COLLEGE BOUND

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PURPOSE

College Bound is a web application that aims to bridge the educational gap between first-generation college students and higher education. Despite recent improvements in accessibility in higher education, there is still more that needs to be done in order to make the college and financial aid application simpler.

RESEARCH

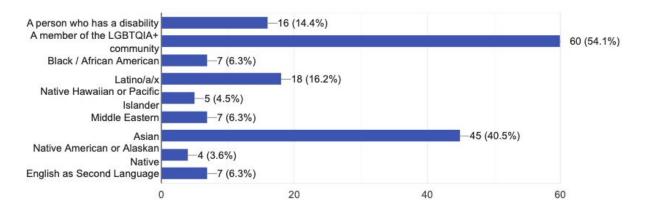
We were well aware of the educational inequalities that come with being first-generation students, having our team members experience it first-hand. To research this further and to get a holistic view on the topic, we consulted scholarly articles and opinion pieces.

In general, a first generation student is defined as a student whose parent(s) / guardian(s) did not attend a four-year university in the United States. With this in mind, "a student may lack the critical cultural capital necessary for college success because their parents did not attend college" ("Defining First Generation"). This is not to say that this identification is exactly binary. Universities and their admissions officers claim to "practice 'holistic' admissions — examining family background, recommendations and essays in addition to grades and test scores — say they can figure out who is truly disadvantaged by looking at how candidates overcome obstacles". In some cases, "low-income" and "first-generation" are considered synonymous (Sharpe).

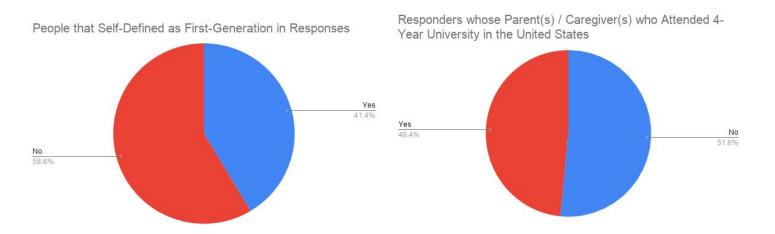
First-generation students experience difficulties in professional development, financing, psychological needs, and academics. These students apply to college and FAFSA by themselves and do so without help. They are more likely than their other peers to work through the summer to support their families rather than interning in their field. In addition, they do not get to apply to multiple colleges because of the cost of application fees (Banks-Santilli). In general, first-generation students tend to complete college at lower levels as a result of the pressures of lack of college readiness, familial support, financial stability, racial underrepresentation, low academic self-esteem, and difficulty adjusting (Falcon).

In addition, in order to get a better understanding of College Bound's users, we distributed an anonymous survey in which 128 potential users participated in. This survey had eight multiple choice questions that reported information on the user demographics, user's educational goals, their parent's education levels, preparedness for college and financial aid applications, and their questions about the college and financial aid applications. In addition, we received 111 responses to our optional self-identification form in which respondents noted they

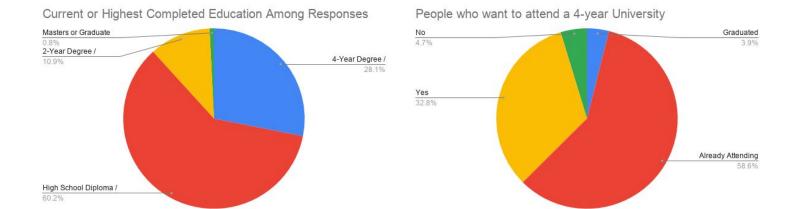
identified with minority groups. These are some groups that are underrepresented in higher education and may sometimes feel social pressure as a result.



