



College tours re-imagined

Leveraging virtual reality
to increase match and fit



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Overview

- Match and fit challenges
- Virtual reality and artificial intelligence as a solution
- Demo of GEAR UP VR
- Early qualitative focus group and user testing results





- State grant in NC is operated by the University of North Carolina system.
- 20,000 students
- Seven years
- Rural high schools
- 60% FRL on average

Challenges of college match and fit

- Information asymmetry
- Low school counselor availability
- High need high schools
- Rural locations
- College application and financial aid is a complicated process



Potential solution – Virtual Reality

VR has the potential to “democratize education” by bringing learning opportunities to learners who otherwise would not have access to them.

- (Bailenson, 2017).



VR – interactivity and exposure



As a learning tool, immersive VR presents **a number of innovative elements** including three-dimensional simulations, **interactivity, and exposure to novel situations.**

(Castaneda, Cechony, Bautista, & Pacampara, 2017).



Use technology to address distance, time, and cost.

Create direct connections to campuses.

Curate college choice process.

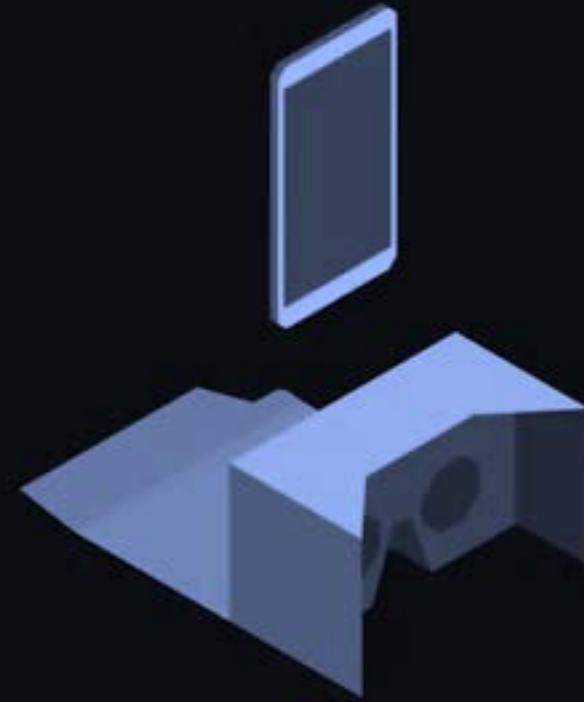
Empower individual exploration.

Free download.



First in the nation
high school VR
for college
access launch

[Graham High School GEAR UP VR launch](#)

