

# October 2017: Inside Silicon Valley

**Date :** October 4, 2017

## Why This Matters Now

Innovation. The word gets used a lot these days – and with good reason. Innovative minds question the status quo and reconceive the way things are done, often resulting in new technologies, products and services that improve our lives and our planet. What better way to introduce high school students to the power of disruptive thinking than by taking a “trip” to Silicon Valley? Silicon Valley is a region in northern California – centered 40 miles south of San Francisco — that is known for its technology entrepreneurs and culture of innovation-driven start-up companies. “The Valley” is a Who’s Who of tech success, including the birthplace and current headquarters of Facebook in Palo Alto, the humble beginnings of Apple in Steve Jobs’s garage in Los Altos, and now the headquarters in Cupertino, and the home base of visionary Elon Musk’s Tesla Motors, maker of premium electric vehicles, also in Palo Alto. Not impressed? The list also includes Google, Pinterest and Netflix, as well as Uber and Airbnb. And as much as students can learn from this spirit of innovation, entrepreneurialism and finance (from the venture capitalists who support new businesses), they may also glimpse their future in a region that is home to a large number of younger workers. Silicon Valley is exciting, and it’s an incredible lesson in the value of risk. When it comes to startups, failure happens, which advances us closer to the ideas that will succeed.

## Resources

### Podcast

#### [Creating Tasty New Foods that Help Sustain Our Planet](#)

Technologists are the backbone of Silicon Valley, with investors putting their cash these days toward industries like online security and fraud detection, artificial intelligence and augmented reality. But the innovation doesn’t stop there. Take, for instance, the plant-based food movement, where you’ve got startups that are using science to create meat-like foods to improve our health and the world we live in. This audio podcast is a great way to discover an industry that is redefining food production and to open communication about perspectives inherent in making our favorite meals in a laboratory. Be sure to pair this podcast with the Career Insight column featuring [Impossible Foods CMO Nick Halla](#).

### Lesson Plan

#### [Incubating Entrepreneurship](#)

Almost as important as the start-up firms that shape Silicon Valley are the incubators that help launch them. Silicon Valley is a hub for incubators like Y Combinator and AngelPad, which provide an opportunity for small businesses to have a shared workspace, networking opportunities, investor connections, and mentorships. They quite literally incubate – and often accelerate – startups as they launch and grow. This lesson plan introduces students to the concept of small-business incubators and gives them an opportunity to develop their own incubators, while considering the needs of global markets.

### Hands-on Learning

Every powerful innovation needs inspiration. In this exercise, students will meet Shubham Banerjee. Banerjee, who is now 16, used Lego Mindstorms EV3, a \$350 Lego robotics kit, and some items from the hardware store a few years back to create a low-cost Braille printer that actually prints documents in Braille. Then he started a business to produce and sell his cool invention – in Silicon Valley. To begin this innovation experiment, read the KWHS article [The Silicon Valley Startup that Began with Legos and a Market Need](#). Then, using the Conversation Starters that accompany the story, begin a discussion with the class about what they have read and how it applies to their lives. Following a 10-minute discussion, bring out large boxes of legos and set them up around the room. Students must then begin

building their own innovations, ideally in teams that you organize. Encourage them to brainstorm ideas before building and to think through other start-up issues they have read about, like market need and financing. You may also designate a panel of venture capitalists (possibly you and a few other teachers) to ultimately hear students' ideas and discuss issues like valuation and capital needs. You can roll this out over several classes or keep it simple during one or two periods.

**Video Glossary**

Provide an extra layer of learning for your students with our video glossary. Here, Wharton professors define terms: Angel Investor, Early-stage Entrepreneur, Elevator Pitch, Entrepreneur, Innovation, Startup, Startup Capital, Venture Capital and Valuation

**KWHS Quote of the Month**

“When you are developing something unique, the impact it’s going to have is visible to everyone. Business plans are not what attract investment. In the seed stage, the concept and the show-and-tell work better.” – *Shubham Banerjee, founder, Braigo Labs*