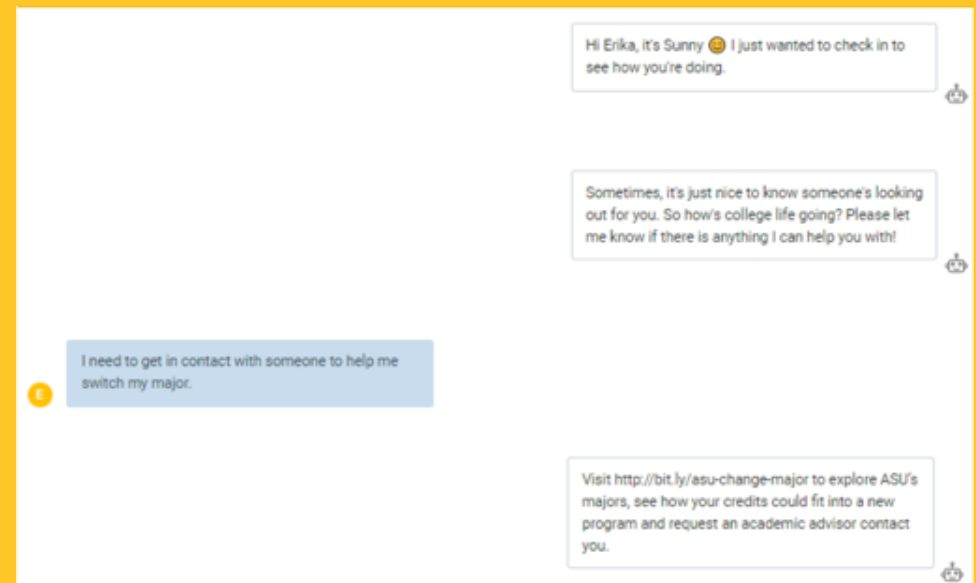


# Data-driven approach

Leverage predictive analytics and retention indicators to develop highly relevant campaigns targeting students with risk factors for a just-in-time connection

Examples:

- Academic status reports submitted by faculty about class attendance, homework and exam performance
- Civitas persistence outlook, check for a drop in the last week
- eAdvisor off track for their major
- Academic warning/probation



"Sunny was always chiming in around the time I would be wondering about something so it was helpful and made my year improve." - *Fall 2018 first-year student*

# Outreach campaigns

- Regular check-ins inquire how a student is feeling
- Provides students with encouragement
- Reminds students of relevant resources

## Examples:

- Support during midterms and finals
- Resource series on advising, tutoring, career services, health & wellness
- Messages to normalize and support students with a retention indicator

Hi Amanda, it's Sunny. Your first semester at ASU is almost over and you probably have all the feels right now ... joy, pride, exhaustion, accomplishment.



Just remember, you've got this 🍀 Remember your goals for being at ASU, and who you are ... someone who has the power to do the best they can!



bot responded 12/10/2019, 1:54:31 PM

Getting to this point is an awesome accomplishment, and I'm so proud of you. You can finish strong, Amanda 🍀



Thanks Sunny, I couldn't have made it this far without your support

Aww, shucks. You flatter me. You're pretty alright yourself.



# Sunny engagement

**~36,000**

First year students reached F18 – S20

**1.8 million**

Outgoing text messages

**32%**

Average monthly student engagement; 40% interactive campaign engagement

**59**

Increased outreach campaigns from 10 in F18 to 59 in F19

**2,550**

Knowledge base responses

30,000  
messages  
triaged

114,000  
messages  
received  
from  
students

Sunny handled  
74% of student's  
messages  
without human  
intervention

**840 estimated hours of staff time saved in 2019**

Students are getting automated answers that used to be handled through emails, phone calls, or in-person appointments by ASU staff.



# Student satisfaction

Students entering their second year at ASU were surveyed in August 2019 to get their opinions on Sunny. **50% of respondents found Sunny to be helpful, friendly and informational.**

We recently checked in with those completing their first term in Fall 2019, and found that **78% of respondents are happy with Sunny.**

Student feedback shows a connection to Sunny:

- *She helped me out and made me laugh*
- *Sunny made me feel connected to ASU*
- *Sunny texted me when no one else would*
- *She reminded me about how special I am :)*
- *Asked how things were going when I felt new and awkward*
- *It's nice to know that I could contact someone if I had any issues*
- *I wasn't so lonely all the time, it was almost as if I was talking to another human*

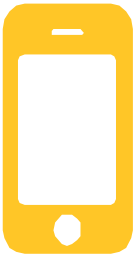
What do you think of me? Reply with a number:

- [1]: Annoying 🙄
- [2]: Lame 🙅
- [3]: Okay 😐
- [4]: Pretty good 😊
- [5]: Amazing 🥰