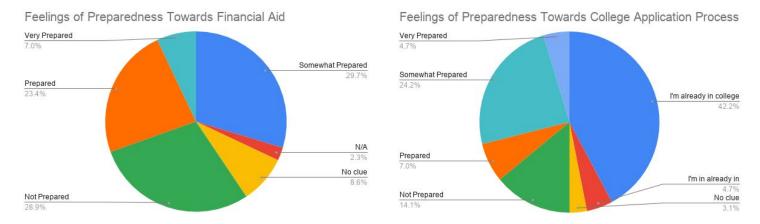
Out of our 128 users, after being provided with the definition of being first-generation, 41.4% of respondents felt that they were classified under the first-generation student definition. First-generation college students formed a significant amount of the student population that we had sampled, and thus, we can expect similar distributions within college campuses.



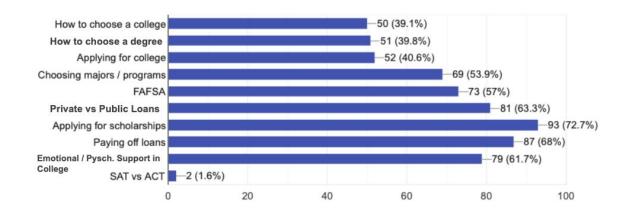
However, we noticed that only 41.4% of respondents self-identified as first-generation despite 51.6% stating that their parent(s), guardian(s), or caregiver(s) did not attend a 4-year university in the United States. For unexplainable reasons, respondents felt that they did not fit under this category, despite technically falling under it. Thus, from this discrepancy, we can actually expect that over-half of the respondents are actually first-generation. This proves that a sizable amount of students on college campuses are defined as first-generation.



60.2% of respondents reported that they were either currently in high school or finished with high school. Thus, most of our respondents fell into the target audience of students.



Most notably, 67.2% of respondents felt less than prepared with regards to the financial aid process. 41.4% of respondents who were not in college already felt less than prepared with regards to the college application process. In both cases, a significant portion of respondents did not voice confidence in their preparedness level towards applying for financial aid and a four-year university. Considering that more than half of respondents are first-generation by definition, this correlates with our findings in our previous research.



Finally, when asked about what information they would like to know or wish they had known before applying to college or for financial aid, the most voted information related to applying to scholarships, paying off loans, distinguishing private and public loans, emotional and psychological support in college, FAFSA, and choosing majors or programs for college.

From our academic research and survey results, we can conclude that many students on campuses belong to minority groups, qualify as first-generation, feel less than prepared with respect to the financial aid and college application process, and that they generally wished or would like more information about financial aid, emotional and psychological support on campus, and choosing majors or programs for college. Thus, there is a significant proportion of students who current students or aspiring college students feel pressured with respect to financial aid and the college application process.

USERS

Target Users

Our target users are aspiring college students, current college students and parents or guardians of current or aspiring students.

Target Users:

- o First generation college student: already enrolled and attending college
- o Parent(s), Guardian(s), Caregiver(s) of a first generation college student
- Rising first generation college student: currently in high school (or young), but planning on attending college
- o Parent(s), Guardian(s), Caregiver(s) of a rising first generation college student
- College students who are not a first generation college student, but require assistance in the college/financial aid process
- Parent(s), Guardian(s), Caregiver(s) of a college student who is not a first generation college student
- Rising college students who will not be a first generation college student, but require assistance in the college/financial aid process
- Parent(s), Guardian(s), Caregiver(s) of a rising college student who will not be a first generation college student
- International students
- Parent(s), Guardians(s), Caregiver(s) of an international student
- Anyone else involved in the financial aid and college process (i.e spouse)

Not Target Users:

- College students who do not require assistance in the college/financial aid process
- Rising college students who do not require assistance in the college/financial aid process
- People who are not interested in attending college
- People who already graduated from college
- People involved with the college admission board

• Why are these appropriate target groups?

 Applying to colleges or applying for financial aid in the United States can be a confusing and frustrating process for all parties involved. We want to create a solution that makes it easy for users to understand and navigate the entire process of picking out a college, applying to college, applying for financial aid and

scholarships, learning about mental health support systems in college, and figuring out what to do after college. In our research, we found there was a gap in existing information and resources for students wanting to learn more about these processes, that was both free, accessible, easy to understand, and comprehensive.

