



Design the Future: Project Partner Guide

We're delighted you're interested in becoming a Design the Future Project Partner! Project Partners are the foundation of the Design the Future program. You will work closely with students over the course of the program, allowing them to interview you and test product prototypes during four in-person meetings and one phone call over the course of the week. Below you can find details on the schedule.

Overview & Goal

Design the Future is a 6-day, fully immersive design thinking summer program for rising 9th, 10th, 11th and 12th graders in which students work to solve some of the biggest challenges facing our world today. During this intensive program, created by DC Design, students will design solutions to real problems faced by individuals living with physical disabilities. Through hands-on experiences students will learn to employ the design thinking process. At the end of the program, each student team will present its final design and high resolution prototype during a media-attended presentation. Throughout the program, students will receive design and manufacturing mentorship from expert facilitators, design and engineering professionals and students, and Project Partners. Students should expect to walk away from the course with an understanding of how they might tangibly improve the world around them having just contributed directly to the improvement of the lives of others.

Project Partner Requests

Thank you for your interest in working as a Design the Future Project Partner. A team of four to six students will work to design and prototype a solution to a challenge you face in your life. Once the program begins, teams will interview their Project Partners to learn more about the specific challenges they face, how those challenges impact the Project Partner's life, and the requirements and preferences the partner has in finding a solution to that challenge. More information on how to think through potential challenges the students could work on is below.

Schedule

Day	Time	Description	Location
Monday Interview Day	2:00 PM - 5:30 PM	Project Partner shows students the nature of the challenge they face and answers questions about how their life is impacted by that challenge. We will also take a group photo on this day! <i>(We will be distributing t-shirts for the photo - feel free to drape this over your front if you'd prefer not to put it on.)</i>	Classroom Space: Stanford University: d.school, Building 550 416 Escondido Rd, Stanford, CA 94305 University of Kansas: Burge Union, 1565 Irving Hill Rd, Lawrence, KS 66045 University of Louisville: Sackett Hall 332 Eastern Parkway Louisville, Kentucky 40208

			<p>Boston University: Classroom PHO-117, 8 St Marys St, Boston, MA 02215</p> <p>College of Alameda: Classroom # To Be Announced 555 Ralph Appezato Memorial Pkwy, Alameda, CA 94501</p>
Tuesday Check In	10:30 AM - 11:30 AM (Be available during this time for a ~20 minute call.)	Students check-in with partners over a video or phone call to ensure the problem they've selected is framed properly.	Video or Phone Call
Wednesday Prototype Check In	9:00 AM - 12:30 PM (Includes Lunch)	An in person meeting in which students get feedback from the partner on the prototype solutions they've built so far. You are welcome to stay for lunch with your team.	Classroom Space <i>Same location as Monday.</i>
Thursday Test Prototypes	2:00 PM - 5:30 PM	Students check in with partner to test a further advanced version of their prototype, make sure any attachments fit properly, etc.	<p>Makerspace</p> <p>Stanford University: To be announced</p> <p>University of Kansas: To be announced</p> <p>University of Louisville: Sackett Hall 332 Eastern Parkway Louisville, Kentucky 40208</p> <p>Boston University: EPIC - 750 Commonwealth Avenue, Brookline, MA 02446</p> <p>College of Alameda: Fab Lab, Building D, Room D-102 555 Ralph Appezato Memorial Pkwy, Alameda, CA 94501</p>
Friday No Check In	No Check In	No Check In	No Check In
Saturday Presentation Day	4:30 PM - 8:00 PM (Presentations begin: 5:45 PM)	As a partner, you will be an honored guest at the Design the Future final project presentations. During this presentation, students will detail the insights they uncovered during the design	<p>Classroom/Final Presentation Space</p> <p>Stanford University: <i>Same location as Monday.</i></p> <p>University of Kansas:</p>

		<p>process and the journey they underwent to arrive at their solution and final prototype.</p>	<p><i>Same location as Monday.</i></p> <p>University of Louisville: <i>Same location as Monday.</i></p> <p>Boston University: <u>Classroom Space:</u> <i>Same location as Monday.</i> <u>Final Presentation:</u> LSE-BO1 - 24 Cummington Mall</p> <p>College of Alameda:</p>
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Outcomes

At the end of the program, students will create a high resolution prototype aimed at addressing their partner's challenge. Generally, final projects could be grouped into three tiers.

