

DESIGN FOR AMERICA

volume 1 issue 1



EDITOR'S NOTE

Hello, world!

We created this journal as a response to the following question:

“How can we teach someone who is unfamiliar with Design for America about human-centered design?”

Our team consists of Maheen Khizar, Kaarthika Thakker, Stacy Su, Taylan Tunçata, and Connor Rothschild. We joined this project because we care about communicating what happens in studios in a meaningful, accurate, and beautiful way.

This journal includes obstacles faced, lessons learned, and spotlights shone on the humans that make DFA awesome. This is the beginning of something great!

Happy Reading,
Team (meta) Design

CONTENTS

04 Glossary

06 The DFA Design Process

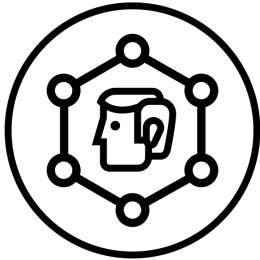
08 Snapshot of a DFA Project

12 Interview with a Team Lead

16 Interview with a Studio Lead

16 Interview with a Community Partner

DESIGN

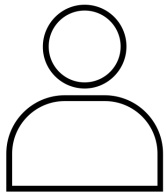


Human centered design (HCD)

The human centered design process is a 6 step method that DFA uses because it emphasizes building a solution while having your end user in mind the whole time.

Problem Space

The problem is what each team is trying to solve. The problem space is everything involved in solving the problem including the problem, the user, the place, other solutions, stakeholders and community partners.

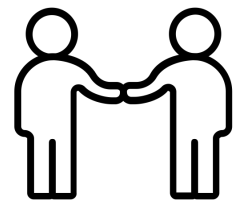


The User

The persons who experience the problem and who the team is trying to help

Community Partners

Organizations and groups that are already trying to help the user in relevant ways. Each team as part of DFA Rice studio works with a community partner for guidance and to increase the likelihood that their solution actually helps the user.

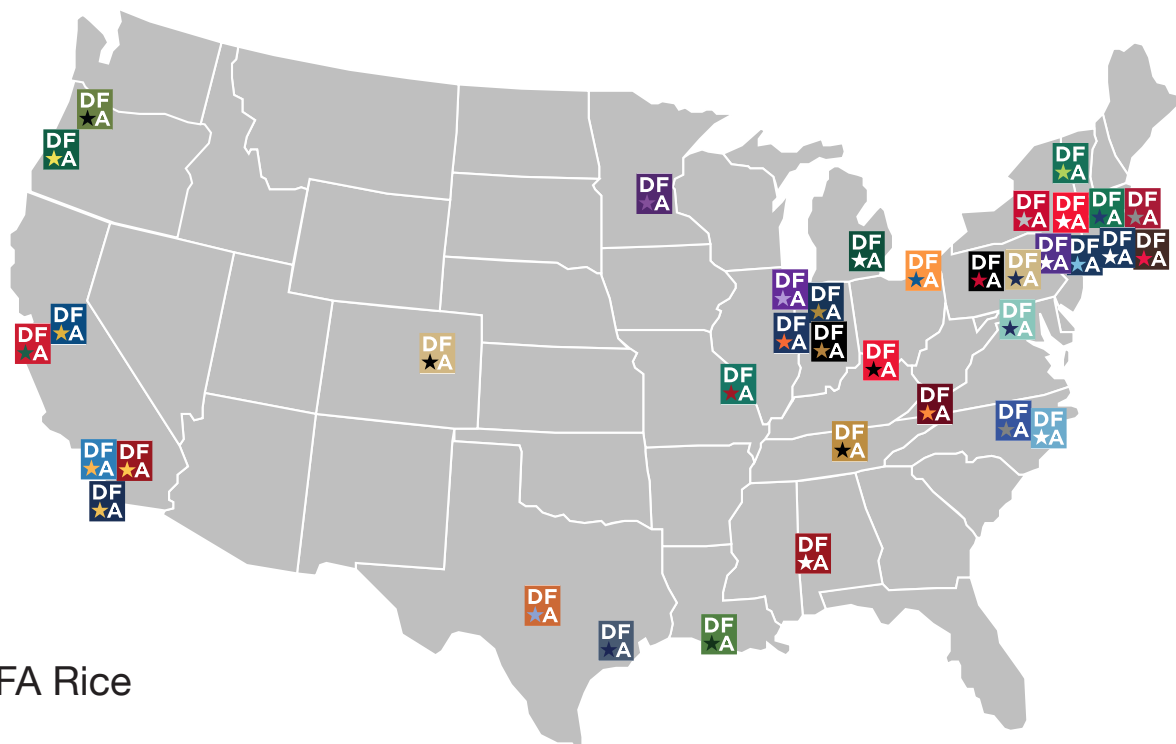


Studio

The term for all the people involved in a DFA chapter. Studios typically meet every week.



