



# Behavioral insights for scalable, sustainable solutions in education

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Have questions?

Text them in!

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# Increasing role for behavioral science in public policy



“A growing body of evidence demonstrates that behavioral science insights...can be used to design government policies to better serve the American people.”

-President Obama  
Executive Order, directing federal agencies to incorporate behavioral science



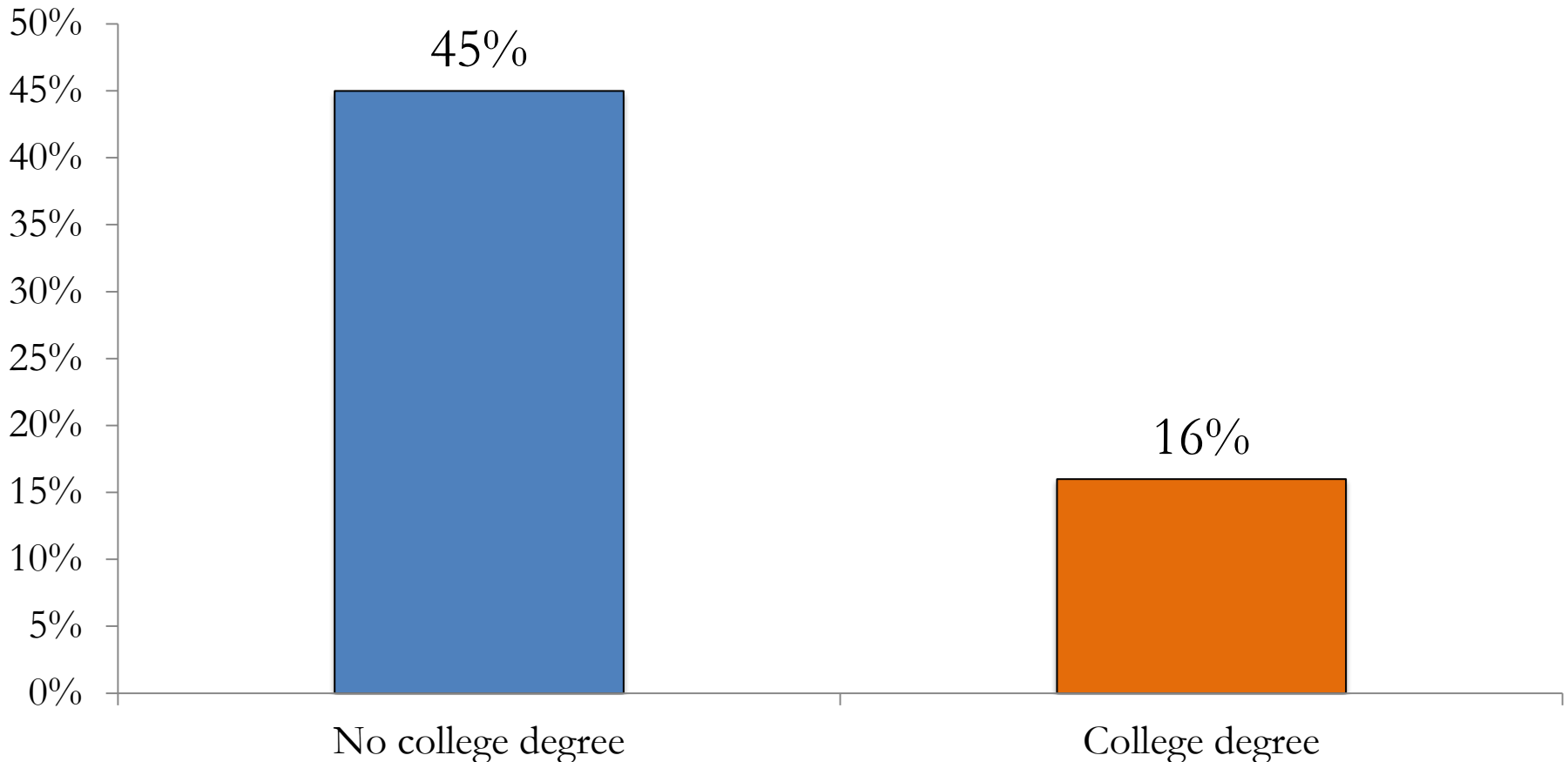
# Increasing role for behavioral science in public policy





# The need for scalable solutions in postsecondary education

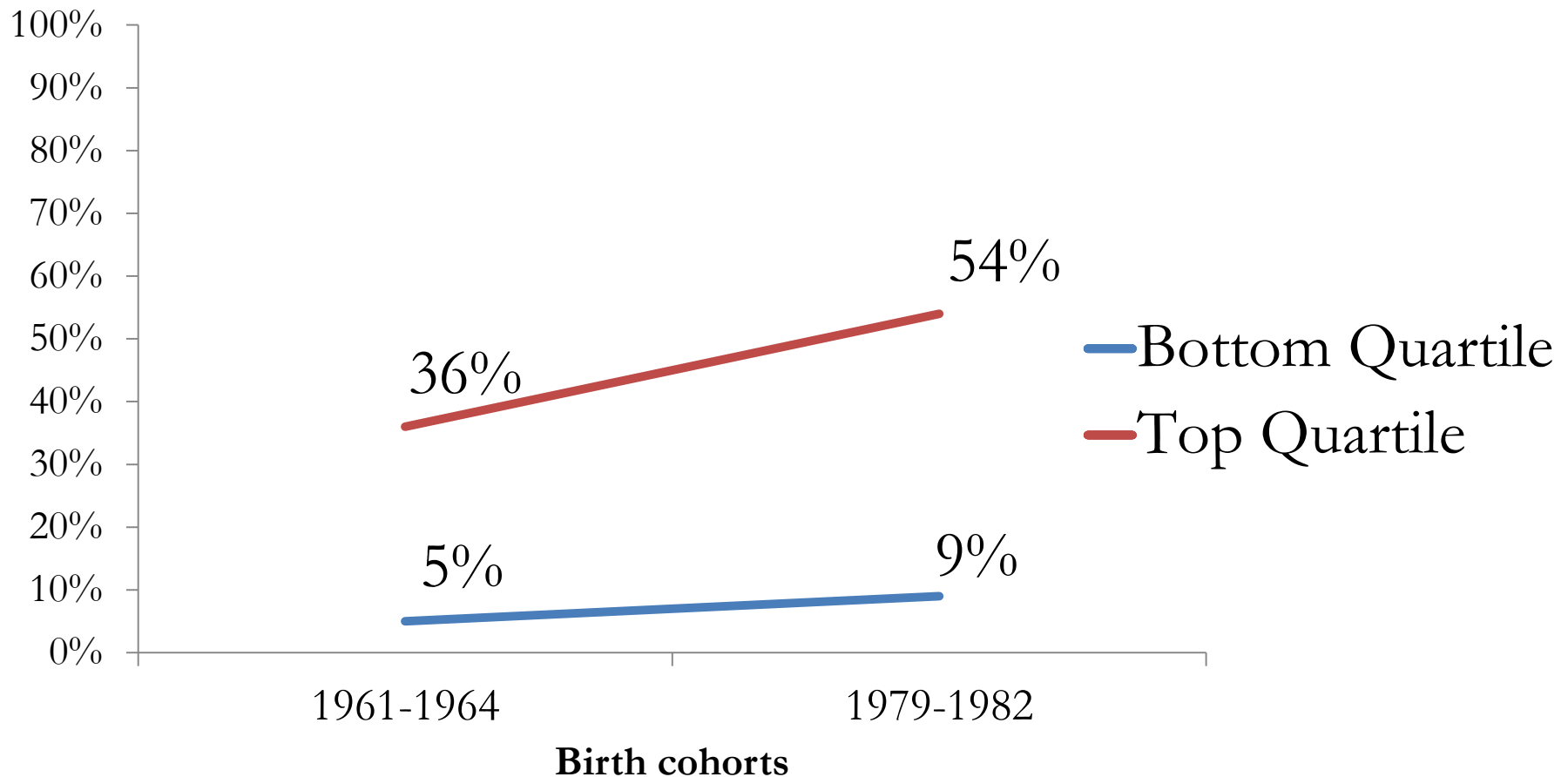
**Percent of children born into the bottom income quintile who remain there as adults**