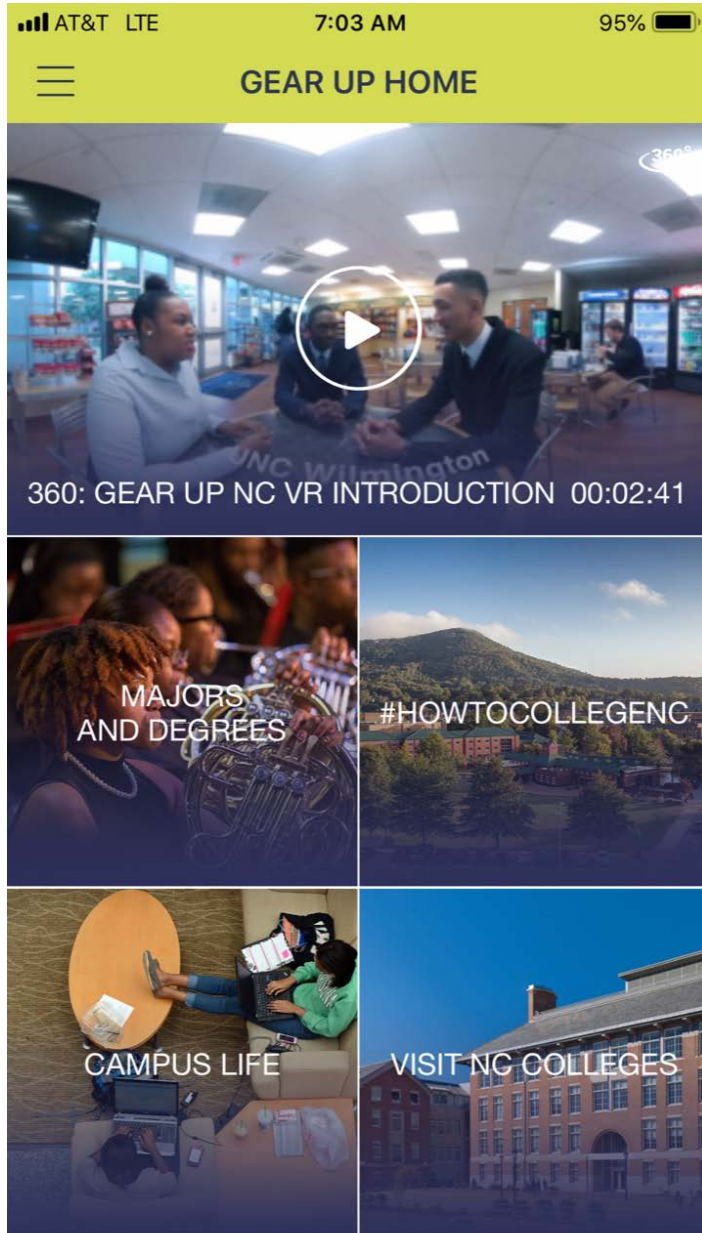


gearupapp.org

"Hardware"