DFA Rice



Studio Lead

Organizes the studio meetings, disseminates information from DFAnational to the team leads, and mentors project team

Team Lead

Every Team in Rice's DFA studio has a team lead. They communicate information directly between the studio leads and the project team members.



Project Team Member

Every member of a DFA studio that is working on a project

FOR
AMERICA

THE

DFA

DESIGN

PROCESS

**IDENTIFY:**

figure out the problem and broadly learn about problem space

**IMMERSE:**

empathize with user and learn the intricacies of the problem space

**REFRAME:**

define the change you want to make and what your solution needs to get it there

**IDEATE:**

think of lot of ideas of potential solutions (no idea is a bad idea!)

**BUILD:**

make prototypes to communicate your ideas and use them to test

**TEST:**

see if these prototypes meet the goals team decided in reframe

SNAPSHOT

OF A DFA PROJECT

Chapstick for the Elderly

Rice University, 2018 Spring project

Chapstick for the Elderly is a Spring 2018 DFA Rice project. The project team was tasked with helping people with arthritis, specifically scoping in to a user group of elderly individuals in retirement settings. The project team found that 9 out of 10 elderly individuals take medications that have dry mouth as a side effect, which can result in chapped lips. Those with arthritis have a hard time opening, dispensing, and using chapstick because of the fine motor skills needed.



Project Team Members

Johan Widdman (team lead)
Samuel Spitz
Irene Kwon
Brendan Wong
Emma Wu



USING AN END GOAL TO GUIDE AN AMBIGUOUS PROCESS

Early on, the team debated between designing a new chapstick container altogether or an attachment to existing chapstick containers. When the team found that they couldn't land on a final decision, they asked for advice outside of the team. The team talked to an engineering design team in a product design course here at Rice, and they gave them advice that helped the team come to the conclusion that they needed to be designing an attachment for chapstick tubes.

Later on in the design process the team specified that their project end goal was to create an attachment that successfully keeps the chapstick cap attached to the body without use of fine motor skills. This helped the team create a measure to refer back to whenever they needed to make a decision on whether to refine or drop a prototype idea. For example, one of the team's early prototype ideas was to have a string that attached the cap to the body. When the team realized the direction they were going in didn't match the benchmark, they pivoted.

INTERVIEW
WITH A

TEAM

LEAD



Greg Alison

Rice University, 2018 Team Lead

Project WaterProof

INTERVIEW

What obstacles / challenges you have faced? How did you and your team overcome them?

We are struggling to adapt the human-centered design process (HCD) to an art-focused project. Because we don't have a specific user with a narrow problem, it has been difficult to know what a successful project will look like. So far we've been making decisions based on research, feedback from others, and group consensus, however it has been a struggle to validate our decisions since our design goals and measures of success--how we know if we're successful-- have mostly come from what our teams envisions, rather than arising from a user's needs.

What's the problem space as you understand it now? Is it any different from your initial understanding?

I certainly have more information and understanding about the complexities of water consumption and the structures that influence it, but that's only because I had close to no understanding about it to begin with. However, the problem space as it relates to my team, specifically, making an installation art piece has only gotten bigger, more complex and confusing, and less coherent. That's probably a reflection of the stage of the design process rather than how well the project has been going though -- we've diverged for a while and are now starting to hone in on what we want to make.

What do you love about DFA / this project?

I love that (1) I get to make something (2) I can "work" on the project by just thinking about it and fitting it into other ideas and art that I'm learning and reading (3) it's a challenge and feels like I'm learning where the edges of applicability are for HCD. Overall, I've loved this project because I think it's forced me to expand as a designer and artist who has quite a bit of experience in HCD.

PROJECT WATERPROOF

Team Waterproof is designing an installation art piece for the Rice Solar Studios [a solar powered lab and exhibition space on Rice's campus]. The piece is supposed to respond to water consumption and sustainability. The team's challenge is applying Human Centered Design—a methodical 6-step process—to something as ambiguous as art.