- o Based on survey results:
 - Between 41.4% and 51.6% of respondents quality as first-generation
 - 67.2% of respondents felt less than prepared with regards to the financial aid process
 - 41.4% respondents felt less than prepared with regards to the college application process

Personas

Jaylen Robinson



Bio: Jaylen is a 17 year old high school student who is starting to apply to 4-year universities all around the United States. They already took both the ACT and SAT, but they are unsure of what other steps they need to take to complete college applications. Neither of Jaylen's parents went to college, and they are the oldest of three siblings, leaving them no family to help them navigate the undergraduate application process. Although their school has a college career center, Jaylen is very shy and slightly embarrassed that no one in their family went to college. Jaylen is getting desperate for resources to help, and is getting discouraged about applying to school.

Goals:

- Graduate from a university with a four-year degree
- Finding a major of study/career path where they can help people in distressed communities
- Be able to study abroad some day (they would love an opportunity to finally travell)

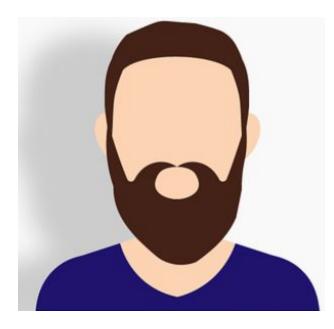
• Frustrations:

- Concerned about not being able to afford school due to their parent's low income
- Not being able to get advice or guidance from their parents about college
- Not being comfortable with reaching out to teachers and counselors about getting college preparation assistance

Personality Introvert Extrovert Analytical Creative Loyal Fickle Passive Active



Antonio Warren



Bio: Antonio is a 20 year old college student at Mars University. Neither of his parents went to college, but they own a restaurant in Antonio's hometown. Despite getting into his dream school across the country, Antonio decided to go to a private university close to his house so he can continue to help out the family business. Antonio has been struggling to keep on top of work and school. Last semester, Antonio did not meet the grade requirements to keep his scholarship. He really doesn't want to drop out of school, but he has no idea of how to apply for loans or where to find other financing options for his studies.

• Goals:

- Be financially independent from family but still be able to help with money if needed
- Choose own career path
- Move away from small hometown

• Frustrations:

- Parents are getting older so they need more help at the restaurant then he can give
- No one in his family understands how hard college is and they blame him for not trying hard enough at school and the restaurant
- Afraid that even if he graduates from college that he will be in debt for the rest of his life

Personality Introvert Extrovert Analytical Creative Loyal Fickle Passive Active



Cynthia Dudek



Bio: Cynthia is 42 year old widower and mother of four. Her late husband, Lawrence, was a successful accountant, an MU alumni, and the sole source of income for their family. Cynthia does not work so she can stay at home with the kids, but they have enough money to continue to support their style of living. Cythia's eldest son Piotr is finishing up his junior year of high school and has started looking at what colleges he would like to attend. No one in Cynthia's family went to college and Lawrence's family all live overseas. Cynthia and her family have no idea what the college application process is like in America.

• Goals:

- Help and support her kids throughout their education studies
- Give her kids the opportunity to pick their own career/life choices
- Take some college classes once her kids' student debts are paid to better herself

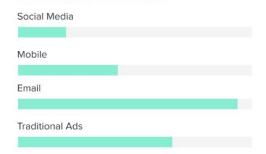
• Frustration:

- Does not know what college options are best for her son
- Does not have people to turn to get advice about applying for and attending college
- Feels as if Piotr's counselors are not helpful in preparing him for university