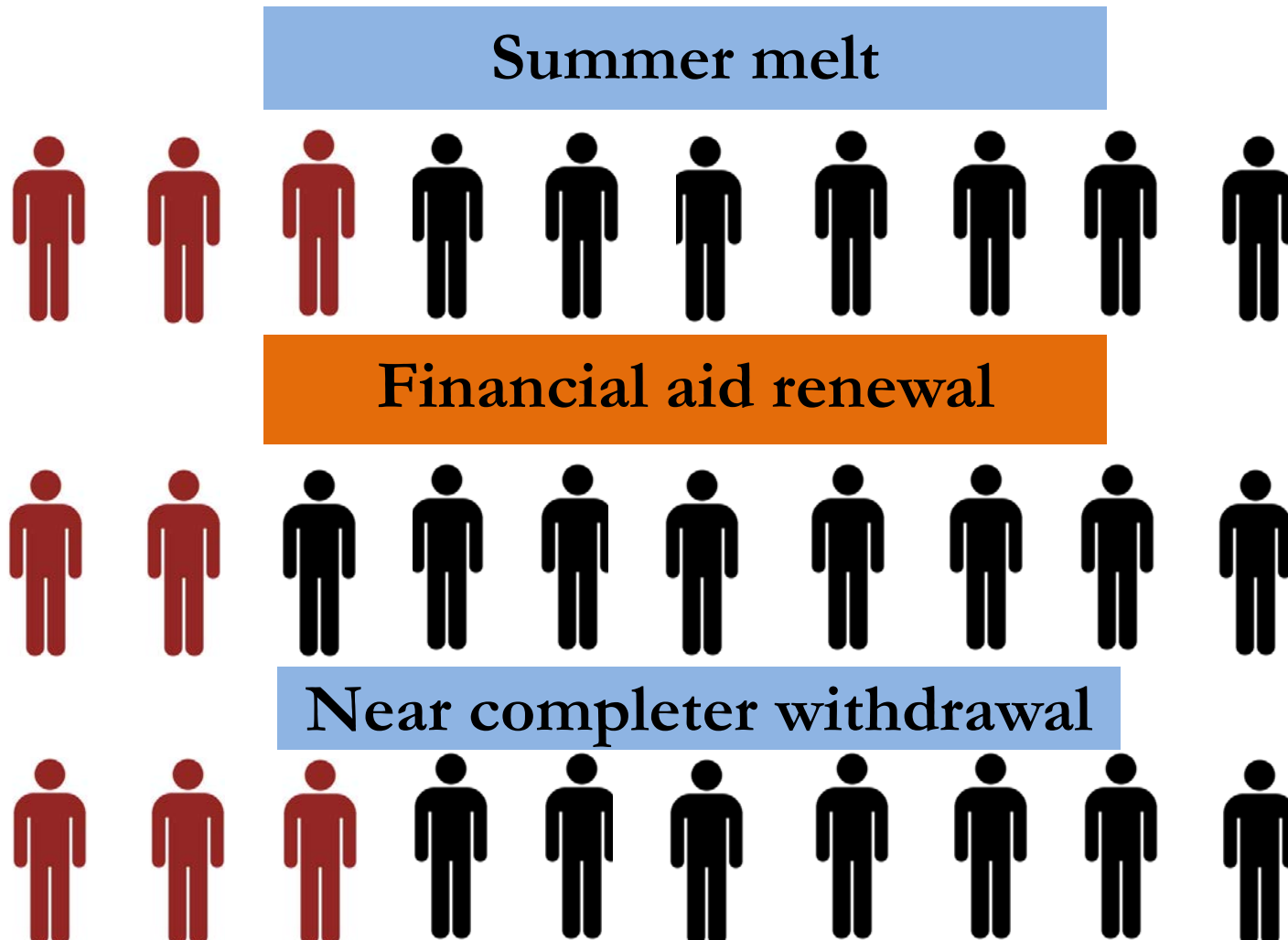
# The need for scalable solutions in postsecondary education

