A Summary of *iLab Design Thinking Innovations Research*. Project Team: Shelley Goldman, Keith Bowen, Brian Fox, Jenny Hoang, and Rachelle Cole

Research Brief - November 2018

This research brief presents the findings from a two-year study, *iLab Design Thinking Innovations Research* (*Year 1 Report*[1] and *Final Report*[2]). The San Francisco Unified School District (SFUSD) iLab began in 2014 to support the district's Vision 2025. The iLab strategy *leverages human centered design as a signature practice to build environments and practices that serve all of our students and their adult allies.*[3]

The purpose of the study was to ascertain the impacts of iLab training and implementation and assess its impact on school practices. The studies were conducted during the 2016-17 and 2017-18 school years. The study methods included: surveys of Innovation Team participants; observations, coding, and rubric-based scoring of iLab activities and events including training programs, team coaches meetings, November's Pitch Night, and year-end school presentations and posters; interviews with Innovation Team coaches, staff, and participants; and interviews with school leaders, conducted one year after their school received its iLab innovation award.

FINDINGS

Table 1. displays the specific findings from the participant surveys, observations, and school-leader interviews. Overall, the researchers found:

- The role of coaches was seminal during the iLab training sessions and teams depended on coaches to keep them focused and help them interpret and apply the process.
- iLab participants successfully mastered the iLab design thinking process as a strategy to achieve the SFUSD's goals of equity and achievement gains.
- Schools with the highest scores exhibited a user-centered process, developed empathy for the users, and focused with intent on achievement and equity concerns.
- Long-term success for schools had similar characteristics, including their ability to make connections, establish partnerships, or find the resources needed to sustain their efforts.

Table 1. iLab Design Thinking Innovations Research Findings

Method	**Finding**
Participant Surveys	• iLab is serving a wide-range of schools and a diverse group of people. Participants represented all grades; all school roles with the majority categorized as 'other administrator' (not a principal) or teacher; and a range of experience. • The teaching of design thinking was extremely effective, with participants engaging fully in Discovery, Design, and Do aspects of the iLab process. Participants reported learning *Innovation based on Empathy*, *User Needs*, *Stakeholder Involvement; Iteration;* and *Open Mindsets.* • The iLab process was a positive experience for those involved and participants left the process with confidence about their innovation projects. • Most participants reported that their district teams and site administrators were 'extremely supportive' of implementation efforts and that they experienced a 'moderate amount' or 'quite a bit of freedom' to innovate in their school. • Making gains in equity and achievement were foremost in participants minds as they worked through their projects.

[1] Goldman S., Bowen, K., Fox B. & Hoang J. (2017). *iLab Design Thinking Innovations Research: 1st Year Brief.* Stanford University (Stanford, CA), San Francisco Unified School District (San Francisco, CA).
[2] Goldman S., Bowen, K., Fox B., Hoang J. & Cole, R. (2018). *iLab Design Thinking Innovations Research: Final Report [PowerPoint Slides].* Stanford University (Stanford, CA), San Francisco Unified School District (San Francisco, CA).
[3] Retrieved November 8, 2018 from http://ilab.sfusd.edu/about-us/about-ilab/

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Method	Finding
Progress at End of School Year	• 14 of the 17 school teams scored reasonably high (3s and 4s) on *User-centeredness*. • 10 school teams scored high (3s and 4s) on *Empathy*. • *Team Collaboration* scored high for all but three schools. • The lowest scoring schools had lower scores on the *Equity* item and the *Empathy* measures than many other schools. • The six teams that scored highest on *User-centeredness*, *Empathy* and *Diversity Focus* also scored highest on innovation and implementation progress. • Approximately two-thirds of the schools scored high on the rated aspects at the end of the school year. Others made some progress in some areas, with two or three not thriving on several rubric criteria.
School-leader Interviews	• Successful projects made progress towards equity and/or achievement goals. • Mindset development has persisted around *Collaboration* and teams, *User-centeredness* and *Empathy*, *Open mindsets*, and understanding the power of *Iteration.* • Leaders know and can use the design thinking approach and understand its impact. They have more understanding of teams. They enable them to make connections across existing hierarchies in the school, think more broadly about students and parents in the process, and envision emerging versions of leadership and how they function as a principal. • There is appreciation for the outcomes of the team and stakeholder-based process and how the team can work through problem solving. • Schools with successful implementations find ways to keep things going. They make connection, establish relationships, and enter into partnerships that can bring resources/partnerships/funding sources and make next steps possible.

WHAT SFUSD CAN DO WITH THESE FINDINGS

While the iLab study findings are overwhelming supportive of the current design, the study identified a series of challenges to the iLab process which could be addressed by the district leadership. Here, we suggest three implications based on these findings:

- **Make adjustments to the cadence and scheduling of iLab training and engagement**: Both team participants and school leaders mentioned not having sufficient time to engage in the iLab process due to the competing responsibilities and demands of the daily school schedule. School district leaders could work with school leaders to assess the time needed for successful iLab engagement and develop appropriate scheduling strategies for both team participants and school leaders

- **Create a system for highlighting evidence-based successes systemwide to help all teams overcome challenges**: School leaders also mentioned the difficulty of pausing and re-starting projects due to summer breaks; the on-going changes within the teams due to turnover among staff, leadership, parents, and community leaders; and the difficulty garnering support from faculty not currently involved in the iLab process. They recommended more opportunities for iLab team participants and leaders to hear about each other's successes and learn how to sustain, build and take their innovations to scale.

- **Implement a research protocol to measure the relationship between the iLab process and movement towards student equity and academic achievement.** The school leaders mentioned that successful projects were making progress towards the SFUSD's goals of equity and academic achievement. It will be important to develop and implement a research strategy to analyze this relationship to ensure continued effectiveness of the iLab process over time.

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