- Cardboard goggles
- Earbuds Included



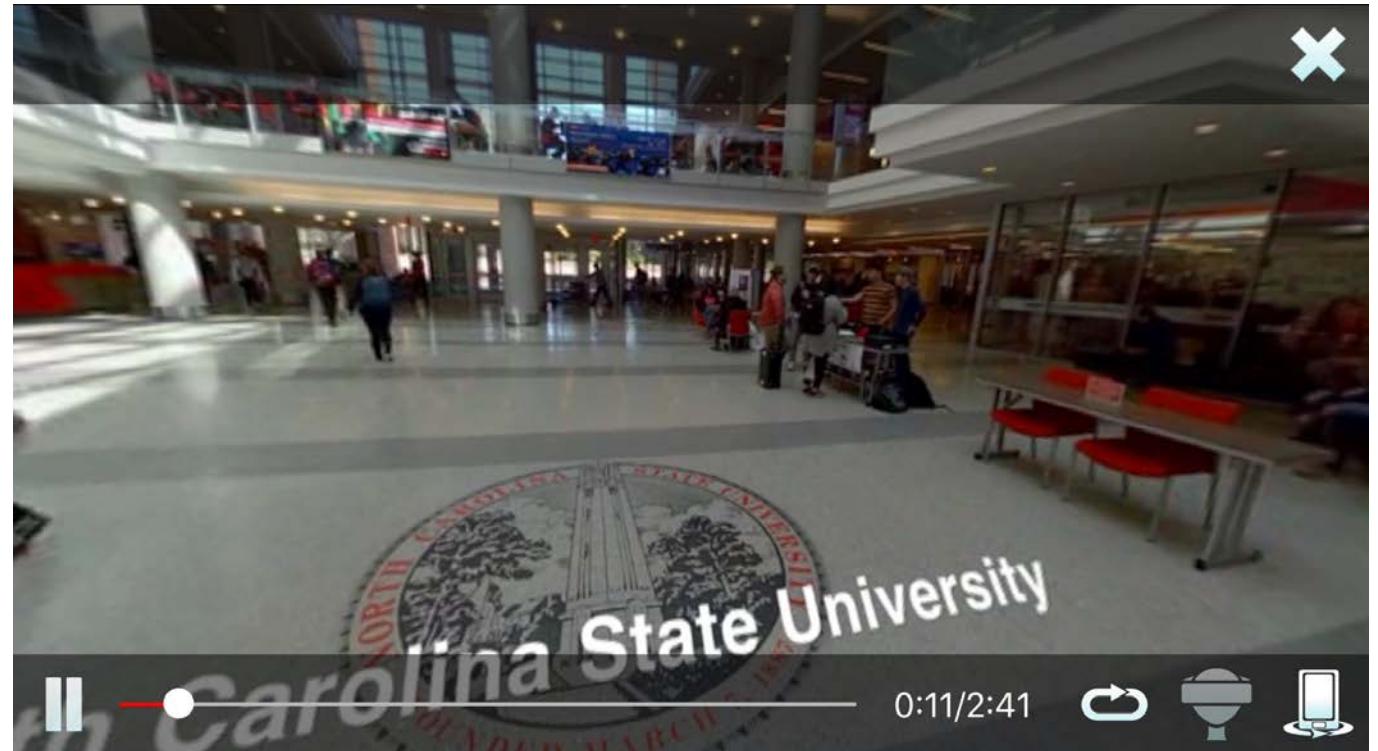


GEAR UP VR Home page

- Messaging targets first generation students
- Majors and Degrees
- #howtocollegenc
- Campus Life
- Visit NC Colleges

Introduction video

- Invites students to explore college.
- Focus is on first generation students.

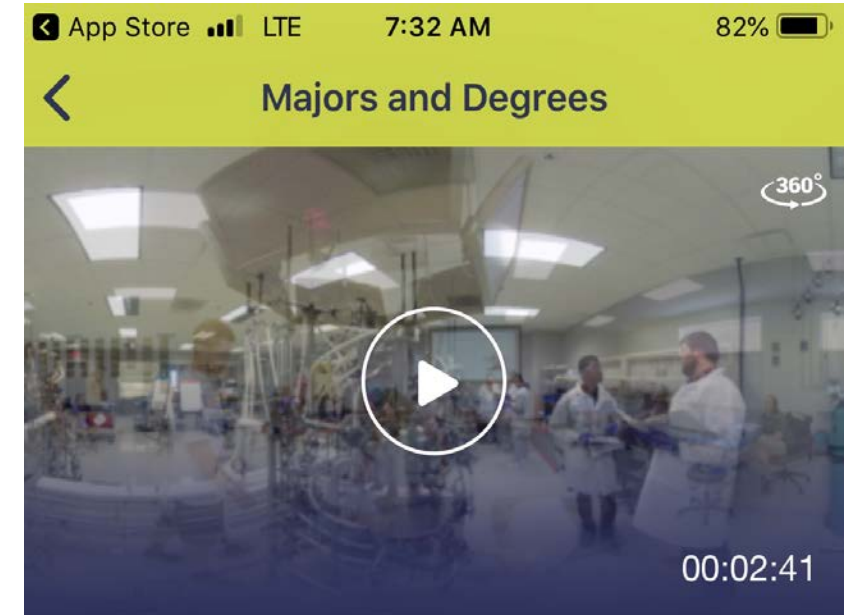


<https://www.youtube.com/watch?v=PPhjuCDa4rw>

Majors and Degrees tile

- The messaging within the Majors and Degrees tile gives students a high-level overview of what a major is and how to choose a major.

