2022

COMMUNITY TECH SUBTEAM FINAL REPORT

Authors: *Ashwin Gadiraju, Ishaan Mehrotra, Ritvik Janamsetty*

Table of Contents

Summary

What if there were established, easily accessible models for engaging Duke students in technology volunteerism?

There are a multitude of community-based organizations working on projects that can vastly improve the quality of life of people in their community and across the world. In an ever more technology-centered world, such organizations need technological help to solve the complex problems the world faces.

While many nonprofits are unable to attract the same level of full-time talent as big companies due to high salaries, they often also have trouble getting tech assistance, even though many technologists (and more recently some companies) yearn to give back to the community in some way.
Many students majoring in tech-related majors often have two simultaneous desires: to get technical experience and help the greater world. However, many do not have easy and accessible means and models for contributing to the university and local community using tech.

Through the open design process and explore ways to achieve our goals while making sure that we are centering the needs of our community

Understand

What are the needs, desires, and hopes of the community?

What if there were established, easily accessible models for engaging Duke students in technology volunteerism?

Who did we learn from?

14 DUKE UNDERGRADUATE STUDENTS

Tech students at Duke were contacted for 15min interview
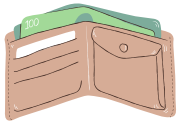
6 COLLEGE GRADUATES

Duke Alumni and other college graduates spoke about their undergrad experiences and post-grad life

11 PAST PARTNERS

Past organizational partner exit interviews were compiles and qualitatively analyzed

FROM OUR INTERVIEWS, WE IDENTIFIED 5 PRIMARY THEMES

BIG TECH BENEFITS

COMMUNITY IMPACT

TIME BARRIERS

LIFE PRIORITIES

KNOWLEDGE BARRIERS

3 KEY INSIGHT STATEMENTS

We also summarized the 3 biggest insights we got from our research/interviews

BIG TECH IS ENTICING	"Sometimes I feel selfish for wanting to go into a nonprofit, since I know if I went to a big tech company and made a bunch more money I could help out my little sister and parents."
TIME IS AN ISSUE	"Since tech companies aren't really looking a lot for community, I haven't prioritized that as much"
THERE IS A LACK OF KNOWLEDGE	"I didn't really know tech volunteerism was even a thing and it definitely sounds interesting but I can't say I was ever interested just because I wasn't aware of it"

Create

What are radical ways we can build to share?

What did we create?

HOUSE COURSE

Student-led class consisting of learning ways to interact with community partners and technology volunteerism

PRE-ORIENTATION PROGRAM

Week-long of curricular and extracurricular program for incoming freshman designed around technology volunteerism

WEBSITE

Created specifically for Duke students to be able to connect them with companies and needs where they can apply their technology skills to real world problems


VolunTeach

A DUKE UNDERGRADUATE HOUSE COURSE

Big Idea/What If:
What if students had a structured and easily accessible way of learning about and engaging in tech volunteerism outside of class?

How does it work?
The first few weeks of the course would be to introduce/educate the class on tech volunteerism and how to meaningfully interact with community partners. After this, the class will participate in an information dispersion program in which they tell at least 10 other friends about tech volunteerism. The final third of the course would focus on connecting the class with a community partner that they can continue working with after the course ends.

3   15   150

INSTRUCTOR   HOUSE COURSE   DUKE
              STUDENTS   COMMUNITY

Primary Stakeholders
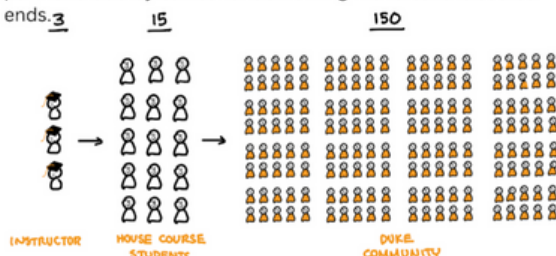
UNDERGRADS   INSTRUCTORS   COMMUNITY PARTNERS