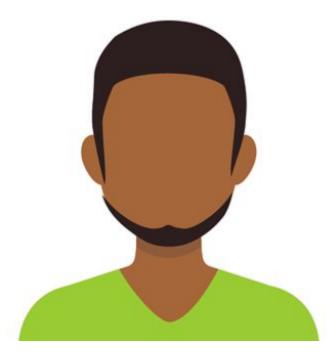
Personality

Introvert	Extrovert
Analytical	Creative
Loyal	Fickle
Passive	Active

Preferred Channels



Kasem Saetang



Bio: Kasem is an 18 year old high school graduate who lives in Thailand. He applied to universities all over the world, and was accepted into a really good program at an American college called Mars University. Kasem has no idea what America is like besides what he has seen on TV and on social media. Perhaps more worrying, Kasem has no idea what schools are like in America or what paperwork he needs to fill out before the decision deadline. Although Kasem learned English in school, he is the only anglophone in his family and has done all of his college applications on his own.

Goals:

- Work in the economic district of New York or San Francisco
- Make enough money to have a house in America and Thailand
- Attend graduate school

• Frustrations:

- o Parents want to read all his paperwork but having to translate everything is tiring
- International student service only provides general information which is not specific to what Kasem is looking for
- No guarantee of "success" in a whole new country

Personality Introvert Extrovert Analytical Creative Loyal Fickle Passive Active



SOLUTIONS

Existing Solutions

In our research, we found a few resources and solutions for our target users. This included high school counselors, college admissions, college career centers, college programs and online websites that provide information like CollegeRaptor (Skogerboe).

High School Counselors

- Positive:
 - Accessible to high school students
 - Supposed to be knowledgeable about colleges and applying for college
- Negative:
 - Can be unhelpful or biased
 - Can be difficult for shy students to reach out to
 - Only a resource for students at that particular high school
 - Helpfulness and funding would differ from school to school
 - Might have too many students to be personal to each individual student
 - Might not have all the information a student is looking for

College Admissions

- Positive:
 - Accessible to students applying for universities
 - Many colleges have promised increased recruiting for first-generation college students
 - Offer scholarships/Grants
- Negative:
 - Only a resource for students applying to that particular college / recruited by particular college
 - There is still underrepresentation of lower-income, minority students in higher education -- education is still inherently unequal
 - Not everyone who is first-generation is going to say they are / know about being first-generation
 - Some students still believe that their background will work against them,
 afraid of the accusation that they got into college ONLY because of this
 - Still unclear on how much being first-generation matters in the process
 - Harvard says it is one of fifty factors they consider (Sharpe)
 - Colleges can promise this, but we never know what is going on in admissions
 - Consider the 2019 college admissions bribery scandal

 Not all universities have promised increased recruiting and resources / no guarantee they will ever implement such things

College Programs (LMU's First-to-Go, University of Pennsylvania's F.G.L.I, Brown University's First-Generation and Low-Income Student Center)

Positive:

- Accessible to college students
- Offer resources directly to group members
- Foster communities in what could be an intimidating university setting

Negative:

- Only a resource for students applying to that particular college / recruited by particular college
- Again, not every student will join such a group because they do not know they are first-generation / do not want to admit they are
- Did not really help prior to being in college
- Not available at all universities / no guarantee that all universities will create similar groups

College Career Centers

- Positive:
 - Accessible to college students
 - Supposed to be knowledgeable about finances and what to do in and beyond college
- Negative:
 - o Only a resource for students at that particular college
 - Helpfulness and funding would differ from school to school
 - Can be difficult for shy students to reach out to
 - Might have too many students to be personal to each individual student
 - Might not have all the information a student is looking for

Websites like College Raptor (https://www.collegeraptor.com/)

- Positive:
 - Free online resource
 - Has information on both colleges and financial aid
 - Can sign in to save information
 - Compares colleges for you
- Negative:
 - Overwhelming

- Does not explain any loans or financial aid information
- Tries to get users to sign up with an ACT/SAT test prep site costs money
- Tries to get users to sign up with a credit card through a different site that the same company owns
- Overall they do not seem to have their users best interests in mind instead seems to market as a helpful resource while actually trying to get money from their users

Our Solution

After identifying the needs of our users, we noticed gaps in the existing solutions. For example, high school counselors vary depending on the school and are only accessible to high school students of that particular school. This excludes parent(s)/guardian(s)/caregiver(s), people who already graduated high school, and international students. College career centers, admission considerations, and college programs have the same issue—they are only available to the current college students or students who applied. Additionally, both of these resources may be biased, unhelpful, or not have all the information our target users need.

