

SCIENCE GUIDE

MEET TEAM SCIENCE GUIDE!



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1.

CORE PROBLEM STATEMENT / HYPOTHESIS

WHERE DID THE PROBLEM ORIGINATE FROM?

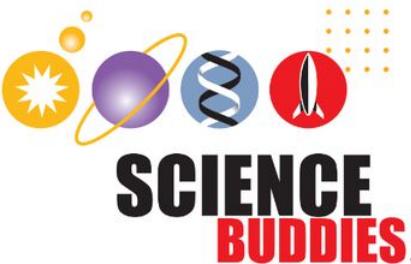


HIGH LEVEL PROBLEM

- ✗ High School Students in Latin America face hardships while conducting research and lack access to research mentorship and resources.
 - ✗ This causes students to become discouraged from pursuing research or showcasing it in science competitions and conferences.

2.

COMPETITOR REVIEW



3. INSIGHTS FROM INTERVIEWS



CAITLIN SULLIVAN: DIRECTOR OF OUTREACH & EQUITY PROGRAMS AT THE SOCIETY FOR SCIENCE & THE PUBLIC

- Formed the Science Advocate Program
- Knowledgeable about underrepresented student and mentor's needs while conducting research
- "Students greatly benefit from having a mentor. They are more accessible than a research lab and increases their motivation in presenting at top competitions."



YOUTH SCIENTISTS FOR PUERTO RICO: LARGEST PRIVATE NON-PROFIT SCIENCE FAIR IN PUERTO RICO

- Founded after Enerys Pagán (President) participated in US Science Fair and noticed a gap in quality of projects
- Work with students of all socioeconomic backgrounds in showcasing research
- “One of the brightest students we helped with their research did not have access to a computer in their house, but showed an incredible potential that just required some mentoring to let shine”



KATHLEEN BATEMAN: SCIENCE TEACHER AT BOSTON LATIN SCHOOL

- Leads a Science Mentorship Program at Boston Latin School
- Works one-on-one with students that are interested in conducting research
- “Our science mentorship program has been very successful but we are constantly overwhelmed at the amount of students each teacher looks over. In addition, some teachers are not trained at mentoring students on how to do research”



BOSTON
LATIN
SCHOOL

VALIDATION EXERCISES

4.

FACEBOOK AD

- ✗ Created a Facebook ad to measure interest in receiving mentorship/becoming a mentoring
- ✗ Attempting to validate whether there is a scarcity of mentors/desire to be mentored.



LANDING PAGES

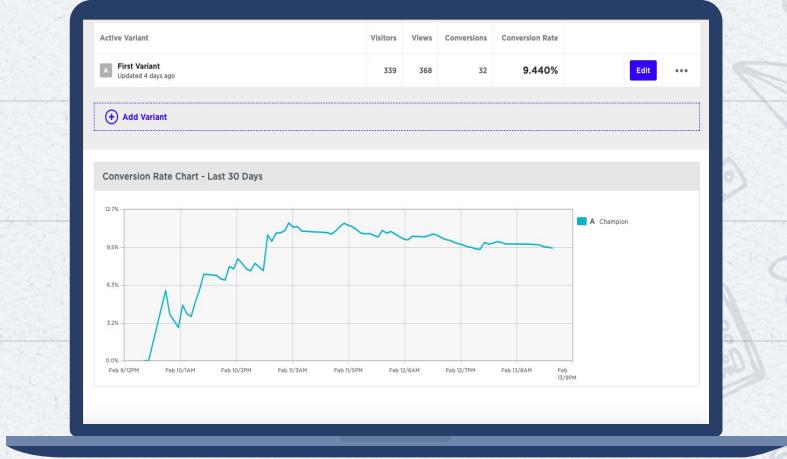
- × Created two separate landing pages gauge user interest
- × Mentors: how willing were they to become a mentor?
- × Students: how interested were they in research opportunities and mentorship?



LANDING PAGE RESULTS

700 visitors

Almost 50 sign
ups in <5 days



FACEBOOK AD RESULTS

**78,000
People
Reached**

**Over 800
Link
Clicks!**

**Majority of
interactions
from Mexico**

5.