Percent earning a bachelor's degree by age 25





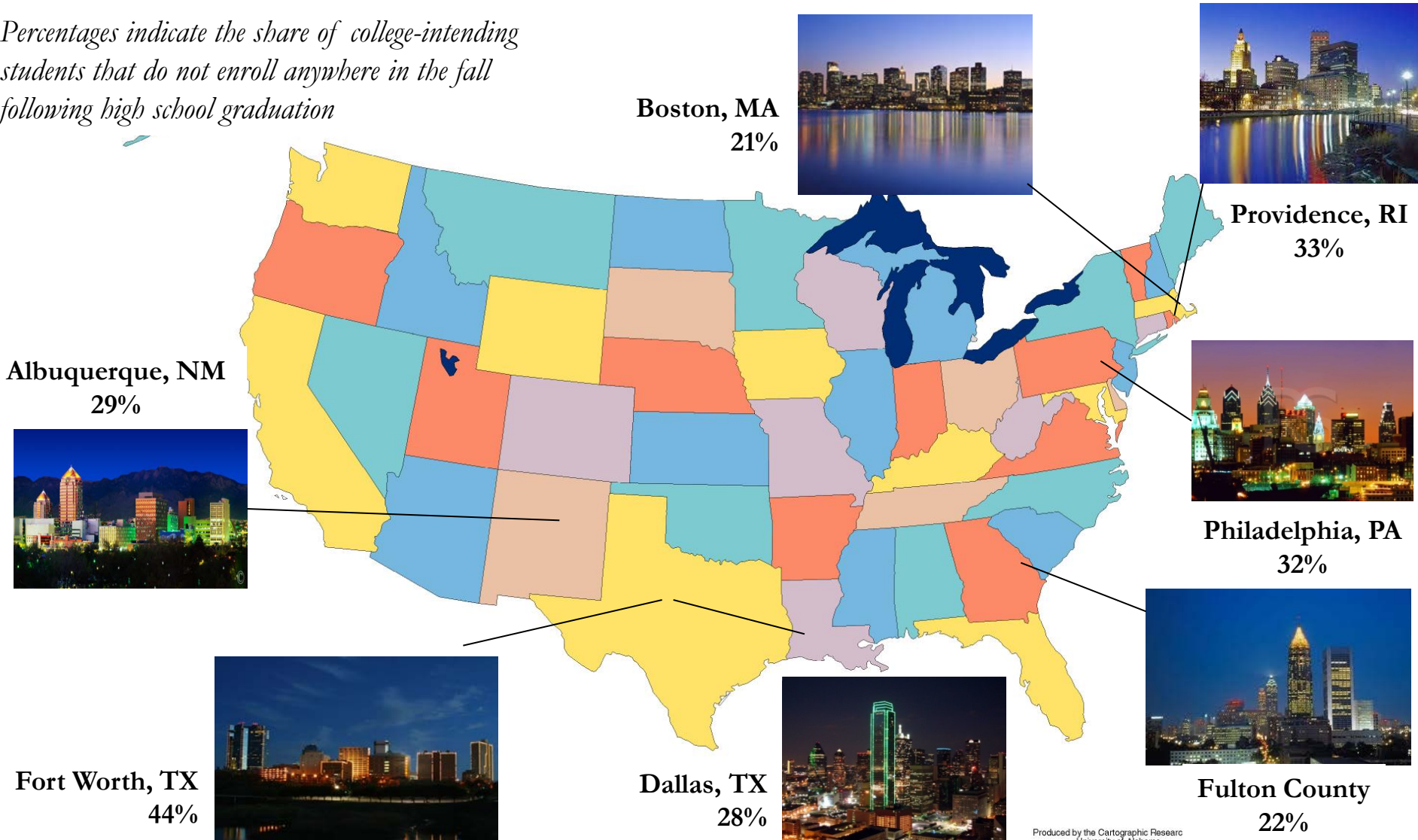
# Complex decisions, critical junctures in higher education





# Summer melt: A classic behavioral bottleneck

*Percentages indicate the share of college-intending students that do not enroll anywhere in the fall following high school graduation*







# Why do students melt?

Even after being accepted to college and choosing where to attend, low-income students have to complete complex tasks...

FAFSA verification

Award letter review

Supplementary loan applications

Tuition payment plan set-up



Unanticipated fees (orientation, housing, etc.)

Orientation and placement test registration

Housing applications

Health insurance applications and waivers

...but typically have little access to professional help.



# Text messaging to mitigate summer melt

- **Text intervention consisted of 10 messages:**
  - Financial aid
  - Orientation, placement tests, and housing
  - Tuition bill and health insurance

Hi Alex! Have you signed up for the UMB orientation? Last one is 7/15. Need to register? <http://bit.ly/umborient>. Need help? Reply to talk w/ an advisor.



# Text messages: A behavioral multi-vitamin?

Captivate

- Each text demands our attention

Simplify

- Reduce complex info to consolidated, timely bursts

Nudge

- Prompt people to follow through on important actions

Connect

- Make it easy for people to connect to professional advising



# Reducing barriers to 1:1 help

UVA Classroom Pilot | [Logout](#) [Tools](#)

Welcome, Ben



All

Participant search

 Select  Action  View

Showing 1 through 25 of 266 &lt;&lt; &lt; &gt; &gt;&gt;

## Messages

All

Unread 1

Inbox 266

Sent 376

+ Education-Innovations 1

Name	Message	Program(s)	Signal	Date / Time
<input type="checkbox"/>	Hi Ben, I've made the quick switch to QuestBridge (low-income high-achieving application to address under matching) but will take other advice you gave	Education-Innovations	●	Dec 8, 2015 9:12:24 PM
<input type="checkbox"/>	Hey Ben, so for the SWAT I am really interested in the topic of alternative credentials to traditional academic credit. I've looked at Mozilla Open Badge <a href="http://openbadges.org">http://openbadges.org</a> and Coursera <a href="https://www.coursera.org">https://www.coursera.org</a> My two questions are do you think there is enough substance here for a thorough analysis, and is it okay for our program to already be well-backed/off the ground like Mozilla's. Best, -Grant	Education-Innovations	●	Dec 5, 2015 5:00:46 PM
<input type="checkbox"/>	Sweetness. Just one other question formatting wise... we don't need to do like a traditional times new roman double space paper. Would it be ok to format it as some type of study or report (I guess similar to some of the pdf type readings we get). Also I can post these questions to the collab forum!	Education-Innovations	●	Dec 1, 2015 11:32:42 AM
<input type="checkbox"/>	Hi Prof. Castleman -- I hope you guy had a great Thanksgiving. Quick question... Are we allowed to include charts/graphics in our swot papers?	Education-Innovations	●	Nov 30, 2015 10:53:08 PM
<input type="checkbox"/>	Do you prefer a poster board or a trifold board for the slide presentation? We are not sure if the set up will be on walls or on tables	Education-Innovations	●	Nov 29, 2015 9:49:55 PM



# Reducing barriers to 1:1 help

Hi Prof. Castleman -- I hope you guy had a great Thanksgiving. Quick question... Are we allowed to include charts/graphics in our swot papers?