Through our survey we found that out of 128 respondents, between 41.4% and 51.6% fall under the first-generation student definition. 67.2% of all respondents felt less that prepared in the financial aid process and if not already in college, 41.4% felt less than prepared for the college admissions process. Even if respondents fell under the first-generation definition or not, generally, all respondents wanted more information on financial aid, emotional and psychological support on campus, and choosing majors or programs for college.

College Bound would help our users feel confident about the financial aid and college applications process. It would be a source in which users can get information pertaining to the confusing aspects of higher-education. If a user is either unsure about how to pay off a loan, choose a major, find resources to help them become more comfortable in the university setting, they can consult College Bound. Most importantly, it will be simple, accessible, and free to all users to ensure that there are no boundaries between a student's educational aspirations and the logistics of entering a higher education institution.

TASKS

User Characteristics

According to our research and survey information, the most predominant age groups are high schoolers and college students. However, this does not include outliers, like people interested in college but not currently in high school, both older and younger. This does also not account for parent(s)/guardian(s)/caregiver(s) of the students. While the younger generations are likely to be very well versed in technology, the older generations may not be and so this has to be kept in mind. As the age range is very disparate, this means our solution must be easy to comprehend and navigate for users of all ages. As the user base is very varied, the ways the users are going to access the solution is likely to be varied as well. This could be through smartphones, desktop, and both public and private spaces such as schools and libraries. Additionally, our predominant users are not likely to be upper class, which means that our solution must be free in order to be accessible. As there are already private, for-profit college and financial advisors for hire, we are not interested in creating a product similar to that. Instead we want it to be accessible to all ages and income levels. Geographically, the majority of our user base is going to be in the United States, as we are specifically focusing on US higher education institutions. However, a part of our user base are also international students who would not be from the United States. Additionally, many first generation college students are either first or second generation immigrants, and so they or their family might not speak English or know English as a second language. Due to all these factors, our solution needs to be both easy to translate and easy to understand. We could look into using the Google Translate API (or a similar technology) in order to make our solution accessible to everyone in our user base.

Description

Tasks would include the ability to find information about different colleges, walkthroughs of how to fill out different college applications, information about how to apply for college fee waivers, information about FAFSA, information about different loan types, general information and resources about scholarships. Additional tasks we could add include taking aptitude tests to match with a major, being matched with current professionals in different fields, moderated forums to post and answer questions, information about the SAT and ACT, basic information about attending college for the first time (what to bring/how to meet people/choose classes/ect). While we know for sure we want to include the tasks in the first section, we would have to do additional research, most likely through a survey, to determine which, if any, of the tasks from the secondary list to include. Overall the idea is to create an easy to follow website that walks a user through all the steps of applying and attending a college in the United States.

Task Analysis

Four tasks are analyzed in this section: information about colleges, information about college applications, and information about finances.