<https://www.youtube.com/watch?v=jgj5HZloDZc>



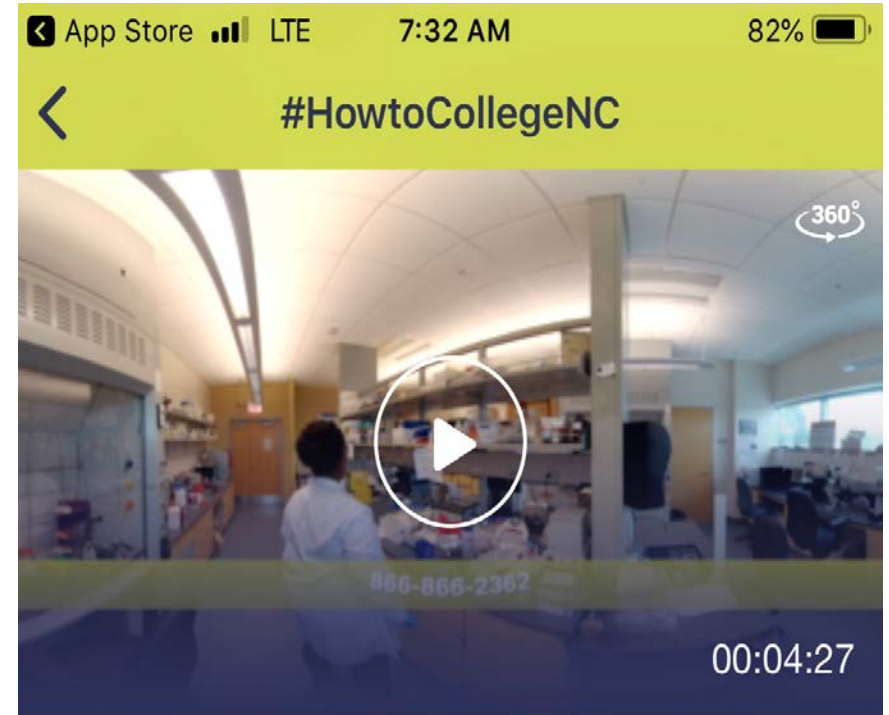
360: Majors and Degrees

It may seem like a mystery, but a college major determines what you focus on in your studies. A degree determines how the classes will line up during your time in

#howtocollegenc tile

- Two steps in the college enrollment process are critical; 1) the college application, and
- the financial aid application (Free Application For Federal Student Aid or FAFSA).

<https://www.youtube.com/watch?v=V6sqqtYMYaI>



360: #HowtoCollegeNC

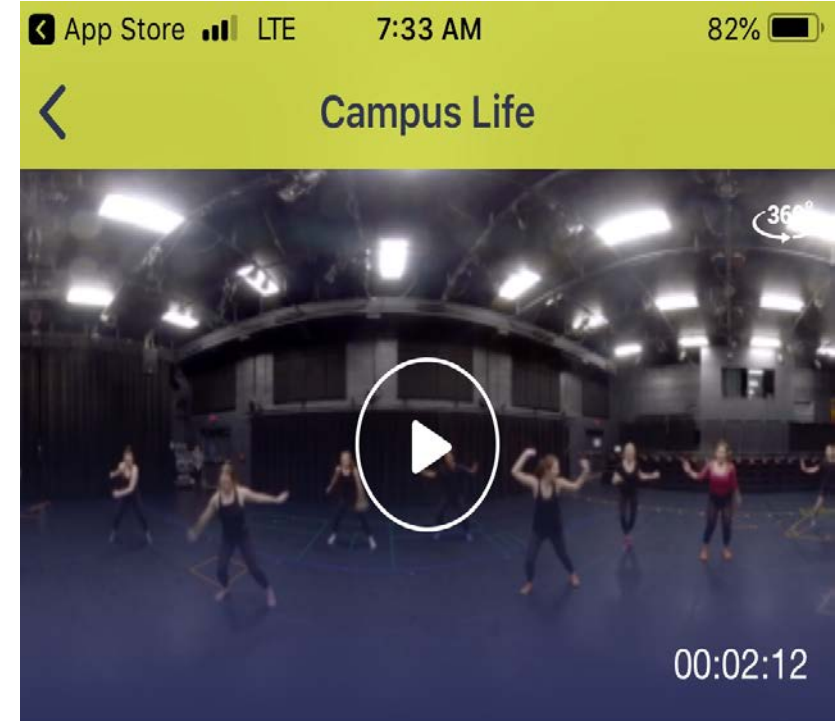
[SURVEY](#)

Start thinking about college early to find the right fit for your personality and the right match for your career goals. Check out some

Campus Life tile

- The Campus Life tile introduces students to the benefits of living on a campus. The messaging is geared toward four-year residential campuses, but many aspects of Campus Life such as intramural sports, clubs, and service learning also apply to commuter campuses.