CUSTOMER PERSONA: WHO, JOBS, PAINS, GAINS

GUADALUPE: LATIN AMERICAN HIGH SCHOOL STUDENT



Guadalupe is a 9th grade high school student in Mexico, who is interested in scientific research, yet can't seem to find the resources to get started. She feels as if she is losing motivation and needs a bit of guidance and direction to begin working on her project.

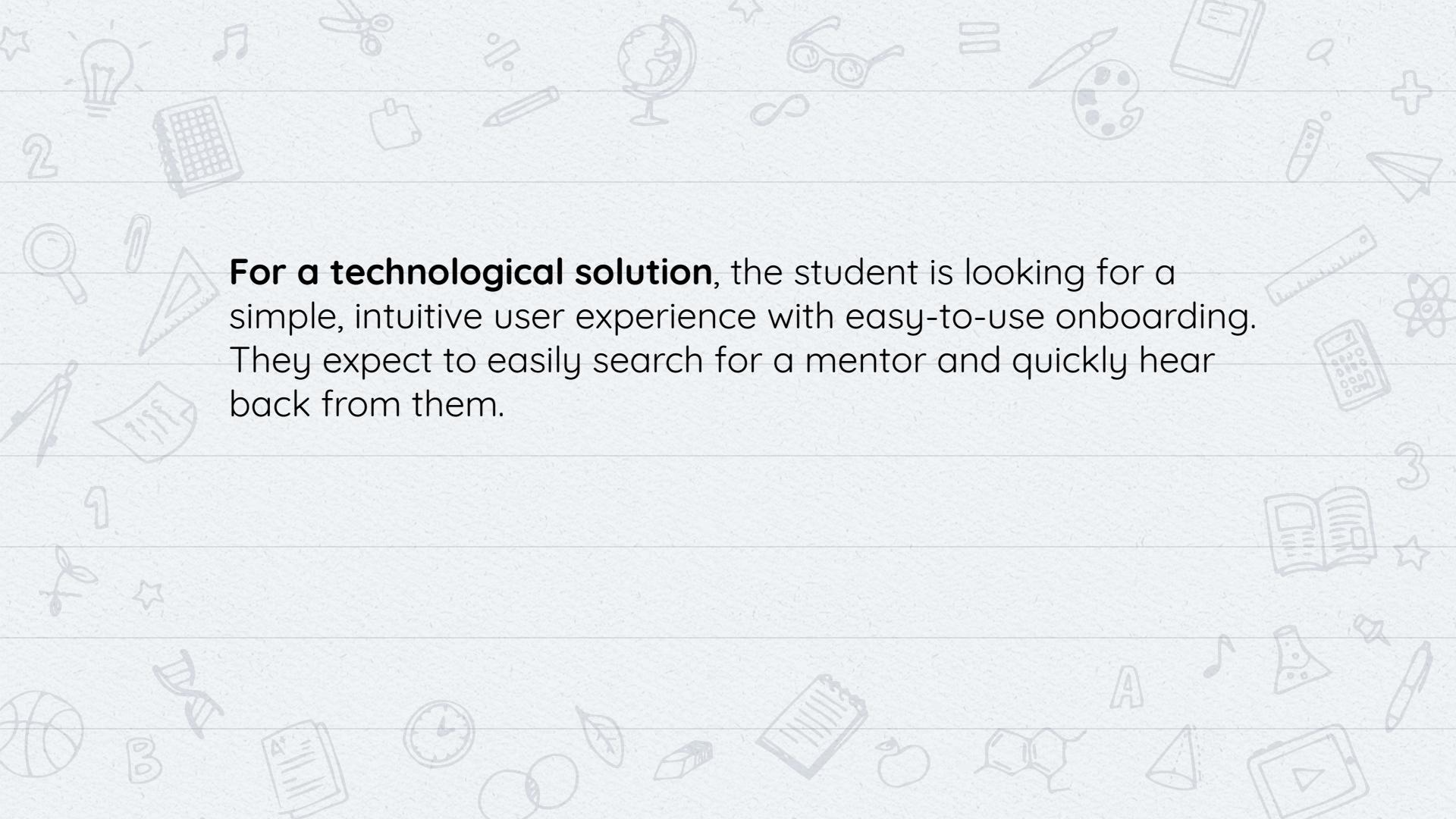
Jobs: Searching for a mentor to start a research project.