11/30/15 10:53 PM

sure!

Ben Castleman 12/1/15 11:30 AM

Sweetness. Just one other question formatting wise... we don't need to do like a traditional times new roman double space paper. Would it be ok to format it as some type of study or report (I guess similar to some of the pdf type readings we get). Also I can post these questions to the collab forum!



2/1/15 11:32 AM

format is flexible so long as you address the key points we went over. thx!

Ben Castleman 12/1/15 5:28 PM

160

Scheduled for *immediate delivery*

SCHEDULE NOW SEND



# The data behind summer melt texting

	A	B	C
1	<b>Student name</b>	<b>Cell #</b>	<b>Intended College</b>
2	Ben Castleman	617-299-0279	Brown Univ.

	A	B	C
1	<b>Intended College</b>	<b>Orientation Reg Date</b>	<b>Orient. Reg. URL</b>
2	Brown Univ.	15-Jul	<a href="https://goo.gl/5us4r">goo.gl/5us4r</a>



# Example text responses

**July 2:** “Awwww! Thank you so much!”

**July 2:** “Who’s this?”

**July 8:** “Oh hey! You couldn’t text me at a better time! I was wondering if I can make an appointment with you...I need to update my financial aid with the 2011 tax forms and I don’t know how to do it. I need your help!”

**Fewer than four percent of students or parents opted out of the text messaging campaign**



# Surprising richness of exchange

**Fall bill due 8/7. Do you have a good plan for paying your bill? Need help? Questions about loans? Text us or visit our walk-in hrs!**

**I saw what my bill is so is that what financial aid takes care of**

**Do you know how much your bill is for?**

**3000 & some change**

**That doesn't sound like your fin aid has been applied yet. Did you check your email? Check to see if you have any emails from the aid office.**

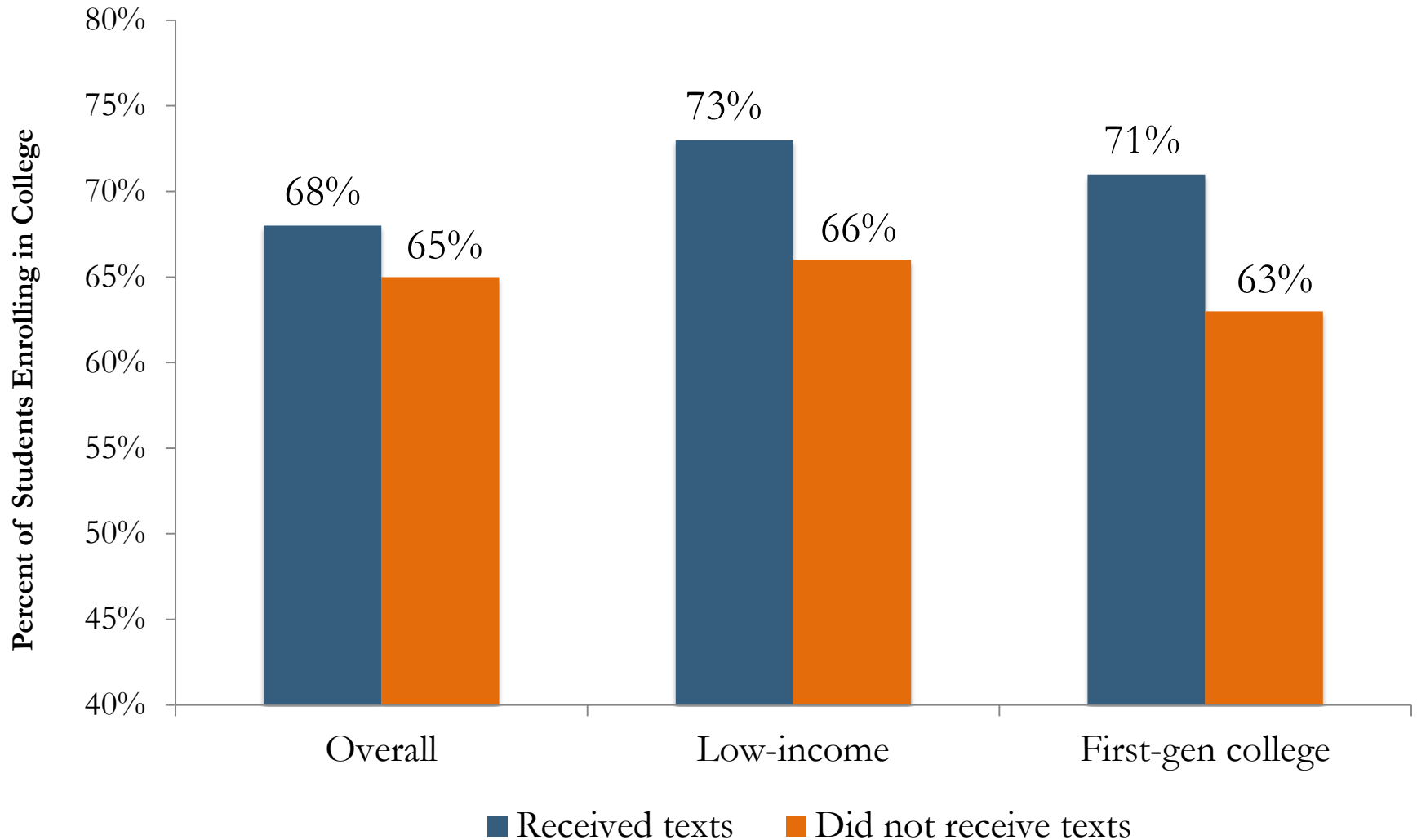
**I figured it out, they need my transcript**

**Ok that makes sense. Once they received this, the fin aid office may have more papers for you to fill out. Be sure to check your email often and let us know.**