They are asking: *How can we help the Rice community become more aware of their water consumption through an installation art piece at the Solar Studios?*

Members:

Greg Allison (team lead)

Alec Tobin

Sam Wittman

Natalie Pippolo

Alison Yelvington

Manlin Yao

INTERVIEW
WITH A

STUDIO

LEAD



Michael Moran

Rice University '19

If you see Michael around campus he'll probably be on his skateboard. He might be giving haircuts outside. In his free time, he pursues graphic design. Basically, Michael likes making things. That's why he joined DFA. Freshman year he was a part of two project teams. Sophomore year, he was a team lead both semesters. He spent his first semester junior year abroad, then second semester he dove straight into being a studio lead.

INTERVIEW

**Team Lead vs. Studio Lead,
what is your personal experience with each role?**

Acting as a studio lead is a lot more stressful. The payouts are awesome. It can be a bit frustrating doing all the behind the scenes work where you feel like you're doing so much, but no one really acknowledges it. The responsibilities range from scoping projects, organizing open studios, recruiting, planning curriculum, mentoring teams, teaching HCD. There's a lot of dealing with responsibility and less designing. Ultimately, I think in my senior year, I would like to go back to team leading again. Through studio leading, I've learned a ton about team leading and I would love to go back and do it again.

**How would you apply what you've
learned from studio leading, into team leading?**

Now that I'm studio lead, I've been thinking about the impact more. The bottom line is, with more experience, you create more impact. I want to see what I could do if I had a project again. I think I could move through steps quicker and still get the same work done. It's frustrating when you go to a meeting and nothing gets accomplished.

Why did you want to be a studio lead?

I love the club! I want to see all our projects have the most impact. I also want to grow as a designer and I think being studio lead has definitely challenged me. In the future I would love to manage a studio - digital product design -- with full-time employees so this seems in line with that goal.

**How has your relationship with DFA
changed since becoming a studio lead?**

I feel much more ownership over DFA now. Before I wouldn't know half the members, but now I know everyone's first names, and what team everyone is on. I feel more responsible, just with all the meetings and preparation work.

INTERVIEW
WITH A

COMMUNITY



Kathy Heizerling

Executive Director of Breakthrough Houston

PARTNER

Only 15% of Houston ISD 9th-graders will end up with a college degree. Breakthrough Houston is working to change that. Kathy Heizerling is the Executive Director of Breakthrough Houston and continuously asks herself, "How can we reverse educational inequities?" DFA Rice worked with Breakthrough Houston to help the organization work towards an answer. The following is an interview with Kathy about Breakthrough Houston, the organization's impact, and how DFA Rice has helped Breakthrough Houston accomplish its goals.

INTERVIEW

What is Breakthrough Houston?

We work with high achieving, underserved middle school and high school students in the Houston area to help them get into college-prep high schools and universities of their choice. The majority of our students qualify for free or reduced lunch, identify as minorities, and/or are the first in their family to pursue a college degree. We also work to inspire and train the next generation of teachers through our teacher training programs during the summer and school-year.

What impact has Breakthrough had?

90% of our middle school program students are accepted into college-prep high schools and 100% of our high school program students are accepted into college with a financial aid package.

What is Breakthrough Houston's relationship with Rice DFA?

We act as a community partner to the studio, and have had this partnership in place for almost three years now. Rice DFA helps by coming in with a fresh set of eyes to see things we could be working on. We provide access to our organization for user research, Rice DFA projects identify something they can help us improve upon, and then they provide a tailored prototype that does so.

How did DFA Rice come into contact with you?

Through personal connections. One of the current DFA Rice members was part of our teacher training program several years ago. He set up an introduction meeting between Breakthrough and DFA Rice three years ago and since then we've had three project teams work with us.

What's the impact DFA Rice has had on Breakthrough?

DFA Rice pinpointed that soft skills training was something we could implement, and that's really helped us out. Our summer teacher training program now includes tools for teachers to track the soft skill development of students, and we're working on fine-tuning it to use again this next upcoming semester.

Key Takeaways

When looking for community partners, utilize your personal network.

DFA project teams provide a community partner with a fresh set of eyes.

Community partners provide DFA teams with expertise on a problem space.

Community partners are key to DFA's social impact - they put the "human" in human-centered design.