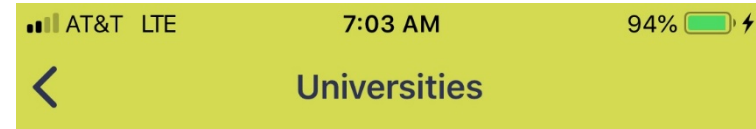
<https://www.youtube.com/watch?v=I4VCHT5VwCY>



360: Student Life

Are you excited for college? College is much more than classes, homework, and tests — it can be a fun time to try new things! All NC

University of North
Carolina System
campuses – 16 and
ten NC community
colleges



Appalachian State University



East Carolina University



Elizabeth City State University

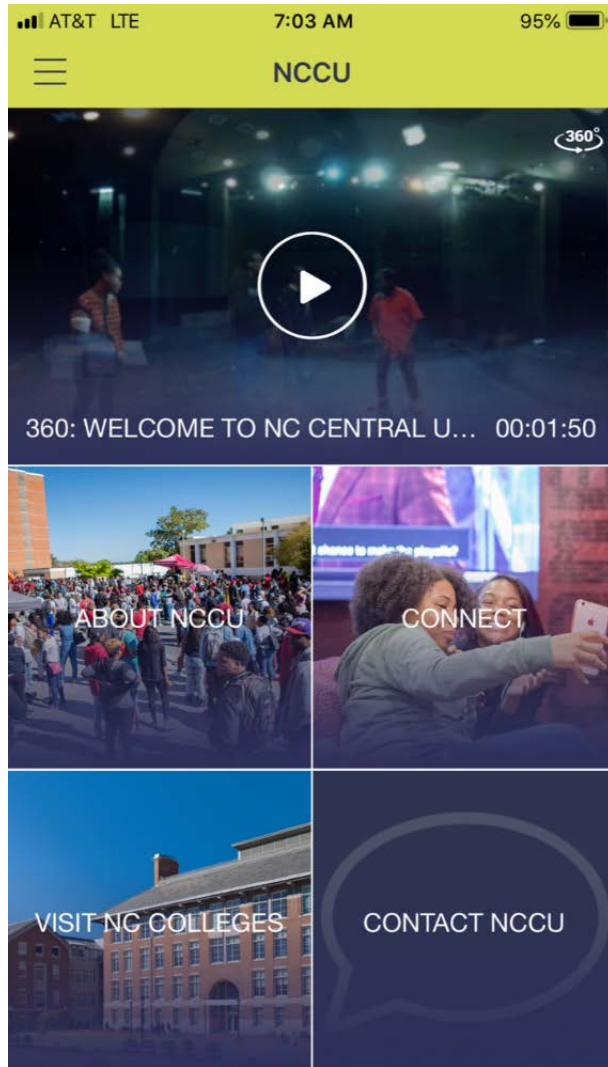


Fayetteville State University



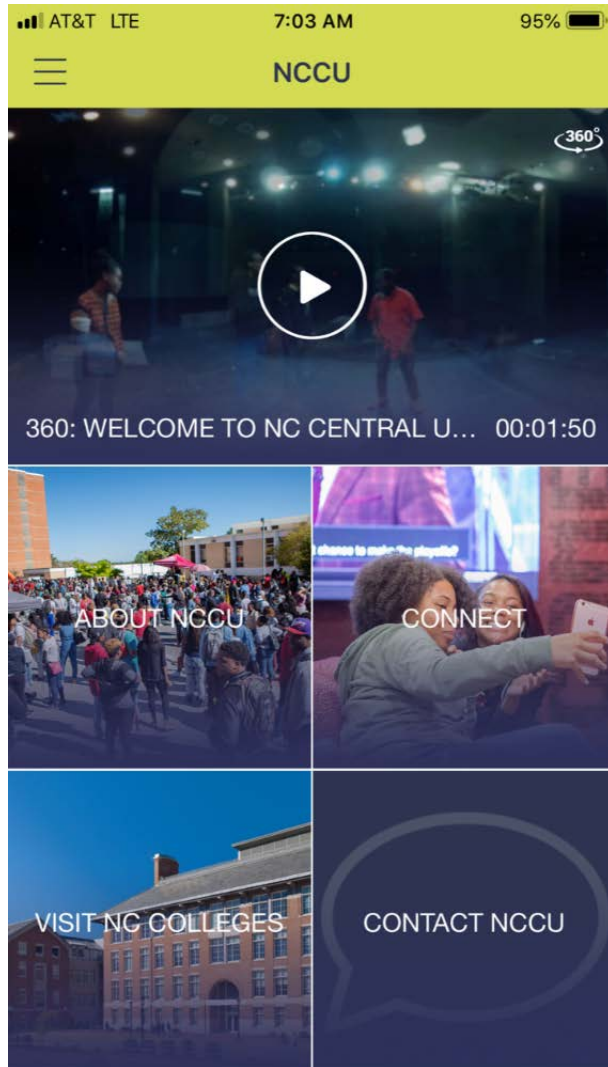
North Carolina Agricultural and
Technical State University