# The bottom line on chatbots



**ASU is continuing to invest in chatbot** as a communication and service tool for prospective and current students.



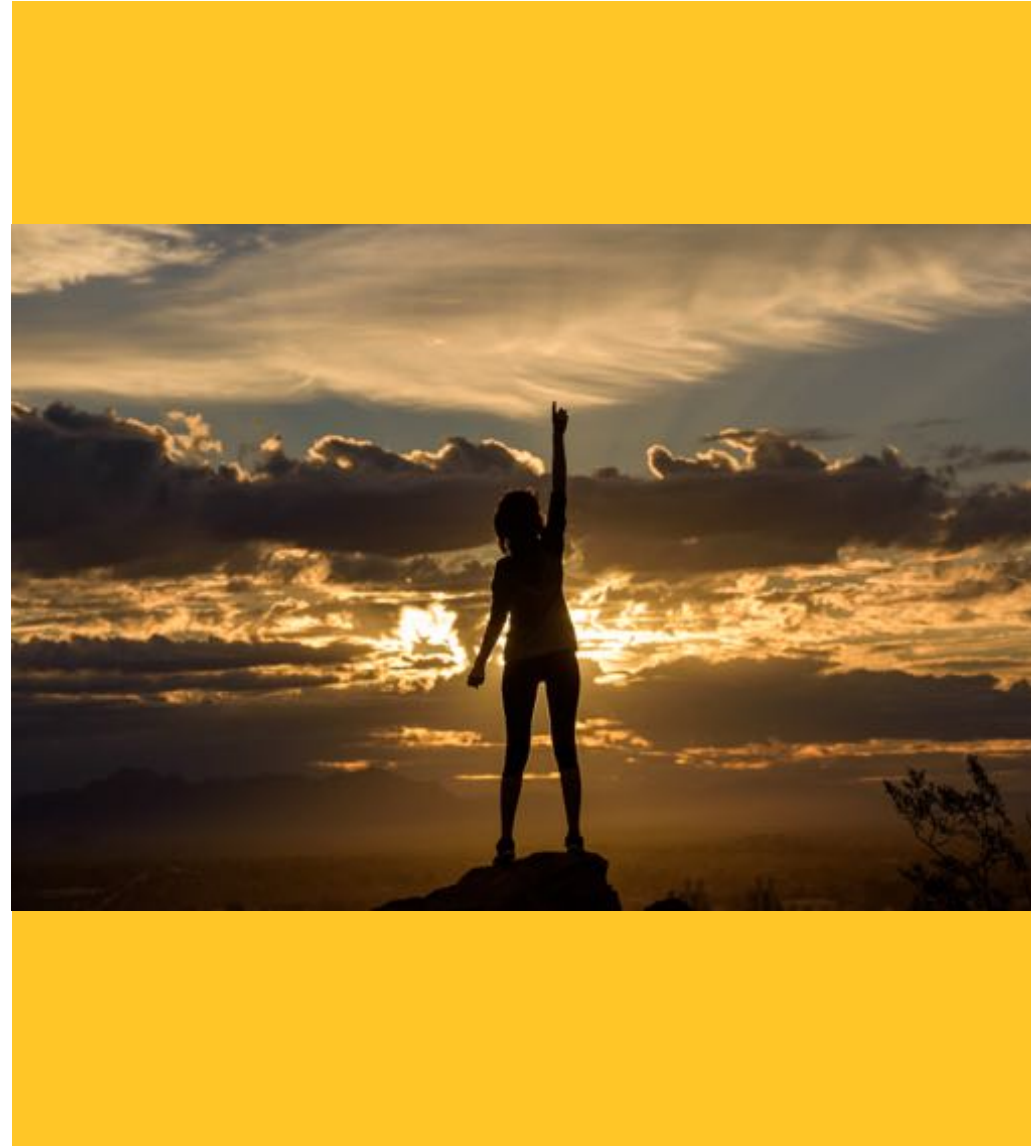
**When added to a portfolio of communication channels, chatbots can:**

- Save staff time
- Create virtual connections
- Enhance person-to-person conversations
- Nudge students to take critical steps forward in their academic career



# Coordinated strategy

- Deploy chatbots with a coordinated strategy
- Align with the institution's brand
- Place student needs at the center



# Personalized approach

Be **timely** and **personalized** through **segmentation**. Effective outreach focuses on:

- Belonging
- Engagement
- Student Success

**Use student's (preferred) first name** at the beginning of every new message to personalize and so that the student knows the message is meant just for them.

Happy Friday, Christopher, it's Sunny! 😊 I know you're probably a pro now at navigating college life, but I wanted to check-in and see how you're doing.



My hope is that your semester is off to a great start, but I want to hear from you. How would you say it's going? Pick a number. [1] Smooth sailing so far! [2] Rough at first, but getting better. [3] I'm struggling.



c

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Good to hear, Christopher! I'm here if you need me.



## Keep it casual

When texting with students, make sure to add some fun to the mix!

- Develop a conversational tone
- Use emojis and gifs



# Chatbot Expectation Tips:



**DO** – Be upfront with students about what the bot CAN do

I'm Sunny, your trusty virtual assistant. I'm here to help you navigate your way through your college experience here at Arizona State University.



**DON'T** – Pretend it's a human

I'm so sorry. I'm just a robot and sometimes I get confused. I can get a human to help!

# Chatbot Expectation Tips:



**DO** – Escalate to staff if needed

Hmm, I don't have an answer to that right now. A human will review your message to help me reply as needed. You can also rephrase, and I'll try again



**DON'T** – Expect the bot to answer every question

Sorry if I wasn't helping. If there's something I'm not getting, there are humans who check on me to catch my mistakes

# Chatbot Take-Aways



Coordinate your **Campus Strategy**  
Think...Total Student Experience



Keep the messaging **Relevant**  
Natural voice and intention



Make it **Personal**  
Personalization = quality interactions



# Thank you! Any questions?

Connect with us here or online if you think of anymore questions.

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Please remember to submit your  
evaluation on Guidebook!



#FYE20