Information about Colleges:

- 0: User obtaining information about colleges
- 1: Do you want to find information online or in-person?
 - o A: Online
 - A.1: Look up colleges online
 - o B: In-person
 - B.1: Visit high school counselor if in high school
 - B.2: Visit local library and to speak with librarians if not
 - B.3: Attend college fair

Information about College Applications:

- 0: User obtaining information about college applications
- 1: Do you know which college you want to apply to?
 - o A: Yes
 - A.1: Visit the specific college website
 - A.2: Read about the process listed to find out how to apply
 - A.3: Complete the application process listed (ex. Common App)
 - A.4: Complete any supplemental application information
 - B: No
 - B.1: Follow steps 0-1 from Information about Colleges to determine which college(s) to apply to
 - B.2: Follow step A in Information about College Applications to apply

Information about Finances:

- 0: User obtaining information about finances
- 1: What do you want to know more about?
 - o B: Loans
 - B.1: Private Loans (non federal loans bank, credit union, state agency, school)
 - B.1.1: Determine which lender source works best for your needs
 - o B.1.1.1: Determine which type of loan works best for you
 - o B.1.1.2 Apply for Loan
 - B.2: Federal Loans (funded by the federal government)
 - B.2.1: FAFSA

- o B.2.1: Go to the FAFSA website
- o B.2.2: Create a FSA account
- B.2.3: Login to account
- o B.2.4: Follow steps and fill out application

C: Grants

- C.1: Visit grant website
- C.2: Create Account
- C.3: Login into account
- C.4: Follow steps and fill out application
- o D: Scholarships
 - D.1: Find information about scholarships
 - Online:
 - o D.1.1: Look up scholarships online
 - In Person:
 - o D.1: Visit high school counselor if in high school
 - o D.2: Visit local library and to speak with librarians if not
 - o D.3: Attend college fair
 - D.2: Determine which scholarship best fits your needs
 - D.3: Apply for that scholarship

CONCLUSION

Through our research, we found that a system that supports rising first generation college students, first generation college students, and students wanting more information in general does not exist. We found highly tailored solutions — like high school counselors or college career centers — do exist, but the price, helpfulness, and accessibility vary by location. Additionally, while online resources do exist, they are either not free or are confusing, incomplete, and contain aspects behind a paywall or are partnered with other companies and therefore exist to take financial advantage of users. Therefore, a solution like College Bound is needed.

During the next process of designing the system, functions like the following would need to be included and supported:

- Implementing a simple interface to cater to our diverse age group
- Be accessible to all types of devices
- Help users to determine the best college suited for their needs
- Match a user with a major or degree path
- Walk the user through the steps of specifically applying for college
- Providing information on different ways to afford college, such as FAFSA, scholarships, grants, and private loans
- Possibly implementing a translation feature to support people from all backgrounds
- Possibly developing a moderated forum for users to post and answer questions

While additional research is still needed to determine the best set up and exact specifications, we do know that there is a high interest in the listed functions already.

We would like College Bound to fill the gap discovered by our research. We strive to be able to provide free support for people of all ages to help walk through the entire process of finding, applying, and affording college.

SOURCES

Banks-Santilli, Linda. "Struggles Many First-Generation College Students Face." *GreatSchools*, 10 Feb. 2017, www.greatschools.org/gk/articles/struggles-first-generation-college-students-face/.

- "Defining First-Generation." *Center for First-Generation Student Success*, 20 Nov. 2017, firstgen.naspa.org/blog/defining-first-generation.
- Falcon, Lauren. "Breaking Down Barriers: First-Generation College Students and College Success: The League for Innovation in the Community College." *League for Innovation in the Community College*, June 2015, www.league.org/innovation-showcase/breaking-down-barriers-first-generation-college-students-and-college-success.
- Moody, Josh. "What to Know as a First-Generation College Student." *U.S. News & World Report*, 14 May 2019, www.usnews.com/education/best-colleges/articles/2019-05-14/what-you-should-know-as-a-first-generation-college-student.
- Sharpe, Rochelle. "Are You First Gen? Depends on Who's Asking." *The New York Times*, 3

 Nov. 2017, www.nytimes.com/2017/11/03/education/edlife/first-generationcollege-admissions.html?_r=0.
- Skogerboe, Liz. "Resources for First-Generation College Students." *College Raptor*, 10 Jan. 2019, www.collegeraptor.com/find-colleges/articles/questions-answers/resources-first-generation-college-students/.