Campus specific tours



- The Visit NC Colleges tile provides a link to the 16 University of North Carolina campuses and 10 Community College campuses.
- Each campus has its own “home page” to give an in-depth look at its unique offerings.

Campus specific intro video



- The videos present the typical student in many contexts so students can gain a sense of where they might want to attend.
- The Introductory videos are intended to assist students in finding a proper college **match and fit** to their interests.

https://www.youtube.com/watch?v=c_28pBoUmQ8

About tile



[Website](#)

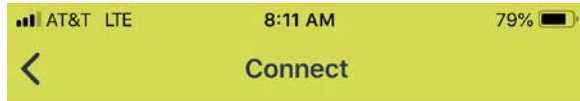
[Application](#)

[Financial Aid](#)

[Degrees & Majors](#)

The About tile provides direct connection to the campus website, application/Admissions office, financial aid office, and campus degree and major offerings.

Connect tile



Connect With Us




[Facebook](#)

[Twitter](#)

The campus specific Connect tile links students to social media outlets for the campus. The intent is to connect students to see the events and offerings happening on a daily basis to generate interest in the campus.

Contact Us email

AT&T LTE 7:38 AM 82% 

Cancel GearUp - Contact us Send

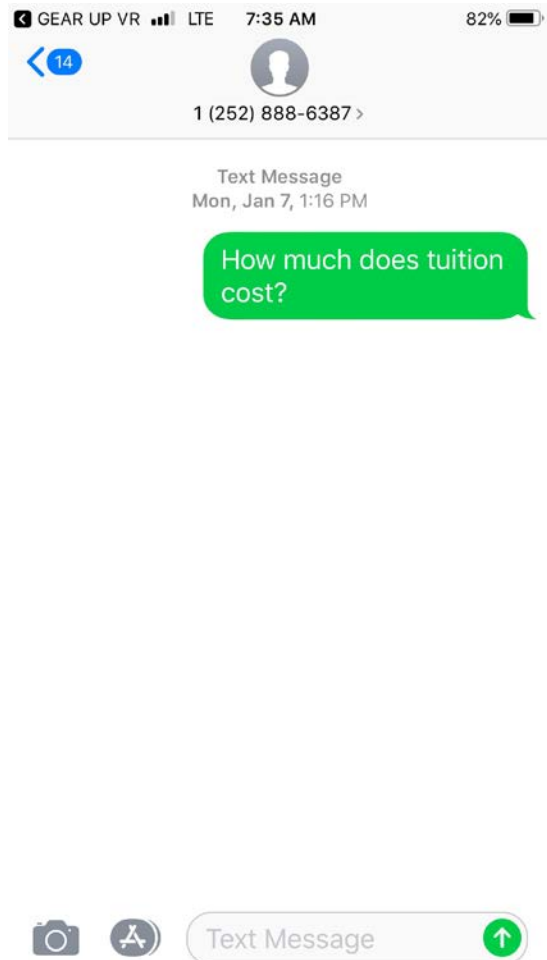
To: admissions@unca.edu 

Subject: GearUp - Contact us

Sent from my iPhone

Each campus has a means for students to ask specific questions. The email goes directly to a campus representative.

Contact Us Chatbot



The campus chatbot is available 24/7 and automatically replies to questions.

Check it out!