## Results: Substantial increases in enrollment for a small investment (\$5-\$10 per student)





# A central role for colleges and universities in data-driven nudges



- FAFSA and CSS/Profile completion for lower-income high schools



- FAFSA renewal for first-year students



# UVA – FAFSA completion help

- **The problem:**
  - To qualify for institutional aid, students need to complete FAFSA and CSS by March 1.
  - Lower-income students tend to file later in the calendar year, so may forego substantial aid
- **The data-driven nudge solution:**
  - Pull real-time data on the status of students' financial aid applications
  - Send students semi-customized nudges to complete their applications



# UVA – FAFSA completion help

- **The messages:**

Hi Alex, only 10 days left before the March 1 priority deadline for the FAFSA & CSS/Profile. Applying by 3/1 can mean \$1000s more in aid

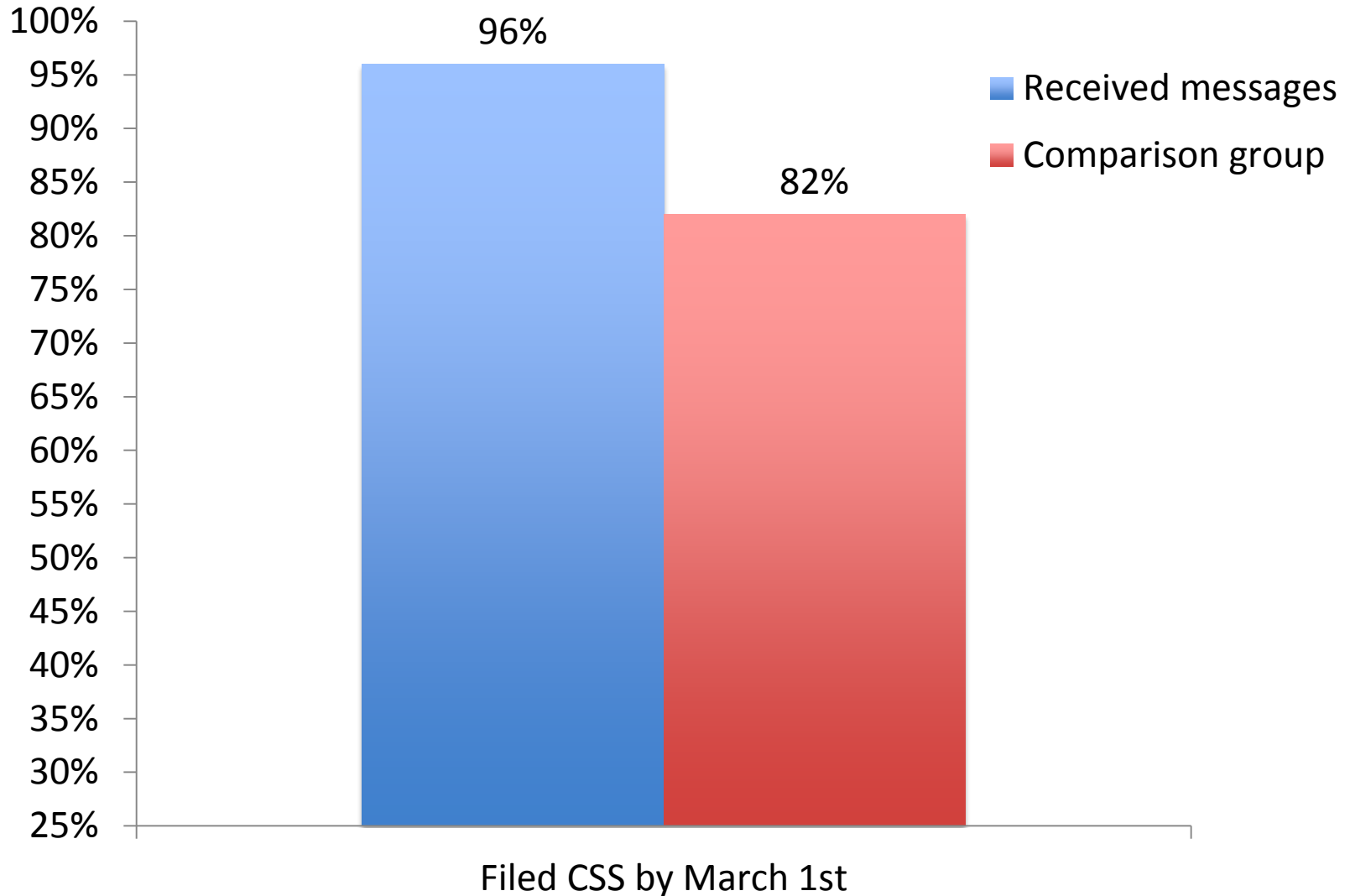
Hi Alex, it's Chelsea from UVA again. Great job on getting your FAFSA and CSS/PROFILE in. You're 90% of the way done!

Is there a day this week when you could set aside a couple hours to work on these forms? Text back if you need help.

As of 3/15 there were still a couple things missing from your aid application. Log on to SIS to see what we need or text back & I can help.



# UVA – FAFSA completion help





# ASU – FAFSA renewal

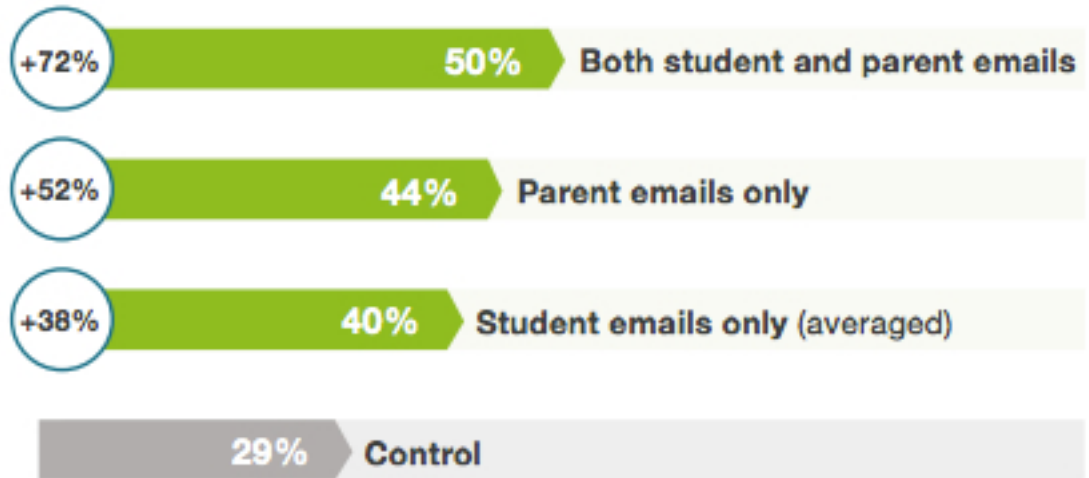
- **The problem:**
  - In 2014, only 18% of ASU students refiled FAFSA before the priority deadline.
  - Missing the priority deadline means students may not receive their maximum financial aid
- **The data-driven nudge solution (via email):**
  - Provide students with institution-specific information about aid filing deadlines and aid received if students file by the deadline
  - Also message parents about FAFSA renewal



