

# iLab Design Thinking Innovations Research:

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**1<sup>st</sup> Year Brief**

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## Introduction, Research questions

This research examines and profiles the evolution of innovation and equity that results from iLab activities, whose purpose is to act as a key lever in evolving SFUSD into an innovative system. The first year of this two-year study was aimed at learning about the iLab process and understanding what participants and school teams are learning from iLab that they apply to the implementation of a design solution for their school site. The second year of the study will take an in-depth look, creating case studies of participants and the design thinking process at three of the schools. The overall research questions are:

- ✓ What do members of school innovation teams learn about the design thinking process?
- ✓ In what ways do the iLab activities and facilitation show up in teams as design thinking and innovation practices?
- ✓ Does the design thinking process the teams engage in lead them to create implementable solutions that can have impacts on achievement and equity goals?
- ✓ What aspects of the design thinking mindsets do school teams learn, internalize, and use in their innovation work and beyond (e.g., aspects of the process include empathy, collaboration, prototyping, and persistence)?
- ✓ How do school teams internalize the process during the training and how are they implementing it beyond the training? What does this look like for three school teams in particular?

## Methods

We used mixed methods to study the iLab's procedures, team innovation learning and practice during the 2016-2017 school year. We collected survey data two times during the iLab training, and we observed and wrote field notes on the iLab training and a coaches training. We observed November's Pitch Night where each team had 10 minutes to explain their design thinking process and their proposed solutions, while also making a pitch for start-up funding of their ideas. We also attended the end-of-year design solution Showcase where each school showed their innovation progress to date. We received comments about the process and the innovations from several participants during the Showcase week. A third data set was generated through observing and scoring videos of school team presentations on Pitch Night and posters created for Showcase.

## Findings

### Demographics on iLab participants

Most of the participants were staff members in conventional schools representing all levels from pre-kindergarten to high school. The majority of participants listed themselves as *administrators* and *teachers*. Some listed *principal, staff member*, and *parent*. Their experience ranged fairly evenly from one year to over 20 years of experience. There were several *students* who participated as well.

### Design thinking training and experiences

Teams participated in four three-hour design sessions facilitated by an iLab coach, with engagement work in between sessions at their schools. iLab's 3D Design Process began with iLab's *Discover* phase, where teams identify an equity challenge in their school and focus on the perspective of their end user and other stakeholders. Next, the teams completed iLab's *Define* phase to make meaning of all they discovered and used their key insights to brainstorm, prototype, get feedback. Finally, the teams entered iLab's *Do* stage where they implemented and iterated on their designs. The research team noticed that the role of the coaches was seminal during the training sessions and that teams depended on coaches to keep them focused and help them interpret and apply the process.

### Mindset development in the cohort and in the projects

In open-responses to our survey on mindset development, participants most often cited *Innovations based on Empathy, User-Needs, and Stakeholder Involvement (46%)*. This self-report was corroborated in our scoring of presentations on Pitch Night, where *about 14 of the 17 schools scored fairly high on user-centeredness*, or actions to hear from users or observe them and learn their perspectives, and *about 10 scored high on empathy*, or the team's ability to demonstrate that they deeply understood stakeholders. Being user-centered often but did not always mean that a team was empathetic in its orientation. In the survey, participants also often cited *Iteration (25%) and Open Mindsets (23%)*. Open Mindset was a new and interesting construct that emerged from our coding of survey responses. It centered on being open to many ideas at once. While we do not have definitive knowledge of where this mindset originated, we suspect it was discussed and reinforced quite a bit during the ideation phase of the challenges, when team members brainstormed and generated many possible ideas and considered their risks and benefits while also comparing and ranking ideas they thought were contenders for more development. When presented with six design thinking mindsets to consider, most participants ranked *Collaboration as "extremely important" (81%)*.

## Innovation and project progress

In the scoring of the end of year Showcase posters, we saw that ***the six teams that scored highest on user-centeredness, empathy for people in the community, and diversity focus also scored highest on innovation and implementation progress.*** Four teams scored considerably lower in innovation and implementation, and were lower on the combination of empathy, user-centered, and diversity scores.

Participant conceptions of innovation deviated in their scope from the simple metric of newness. These conceptions included ***iteration on an existing model or program***, such as adapting a model that is working well at another school or organization, ***taking the next step, a bigger bite, or trying a more comprehensive approach***, and ***acquiring a new value or value proposition to which the team was committing.*** An example of this last definition would be when a school team sees that blaming students for their truancy or disciplinary episodes is counter-productive, and instead sees the student as acting reasonably in the situations, recognizes its own responsibilities in perpetuating the problem, and designs a solution set that reflects this new perspective. These expanded definitions contribute to understanding of innovation in the context of education, give the iLab team information about why schools make commitments to action, and lay additional groundwork to support implementation, which surfaced as a complex part of the process that could be experimented with in next iterations of the iLab program. Suggestions in our full report include examining and better understanding the range, granularity, and complexity of innovations, as well as their relations to time, space, change dynamics at the school sites, and financial supports.

## Moving forward

We're very excited to see that schools in the iLab Innovation Award program were gaining traction for individuals who participate as well as for school teams. They are actively and successfully contributing to the growth of innovation practices and mindsets in SFUSD teachers, staff members, administrators, and community members who have embraced key design thinking mindsets such as empathy, iteration, collaboration, and openness. This first round of research has shown that school teams can come together brilliantly and can make progress towards school-based innovations that speak to their communities and specific achievement and diversity goals. The results outlined in our full report provide feedback on what iLab participants see themselves learning through the process, and provide direction for future iLab work and the next round of research.