Chat with "**Lance**" at Lenoir Community College
252-881-1307

Engaging Generation Z

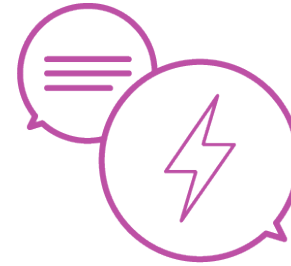
Meeting students where they are to get them
where they're going



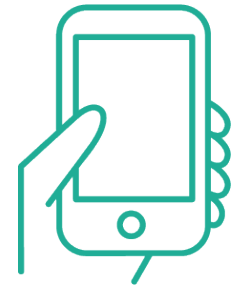
Personalization



Relationship
Building



Instant
Fulfillment



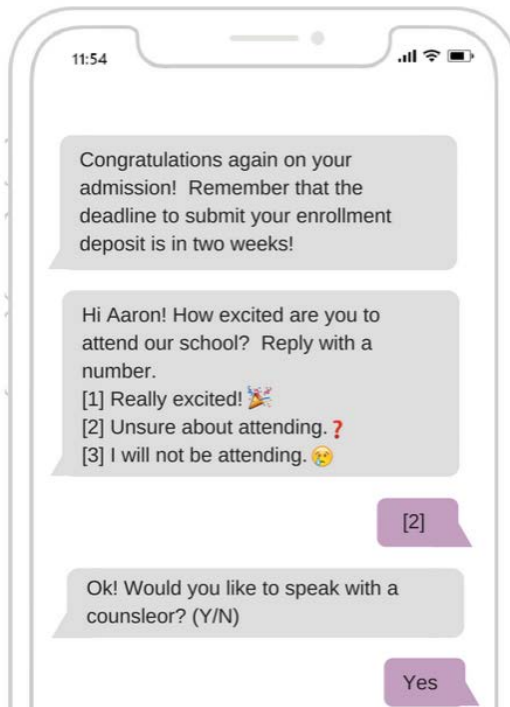
Anytime,
Anywhere

Conversations Change Behavior



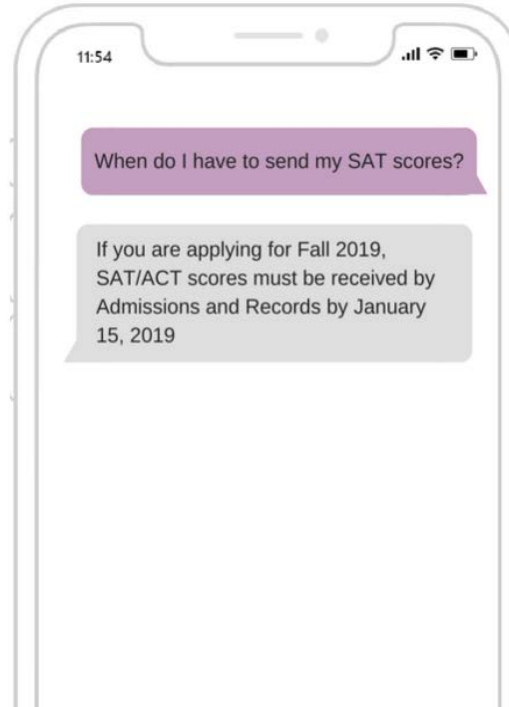
Proactive Outreach

The bot can send information to students and get some in return.



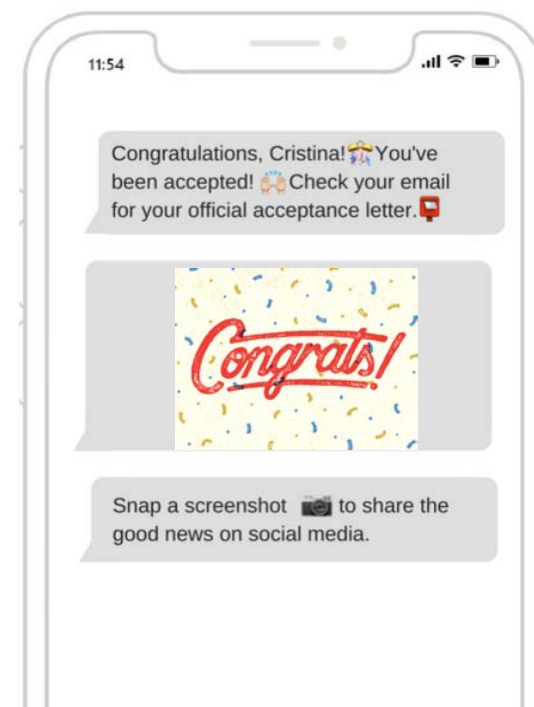
On-Demand Assistance

Students can ask any question and receive a response.