Key Features to be tested/How they will be tested:
General Interest - (Signature Sheet)
Feasibility - (Create syllabus outline with schedule)
Relevant Guest Speakers - (Identify guest speakers)
Potential Partnerships - (Identify Community Partners)
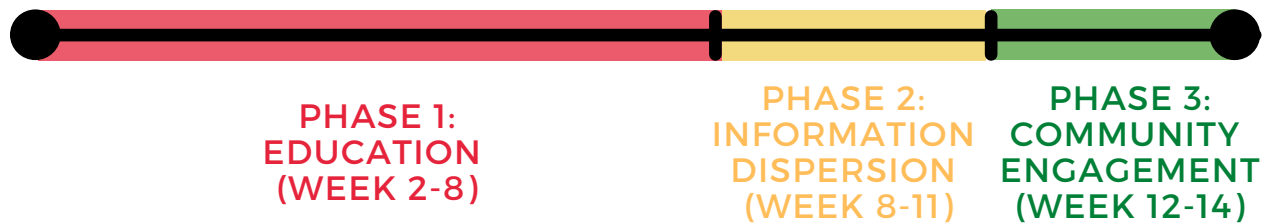**Measurement of Success:**
Information Dispersion Statistics
Pre/Post Survey for students
Follow-ups on past students

Why Might it Fail?
- Lack of house course enrollment
- Lack of community partnership choice
- Lack of prior experience

Class Structure

PHASE 1:
EDUCATION
(WEEK 2-8)

PHASE 2:
INFORMATION
DISPERSION
(WEEK 8-11)

PHASE 3:
COMMUNITY
ENGAGEMENT
(WEEK 12-14)

Education

The first phase of this course involves students learning about what tech volunteerism is and what it means to critically engage in tech volunteerism within the community. This phase would involve student run lectures, as well as consistent guest speakers.

Information Dispersion

The second phase of this program is information dispersion. With just 10 active learners, students are able to greatly impact the number of students who know what tech volunteerism is, effectively closing the knowledge gap on this topic. This would include word of mouth or flyer creation by students (work time will be dedicated in class).

Community Engagement

A final couple of weeks in this course will be dedicated to learning about potential ways to get involved with the Durham community. We hope this section can guide future action and provide students with actionable goals to set for themselves as they continue their careers past the timeline of this course.

Evaluate

Are students interested in this course?

For the success of our prototype, it is crucial that the house course we designed has interest among the student body to ensure the network-effect we intend to create form the house course is successful.

Recruitment

We will look back at the partners we identified as well as past interviewees to create a group of over 50 students who are representative of the tech students at Duke. This process will be equitable and ensure that a diverse range of students is reached.

Data Collection

Participants will be asked to read over the syllabus in its entirety and to fill out our online survey anonymously. Some questions include the following:

- How would you rate your interest in the course material?
- How would you rate the quality of the syllabus?
- What is your interest in tech volunteerism?
- What are some of your impressions of the course
- How can we improve the course

Analysis

The qualitative and quantitative data that we collect will be synthesized in an easy-to-understand. Our quantitative data will determine our pass/fail metrics:

- ≥ 4/5 on syllabus quality
- ≥ 3/5 on the need for more tech volunteerism opportunities

Qualitative feedback will be used to improve the syllabus. If the qualitative feedback is significant or we fail our pass/fail metrics, we will run the second round of data collection

Next Steps & Conclusion

Where do you go from here? With the semester coming to a close, it's time to understand where we are going in the future

This semester we have learned invaluable skills regarding the open design process, tech for equity, and what human flourishing means in a variety of realms. Through our project, we gained first hand experience as to how to take a project from nothing to a taste prototype. Below is a short list of some of the next steps we envision for this project

01 ——————— Create a more exensive syllabus

So far, we have drafted a 1pg outline of our syllabus. We hope to make a longer, more extensive version that will hopefully assist in ironing out many of our creases with this idea

02 ——————— Execute the test plan and analyze data

We have already detailed our test plan, however there is still a lot that goes into setting up the logistics to actually implement it. We hope to do this and successfully run the test to get data for the step below.

03 ——————— Iterate our prototype/project

Following initial data collection, we hope to begin iterating our idea. This may include going back, revising our syllabus, and making improvements

Acknowledgements

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We thank you for your continued support in our efforts to contribute to a stronger culture and awareness of Tech Volunteerism on Duke's Campus

Contact