- Tier 1: Students produce a product that is immediately implementable and impactful on their Project Partner's life.
- Tier 2: Students produce a product that meets the need and shows great promise but requires improvements. For example, it should be made of different materials, the sizing isn't a perfect fit, or one of the mechanisms doesn't function 100 percent of the time.
- Tier 3: Students create a project that rules out an option for addressing the problem the partner put forward, but ultimately, doesn't solve the problem in a desirable way.

For all projects, our highest goal is for the products the students create to end up in Tier 1. We certainly hope all projects will stay out of Tier 3. Partners should expect students to put their full effort into addressing the challenge they are presented with, but also realize this is a learning opportunity for high school students and projects falling within any of these tiers are possible. The final solutions created should be viewed in this light. It is possible that student projects will be implementable. If they aren't, however, partners are asked to be understanding of this outcome, as well.

Defining Challenges for Student Projects

During the Project Partner application, which you can find at www.youdesignthefuture.com, you will be asked to submit three potential project challenges, as well as a brief bio. To aid you in defining challenges the students might be able to work on with you, one helpful strategy is to think through your day moment by moment. Ask yourself:

- What is it like getting out of bed and getting dressed in the morning?
- What about bathing in the morning?
- Carrying objects from your home to work or out into the world?
- Getting in and out of your car or using another form of transportation?
- Eating lunch?
- Etc.

These questions should help uncover friction points during your day. In addition to this approach, you might also think about the times when completing a task requires assistance that you'd rather do

without. These friction points are often the types of challenges that are accessible for students to produce meaningful solutions to within the weeklong timeframe.

Program Flow

The program is a 6-day design intensive guided by trained facilitators in design thinking and engineering. It cannot easily be written as a step by step schedule, but we can offer an overview of what each day of the program entails.

Monday:

- Student introductions
- Students do a full dive of the design thinking process
- Students learn the value of empathy, the first step in Design Thinking, from an individual with a physical disability
- Students engage in empathy by interviewing their Project Partners and learning about the challenges they face
- Reflection on the day

Tuesday

- Students unpack the information they heard during their empathy conversations
- Students define the problem they are going to solve, and then check in with their partner on how they've framed their problem (what we call their "Point of View statement")
- Students learn Ideation and practice it through brainstorming solutions to the challenge they've defined
- Students make initial, low-resolution prototypes and figure out the critical functions of the solution
- Students learn about Minimum Viable Product
- Students and coaches define skill sets on each team and create a prototyping plan
- Students learn mindful meditation and do a core value exercise to learn about what they value most and about self-observation

Wednesday

- Students learn to receive feedback as a gift
- Students test prototypes with Project Partners and receive feedback. Students and Partners reach consensus on a direction for students to head in. Partners emphasize most important aspects of design.
- Students refine basic prototypes and continue testing
- Safety talk
- Students complete Modules, where they learn new skills that can help enrich their projects and/or STEM learning journeys
- Students map out approach to building high resolution prototypes with manufacturing equipment (lasers, 3D printers, Arduino, etc.)
- Students begin to build using tools
- Reflection on the day

Thursday

- Students prototype and build
- Students engage in a team dynamics session to give feedback to teammates about contributions for the week
- Students test prototypes again

- Students build high resolution, functional prototypes using lasers, 3D printers, hand tools and other equipment

Friday

- Students learn to think of their presentations as a prototype, and learn some "self-design" principles
- Students begin thinking about their final presentations and how they want to communicate their journey to the world
- Students continue to build high resolution prototypes
- Reflection for the day

Saturday

- Students complete any loose ends on high resolution prototypes
- Students learn about storytelling
- Students prototype their presentations and do run throughs
- Students present their final products to family, media, their Project Partners, and the broader community

Successful Past Projects



Crowd Navigation Device for Visual Impairment



Assistive Tool for Low Grip Strength