Joy

The bot makes interactions fun through graphics and wit.



GEAR UP North Carolina Chatbots



Qualitative field research

- Three Studies
 - User testing study (October 2018)
 - Survey study (Fall 2018)
 - Focus group study (March 2019)
- Students are rural and predominately first generation



Three modes of inquiry

- User testing study (October 2018)
 - Four GEAR UP NC High Schools; 100 11th Grade Students
- Survey study (Fall 2018 & Spring 2019)
 - Four GEAR UP NC High Schools; 44 11th Grade Students
- Focus group study (Spring 2019)
 - Two Gear UP NC High Schools; 24 11th Grade Student

Qualitative field research

- Objectives of Studies: Usability and Usefulness



Usability

- Researchers broadly define usability as “ease of use” and “usefulness” (Bowman, Gaddard, & Hix, 2002; p. 404)

Guiding Evaluation Questions

1. How did students use the VR app?
2. Was the VR app easy to use and navigate?
3. Did the students find the VR experience useful for gaining knowledge and making decisions for college?

Findings - Usability

- Some students experienced difficulty assembling the goggles;
- WIFI access was a challenge at one school;
- Mixed views on usability of goggles across schools;
- Students “toured” 1 – 10 campuses;
- Some information (programs of study, majors, financial aid, etc.) difficult to find;
- Limited knowledge of the chatbot feature.

Findings - Usefulness

- Enabled students to tour the campuses they wanted to tour;
- Increased access to campuses & broadened college choices;
- Enabled students to compare campuses;
- Learned about physical attributes of campuses, campus life, sports, clubs, dorm life, etc.
- 360 technology enabled students to “feel” they there on campus;
- Helped students to narrow down college choice based on interests or personal preferences for size, location, college type (e.g., HBCU vs. PWI), etc.

Findings - Usefulness

- Students expressed a sense of “being there” through use of the app
- Overall positive experience
- Information was useful.
- Some things to improve to make information easier to find.



Findings - Consistency

- The VR app had **good** usability but a few challenges to address.
- The VR app had **high** usefulness:
 - Generated interest in college exploration
 - Enabled students to choose the campus(es) to explore
 - Broadened students exploration of campuses
 - Increased access to college knowledge
- Transported students to college campuses through information and 360 immersion technology.

Early qualitative findings: Student sense of connection for match and fit

"Being there" in their words:

*"I would say way being able to see the students up close made me **feel like I was there**. Since I haven't been on a college tour, it made me feel like I was there."*

*"It made you **feel like you were actually there**. Sometimes you cannot get there physically."*

*"We were able to see action on campus **without going there**. Better than online pictures. "*

"I like this better than the campus tour. All we did was walk by buildings. I got to see inside buildings on the VR tour."



Two way benefits for match and fit

- Helped students decide which campus to tour (if able)
- If students had toured a campus, helped remind students of what they liked.



Significance and Implications

- Information, campus connections, and the capacity of virtual reality to “**transport**” **students for an experience** is now in the palm of a student’s hands.



Significance and Implications

- The early user testing indicates there is **promise in utilizing the VR technology** in the college access space and when combined with artificial intelligence to revolutionize the college choice process.



User initiated improvements

- Orientation for new users
- Search feature
 - Cost of attendance
 - GPA and ACT/SAT admissions requirements
- Add community colleges
- Curriculum for school staff

Interested in VR or AI?

- Virtual reality app
 - Steven King
 - UNC Chapel Hill
 - stking@email.unc.edu
- AdmitHub artificial intelligence
 - Kirk Daulerio
 - AdmitHub
 - kirk@admithub.com

UNC
EMERGING
TECH

LAB





Leveraging virtual reality to increase
match and fit

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