# ASU – FAFSA renewal

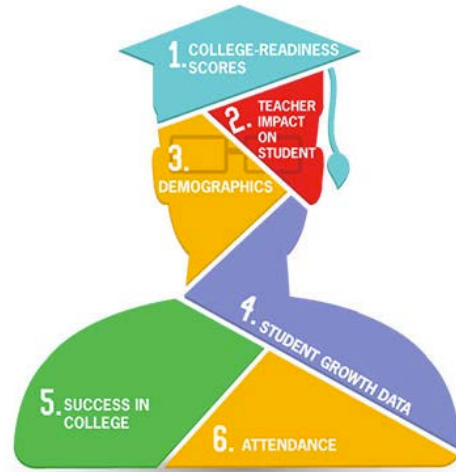
ideas **42**

**Number of Priority FAFSA Filers  
by Treatment Condition  
(Interventions 1 & 2)**



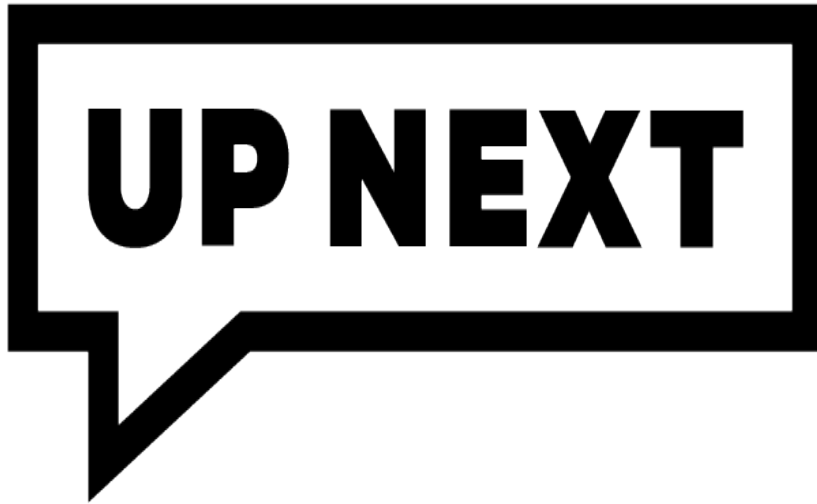


# What makes these campaigns successful?





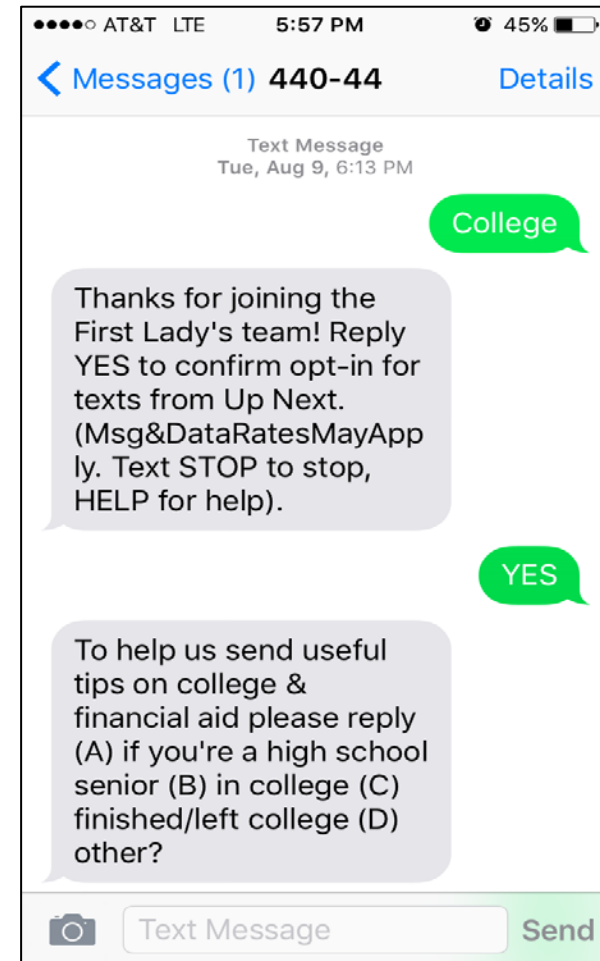
# Text campaigns at scale





# Up Next campaigns

- High school seniors: College search, FAFSA completion, college applications
- Current college students: Transition to college, making use of campus resources, FAFSA renewal
- College grads: Loan repayment decisions
- Parents and school counselors can also sign up.





# Up Next message design

Do you have a list of colleges you plan to apply to? Txt YES/NO

NO

That's OK, we can help! Check out this graphic for tips on finding schools that are a great fit AND affordable:

**Make your college list.**

- Start your search based on where you want to live or what you want to study.
- Apply to at least 4: 1 safety, 2 match where you're confident you'll get in, and 1 reach.
- Check out what graduates earn and how much each college actually costs for families like yours:

[bit.ly/CollegeSC](https://bit.ly/CollegeSC)

University	City	Undergraduates	Avg. Cost	Min. Cost	Max. Cost
University of Illinois at Springfield	Springfield, IL	2,199	\$1,100	\$1,100	\$1,100
Governors State University	University Park, IL	3,179	\$1,100	\$1,100	\$1,100
Southern Illinois University Edwardsville	Edwardsville, IL	11,179	\$1,100	\$1,100	\$1,100
Western Illinois University	Macomb, IL	9,823	\$1,100	\$1,100	\$1,100

Hi, this is Better Make Room! We know student loan payments can lead to stress you don't need. Want to learn about options for lowering your monthly payments? Text YES/NO

YES

Great! Millions of borrowers like you choose plans based on their income. As a result 90% of them pay lower student loan payments each month. Text NEXT

