

Innov8 Capstone 2023-24 Course Overview

The winter Innov8 cohort meets over nine A-F day "rotations" (18 classes). See the overview and key dates:

Rotation 1

- Intro to Design Thinking

Rotation 2

- Question Formulation Technique
- Identifying areas for disruption

Rotations 3 & 4

- Active listening
- Interview skills
- Observations
- Empathy

Rotations 5

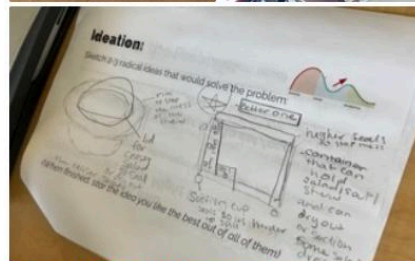
- Ideation
- Prototyping

Rotations 6 & 7

- Feedback: **Prototype Feedback Forum: January 19th**
- Iteration

Rotation 8 & 9

- Promotion
- Presentation: **Innov8 Symposium, February 14 (tentative)**



Below is a more detailed look at the curriculum:

1. Establishing a Design Thinking Framework

Design Sprint: To kick off the course, students were introduced to Design Thinking with a rapid design sprint to create the "[perfect utensil](#)" for their partners' two favorite foods. They used the [SCAMPER](#) idea generation technique to stoke creativity during ideation: substitute, combine, adapt, modify, (re)purpose, eliminate, reverse.

Portfolios: Each student is curating an online web portfolio to feature their design thinking process on pages "problem," "prototypes," and "pitch." You can see [former students' portfolios](#) for a taste of where they're headed.



2. Identifying Areas for Disruption

Opportunities All Around Us: *"If I had an hour to solve a problem, I'd spend 55 minutes thinking about the problem and 5 minutes thinking about the solution."* - Albert Einstein.

Problem-identification is a significant early stage in design thinking and takes understanding perspectives from people close to an issue. First-hand observations, immersing oneself in an experience, and conducting interviews are three ways to develop **insights** about a problem that lead to can lead to innovative design opportunities. This IDEO [Power of Insights](#) video shows how an insight about choice changed the way people felt about food assistance services.

Question Formulation Technique: In order to make the most out of interview situations, it's helpful to distinguish "open" from "closed" questions. Closed questions have a yes/no or short answer while open questions are more nuanced and yield detailed answers. Students practiced the Question Formulation Technique from Harvard's [Right Question Institute](#) by crafting dozens of questions around the statement "Humpty Dumpty fell off a wall." Who is Humpty Dumpty? Why did he fall? Why was he on the wall? Which wall? Does he want to get back on the wall?

Active Listening & Observation. Actively listening and observation takes *practice*. Here are two videos that helped us envision our best selves in interview situations: IDEO's [An Interview Gone Wrong](#) and "[10 Ways to Have a Better Conversation](#)" with Celeste Headlee.

The Five Whys are a simple technique to perform root cause analysis. Here is an example of how the Five Ways were used to help the [Jefferson Memorial](#) gain sights about the their deteriorating stone exterior. Students practiced this repetition of inquiry with a peer on that topic of their "evening routine" and then took the Five Whys on the road to engage family members in conversation about potential design opportunities or "areas for disruption."

3. Ideation & Prototyping

Solutions can come in many forms. IDEO's videos about [ideation](#) and [prototyping](#) show us how developing solutions is not magic, but rather a creative process that *everyone* can engage in. "Build to think" is a recurring theme that encourages designers to make early and low-fidelity prototypes in order to get feedback that will take you to the next level. In this video about [iteration](#), we are encouraged to *"fail early in order to succeed sooner."* A student's first solution prototype may look nothing like what they end up with at the end of the course. Solutions can run the gamut through graphic novels, video public service announcements, podcast episodes, art works, physical inventions, lesson plans, simulations of a new technology, a new concept for a social media campaign, or a detailed model for an improved system (for example food service, pedestrian traffic, recycling...).

Viability & Sustainability. In earlier years of Innov8, students created business plans that endeavored to earn a profit. While we've reframed the experience in recent years from thinking like an entrepreneur to being a "changemaker," the principles behind the Business Model Canvas are still *very* helpful for our innovators. Our modification of the BMC is called the [Innov8 Project Roadmap](#) and it takes into account the same concepts of need, audience, solution, and sustainability measures. While students conceptualize their problem solutions, they will be thinking about how feasible the solution is and how well it might stand the test of time.

Social Media Note: If a student determines that the use of a social media tool is instrumental in achieving their project goals, they must read and sign the [Innov8: Permission for Use of Social Media](#) contract with their parents.)



4. Sharing

Symposium: Wednesday, February 14, 2024 (tentative date)

Pencil your calendars with the Innov8 Symposium on Wednesday, February 14, when each second-trimester Innov8 student will present their innovations in the Hill Chapel to a live audience from 11:15 am - 12:20 pm. The event will be lived-streamed and archived for later viewing, if necessary.

Each student will have 2 1/2 minutes to share the story behind their innovation. They will have use of a podium or they can move about the front of the stage with a handheld mic if they prefer. Projected images and video are permitted, but there will not be time for setup of any major props or furniture. The presentations will include:

- An explanation of problem being solved
- Discoveries made through research and immersive observation
- A description of the presenter's innovative solution and how it improved after a round of testing and feedback.

General Resources

- [Innov8 Website](#) is our outward-facing website viewable to Vanguard and extended family members.
- [Innov8 Website: Student Work](#) has projects from years past and will be home to your students' digital portfolios.
- [Innov8 2023-24 iCloud gallery](#) is a photographic archive of learning-in-action