Pains:

- Have no previous experiences, don't know how to start with a new research.
- Language Barriers.
- Couldn't find tailored mentors or exciting research.
- Couldn't keep the mentorship and feels unsupported.

Gains:

- Find a related science research community.
- Obtain information about mentors, researches, and labs.
- Keep the connection with mentors and other students.
- Expand their knowledge and ideas to improve their work.
- Exposure to their work.



For a technological solution, the student is looking for a simple, intuitive user experience with easy-to-use onboarding. They expect to easily search for a mentor and quickly hear back from them.

CAMILLA: RESEARCH MENTOR



Camilla is a university professor who has had experience researching within their respective fields and they have an interest in providing mentorship to interested students within this area of study but don't know how to access these students within a platform that provides seamless interactions.

Jobs: Mentor a Latin American High School Student doing research.

Pains:

- Has a hard time recruiting students who are interested in specific projects.
- Faces difficulty providing and sustaining mentorships without structure.
- Hard to keep up with students.
- Challenging to motivate students and give them a needed coach without reliable resources.

Gains:

- Find students and communities.
- Keep up with the latest progress on the project.
- Be able to maintain communication with the students.
- Receive coaching on how to best mentor their students.
- Networks with other related researchers and programs.
- Train their skills as a science team leader.



For a technological solution, the research mentor is looking for a simple, intuitive user experience with easy-to-use onboarding. They expect communication and project management features.

6.