NEXT

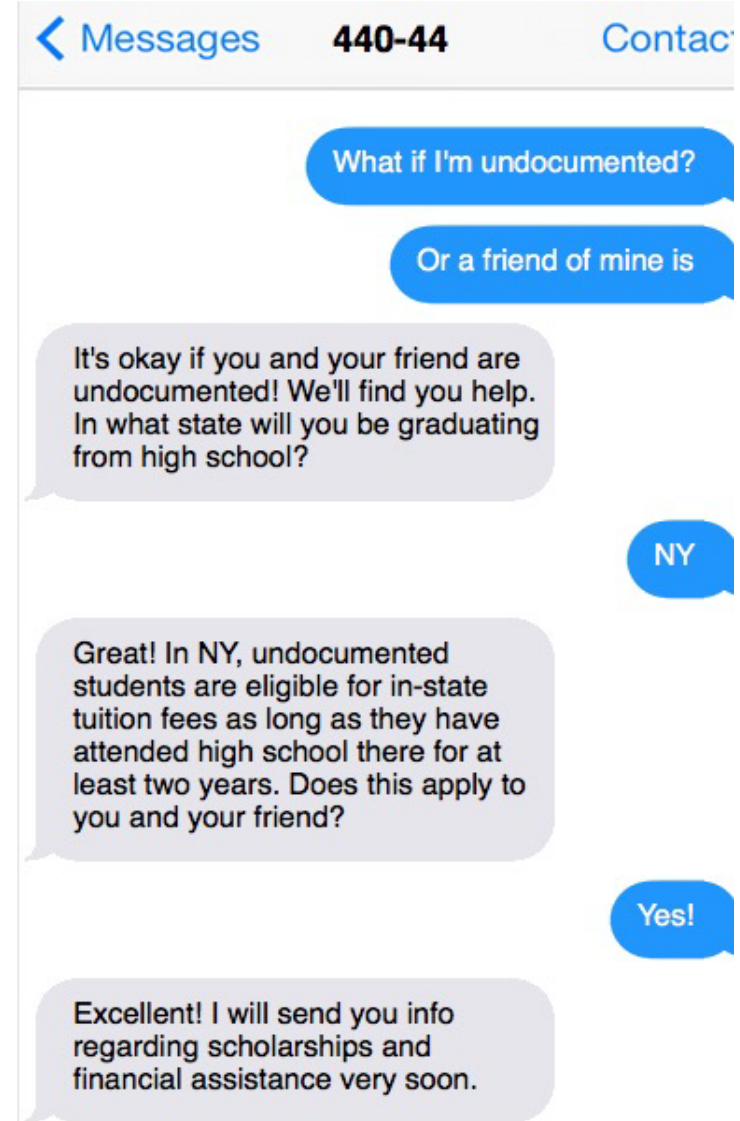
If money is a concern income-based plans are better than delaying payment. You may be able to pay \$0/month w/ interest benefits/loan forgiveness. Txt NEXT



