

K12 Lab Network Resource Guide

1. Ways to Connect

- Sign up for the K12 Lab Network mailing list here: All events and opportunities to be involved with the K12 Lab Network are announced here. You can also email us directly at K12@dschool.stanford.edu.
- K12 Lab Network program page: The best place to learn about the latest and greatest at the d.school's K12 Lab Network. Includes upcoming events, opportunities, stories and links to resources.
- <u>d.school Website</u>: A great place to learn about all that's happening at the d.school as a whole. Includes information about the <u>public tour of the d.school</u>.
- Join the K12 Lab Network Facebook page. Another way to get connected with educators who have been to an event that the K12 Lab Network has hosted.
- <u>Design Thinking in Schools</u>: In partnership with IDEO we created this map of schools all
 over the world integrating design thinking into their curriculum. Please join if you are
 using design thinking in your classroom.
- #DTK12: A twitter hashtag where the twitter-verse goes for all things design thinking in education. Related: #DTK12chat, a weekly twitter chat on design thinking in K12 education, held on Wednesdays from 6-7 PM PST.
- Follow <u>@K12lab</u> on twitter for invitations and information about the latest goings on and workshop offerings.
- The K12 Lab Network hosts office hours at the d.school every Monday from 3:30-5:30 PM. Stop in to meet <u>Devon Young</u> (Program Manager), <u>Ariel Raz</u> (Learning Experience Designer), and other interested and interesting people. Please email K12@dschool.stanford.edu to let us know if you plan to join office hours.

2. K12 Lab Projects & Initiatives

- <u>School Retool</u> is a professional development fellowship that helps school leaders
 redesign their school's culture using small, scrappy experiments called "hacks." Hacks
 may start small, but they're build on research-based practices that lead to <u>Deeper</u>
 <u>Learning</u>, and can create the kind of big changes school leaders strive to create.
- The <u>Shadow a Student Challenge</u> is a call for school leaders to deeply immerse themselves in empathy for their students by shadowing a student for an entire day, from bus stop to bus stop. The tools and materials are available for download on the website.
- <u>Liberatory Design</u> is the result of our collaboration with the <u>National Equity Project</u>. We created an equity-centered design thinking framework focused as well as design cards.



Our <u>Deeper Learning Puzzle Bus</u> is an experiment in how we might apply the
international craze of escape rooms to the educational imperative of helping students get
better at crucial deeper learning skills.

3. Previous K12 Lab Projects & Initiatives

- d. home team was work we supported with Bay Area schools incorporating design thinking into their curriculum and practices. Its innovative teacher professional development tools are open source for your use.
- Our work to Reimagine High School has included work with <u>d.tech high school</u>, creating the <u>DSX model</u>, and <u>Project Wayfinder</u>.

4. Toolkits & Curricular Resources

There are multiple resources and collections of design methods out there. Not all of these are specifically designed for education, but they are all useful when exploring and using design thinking.

- <u>K12 Lab Network wiki</u>: This site is always under construction, but there is some really awesome stuff in there, if you're willing to dig a bit.
- Research on Design Thinking: Check out this list of research articles and resources discussing the intersections of design thinking and learning.
- <u>Design Thinking for Educators</u> (IDEO): This toolkit is the most explicitly geared towards K12 educators. It's focused more on school-wide organizational change than running design challenges in the classroom.
- <u>Bootcamp Bootleg</u> (d.school): Check out this set of "method cards" to provide bite-sized explanations of different techniques for each phase of the design thinking process.
- <u>Design Thinking Crash Course</u> (d.school): This is a virtual crash course on design thinking, complete with facilitation via video and handouts. Best done in groups, as this is a paired activity.
- The <u>REDLab</u>'s mission is to conduct research to inform our understanding of design thinking in K12, undergraduate and graduate educational settings. REDLab publishes excellent design thinking curriculum.
- Check out the <u>d.loft Curriculum</u> page to see educator-created design thinking curriculum
- Take on the <u>Future of Stuff Challenge</u>, a curated, extended online design thinking project focused on the future of manufacturing.
- Extreme By Design documentary: Check out this documentary that was created about the d.school class Design for Extreme Affordability. Ralph King developed curriculum to be used alongside the movie to enhance students' learning.
- Check out this online <u>Design Kit</u> created by IDEO.org to help you get started designing.



- <u>Collaborative Action Toolkit</u> (frog design): This toolkit is geared towards groups of people who want to make change in the communities around them.
- <u>Design for Change</u> is a global movement designed to give children an opportunity to express their own ideas for a better world and put them into action.
- Agency By Design is an initiative of <u>Harvard's Project Zero</u>. Agency By Design focuses
 on educational initiatives that emphasize making, design, engineering, and tinkering are
 gaining traction in schools and organizations across the country.
- <u>Tinker Lab</u> is a creative activity blog by Rachelle Doorley. Updated weekly.

5. If You Are Looking for Materials

- RAFT (Resource Area For Teachers) RAFT makes low-priced craft and learning kits for kids out of industrial surplus materials. Their main warehouse in San Jose is only open to teachers, but anybody can order kits from their website.
- <u>SCRAP-SF</u> A treasure trove of salvaged free and low-cost building and craft materials at a huge warehouse in the Bayview area of San Francisco. They also offer workshops

6. Books & Things to Read/Watch

- An Incomplete List of Resources for the Equity-Centered Designer
- Design Education's Big Gap: Understanding the Role of Power (George Aye)
- Design Revolution (Emily Pilloton)
- Change by Design (Tim Brown)
- Make Space (Scott Doorley & Scott Witthoft)
- <u>Creative Confidence</u> (David & Tom Kelley)
- The Art of Innovation (Tom Kelley)
- <u>Taking Design Thinking to Schools</u> (Shelly Goldman & Zaza Kabayadondo)
- Hip Hop Genius: Remixing High School Education (sam seidel)
- Out of Our Minds (Sir Ken Robinson)
- The Achievement Habit (Bernie Roth)
- <u>Creating Innovators</u> (Tony Wagner)
- <u>Design Thinking in Education</u> (Susie Wise)
- <u>Everyone is Biased: How Reboot Builds Bias Checks into Design Research</u> (Erin Wispelwey)
- <u>Design Time documentary</u>
- Equity X Design Medium Page
- Extreme By Design documentary
- TED talk on creative confidence: David Kelley
- TED talk on using empathy in the field: Doug Dietz



- TED talk on designing for the developing world: Jane Chen
- The Third Teacher (Cannon Design)
- Redesigning Your Classroom (Edutopia)
- SparkTruck documentary