OPPORTUNITY SPACE

OPPORTUNITY SPACE: SCORING COMPETITOR PAINS & GAINS

10 = satisfied



Research
Resources &
Opportunity
Database

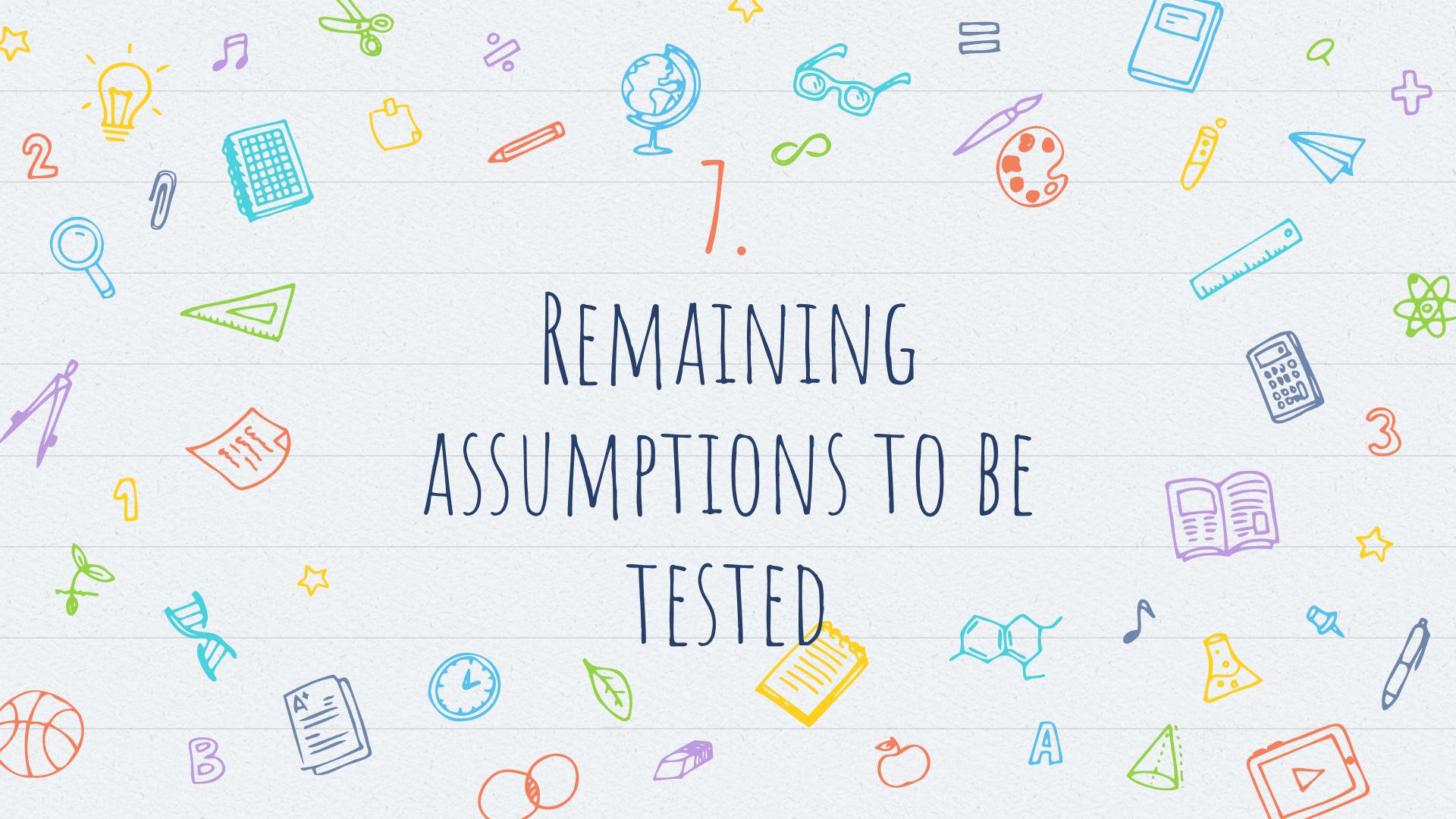
Mentor
Search
Functionality

Communication
& Forum
Features

Project Progress
Tracking

1 = unsatisfied

7. REMAINING ASSUMPTIONS TO BE TESTED



ASSUMPTIONS TO TEST

- ✗ Language barrier is an issue when doing research
- ✗ Quality of mentorship correlated with improved quality of work



JOB'S MAP



Science Guide Jobs Map

CORE JOB: Match Latin American High School Students Interested in Pursuing Research with a Qualified Research Mentor.

JOB PAINS AND GAINS			
RELATED JOBS	SOCIAL JOBS	EMOTIONAL JOBS	CHAIN OF CONSUMPTION JOBS
Their research is top-notch and showcased at conferences.	Simple, easy, and safe networking and communication.	Lack of motivation upon not finding support, taking too long, or uncommitted halfway.	Not finishing research due to lack of funding or research knowledge
Search engine for mentors, easy to create a profile, plan project.	Available in multiple languages	Research unfinished, low quality or doesn't follow standards.	Communication between student and mentor is difficult
Project/Progress management features	Networking opportunities between student researchers	Feel motivated, supported, and that they belong in STEM.	Outreach & recruit students from different locations.
Learning research standards and practices	Forum features for students/research subjects & groups.	Provide assurance that the mentor will work well with them.	Recruit and coach research mentors in different subjects.
Notification system	Regional research meetups & networking opportunities.	Bug-free	Search, connection, and communication features.
Outside funding & opportunities database/board.	Communication between mentors for coaching & support.	Simple, clean, intuitive UI	Research progress tracking/coaching/resources for both.

SUBSTITUTES: WHAT ELSE ARE PEOPLE USING?

ScienceBuddies

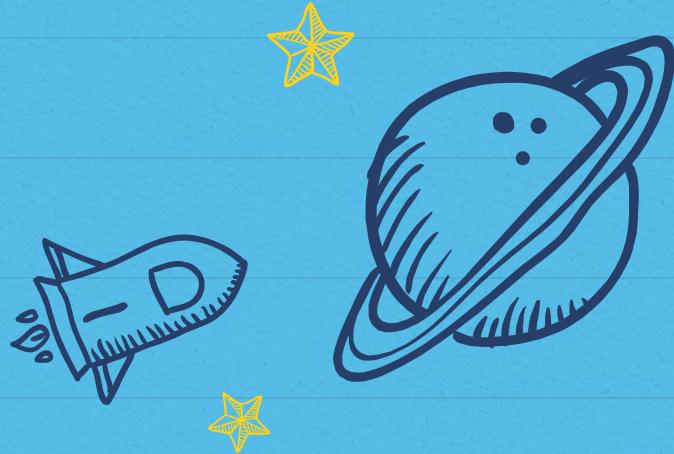
Speaking with Local Universities

Set-up their own program

Visit Online Research Sites on their own

9. VALUE PROPOSITION HYPOTHESIS

9.



Our **solution** helps Latin American High School Students who want to **start a research project of their own** by **matching them with a mentor** and **providing them coaching and educational resources**.



THANKS!