# Advising at a national scale

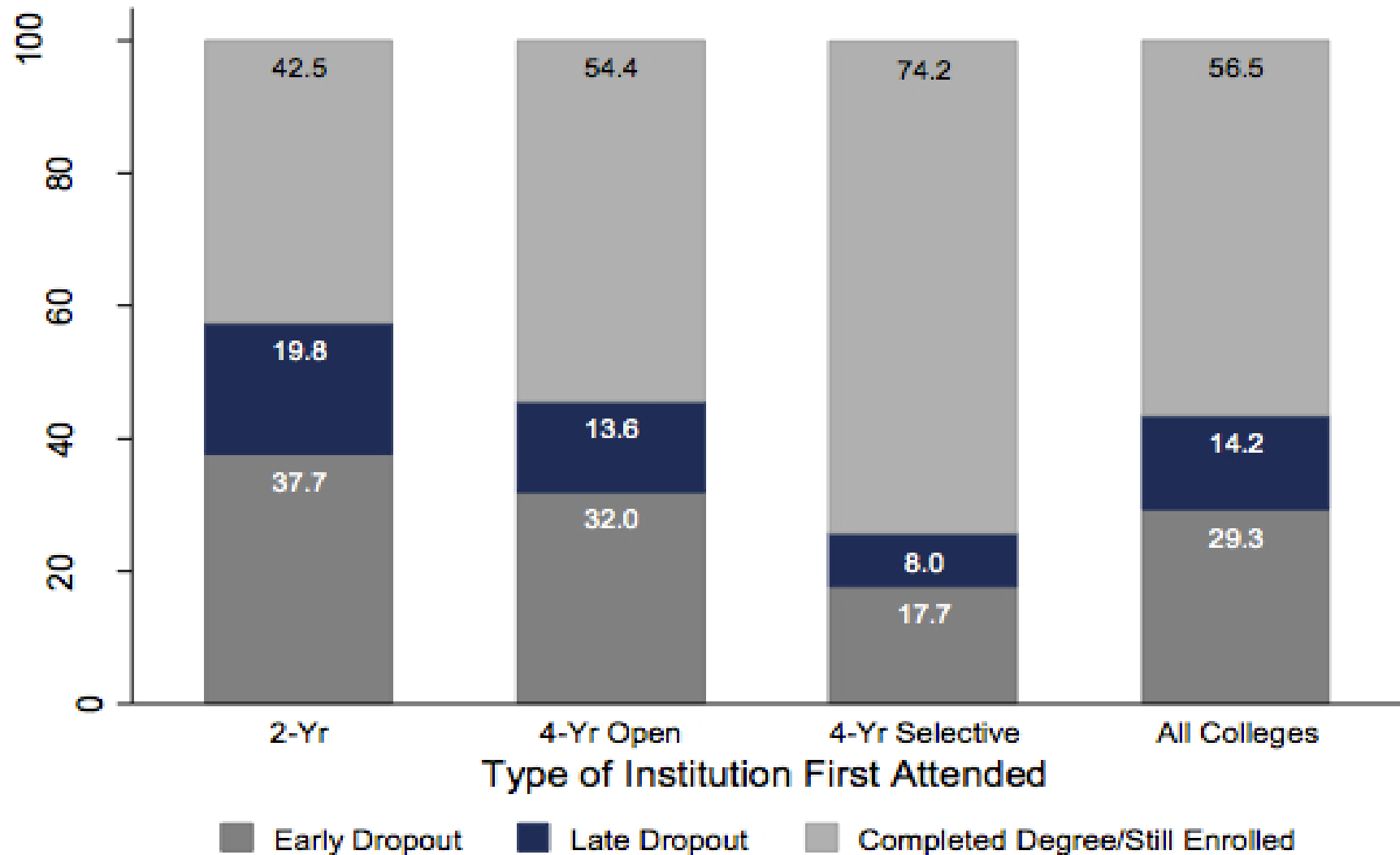


*college forward*





# Nudges for College Completion





# Nudges to the Finish Line (N<sup>2</sup>FL)





# N<sup>2</sup>FL nudges

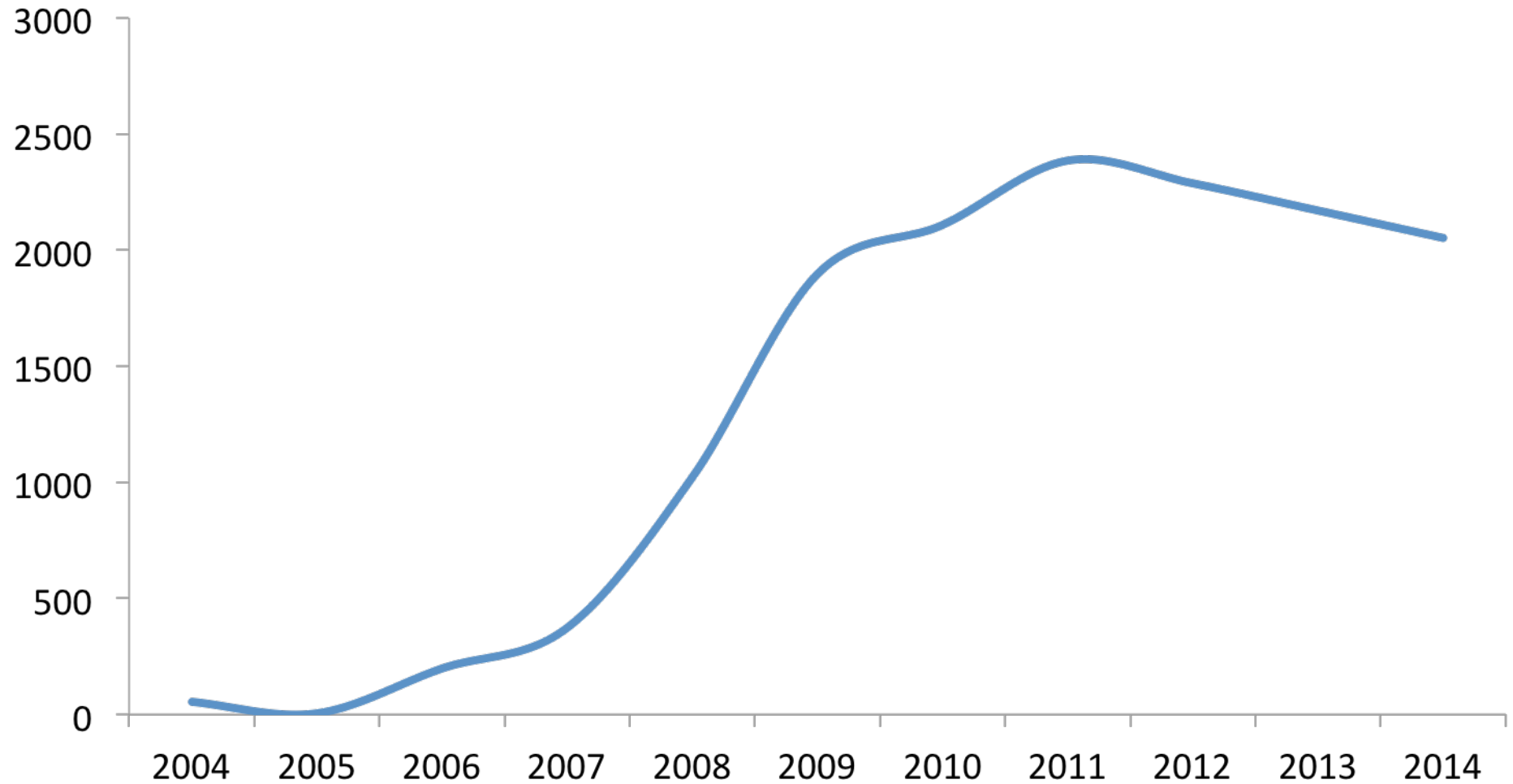
hey it's Deanne. I want to make sure you get the classes you need next semester to move towards graduation. Want to chat about your course options?

Hi there! Just checking whether you've started FAFSA. Doing it as early as possible will maximize how much aid you receive. Can I help with this?



# The twilight of text messaging?

**Billions of texts sent per year, North America**



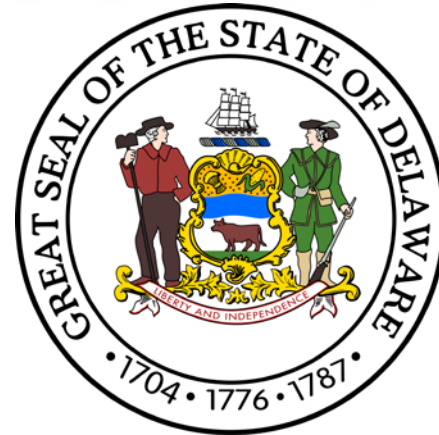




# Saturation of texting?



THE COMMON APPLICATION



# Going forward: new channels







# Going forward – more from mobile



### Making Sense of Your Financial Aid

<b>Grants</b> Free money from your college or government 	<b>Loans</b> Money that you borrow from the government 
<b>Work Study</b> Money you earn once you get to campus 	<b>Cost of Attendance</b> Total you owe to enroll. This may be more than the financial aid you receive 

Still have questions? Reply to this text message





# Going forward: Big Data + Behavioral Science



Real-time FAFSA completion updates

Required summer tasks

Courses to complete a degree

Nudges to use academic supports

Targeted growth mindset messaging



# Expanding outside traditional education



**Criminal justice:** Tablet-based modules that provide personalized supports as individuals transition back into society.



**Veterans education:** Interventions to help soldiers and their dependents make informed choices about the educational pathways they pursue.



**Workforce development:** Personalized job matches and behavioral nudges to encourage displaced workers to engage in an active job search.



# Thanks!

## Ben Castleman



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