

Partner Profile: d.Tech High School

📅 September 28, 2021



[Design Tech High School](#) (also known as “d.tech HS”) in Redwood City, CA was co-founded in 2014 by Ken Montgomery and Nicole Cerra, with the support of the Oracle Education Foundation, to prepare students to make the world a better place by supporting their development of “design thinking” skills and mindsets that ignite students’ empathy and passion, and expand their creative problem-solving capacities. From 2018–2020,

d.tech HS staff partnered with ELP to work on the development and piloting of its Innovation Diploma performance tasks and rubrics. Ruth Chung Wei, Director of Research and Innovation, and Vinci Daro, Director of STEM Learning, provided technical assistance during the development process and evaluation of the first year pilot. The partnership culminated in an external review of the Innovation Diploma, which found overwhelmingly affirmative feedback from design experts in higher education and industry.

The Innovation Diploma is an assessment system that was designed to provide students with an opportunity to demonstrate their ability to apply mindsets and skills that are necessary to design solutions to real-world problems. The focus of the Innovation Diploma at d.tech is on addressing problems related to the United Nations Sustainable Development Goals. Students select one or more of the Sustainable Development Goals and a need that they have identified in their local context or in the world, and develop a design solution to address that problem/need. Earning the Innovation Diploma certifies that a student has met industry and academic standards for creativity, leadership, self-direction and has also demonstrated an understanding of their responsibilities as a designer.

One d.tech alumna Joelene, who is now a student at UC Berkeley, explained how her experience with design thinking in high school prepared her for college learning and work experiences.

“My time at d.tech taught me to be adaptive and creative when approaching unfamiliar situations and daunting problems, and it started building the foundations in me to approach designing and building solutions with empathy at the forefront. At UC Berkeley, I’m a designer and project leader in a student-run organization that builds technology for nonprofits. This semester, I’m leading the development of a mobile application partnered with We Care Solar, an international organization that provides life-saving solar energy to community health centers in hard to reach villages all over the world — every step of the way, I know that the principles that I’ve learned at d.tech will come in handy, from user-centered design, to a mindset of iteration and growth, to a willingness to work in initially ambiguous and new environments...Although the 5 step design-thinking process that we learned in school is rarely referenced explicitly, it’s grown to be part of the work that I do and the way I approach new challenges that arise; through practice, it’s become a natural part of my toolkit when I embark on a new project or explore a new entrepreneurial idea!”

Design Tech plans on supporting high schools around the world in offering the Innovation Diploma to their students. To learn more about the Innovation Diploma program, please visit innovationdiploma.org or contact Dr. Ken Montgomery at kmontgomery@dtchhs.org.

Alumni Testimonials:

Meghna G. BA/MD Student at Northwestern University. Conducting antibody research to better understand social determinants that affect human health

In my experience, the design thinking process has proven to be a very powerful thought process that constantly makes me think about how I can better my surroundings. I am currently a pre-med student, which consists of a lot of studying and memorization about the world, but ironically, not a lot about how one can help the world. Therefore, I am grateful for my background in design thinking because it has ingrained within me the ability to think outside of the traditional framework of academia and to think creatively about how I can take what I’ve learned to not just solve problems on a test, but more importantly, solve problems in my community. For example, right now in college, I’ve been using design thinking as a guide to develop effective programs that work on menstrual equity and community development through art. I’m so grateful that d.tech taught me design thinking so early on, as it has become an invaluable mindset that has shown me that I have the power to make a difference at any stage of life, and that is an empowering lesson that I’ll carry forever.

Adelyn C. Freshmen at The Wharton School at Penn

I was recently offered an internship with the San Francisco Veterans Affairs Department, and I’ll be working with them from September through May to redesign the post-COVID hospital experience. The internship was supposedly directed at graduate students (the application said graduate students were preferred) but I think my unique background stood out because I did an activity session/group interview alongside four other graduate student applicants and was still selected! d.tech and my experiences with design thinking really shaped my application.

Joelene L. UC Berkeley, intern at Slack and Kleiner Perkins

My time at d.tech taught me to be adaptive and creative when approaching unfamiliar situations and daunting problems, and it started building the foundations in me to approach designing and building solutions with empathy at the forefront. At UC Berkeley, I’m a designer and project leader in a student-run organization that builds technology for nonprofits. This semester, I’m leading the development of a mobile application partnered with We Care Solar, an international organization that provides life-saving solar energy to community health centers in hard to reach villages all over the world — every step of the way, I know that the principles that I’ve learned at d.tech will come in handy, from user-centered design, to a mindset of iteration and growth, to a willingness to work in initially ambiguous and new environments. “although the 5 step design-thinking process that we learned in school is rarely referenced explicitly, it’s grown to be part of the work that I do and the way I approach new challenges that arise; through practice, it’s become a natural part of my toolkit when I embark on a new project or explore a new entrepreneurial idea!”

2019 TEDx Talk by TEDxDesign Tech High School Club