

Design Thinking in an Hour?

**FOLLOW
ALONG:
bit.ly/dtclaps**

**Roberto Arteaga
@irobarte**

Photo by Patrick Perkins



Hello!



THANK YOU
FOR BEING
HERE!!!

I am Roberto Arteaga (he/him)

Pacific Lutheran University

@irobarte

#claps2018 #dtclaps



**INNOVATION
COMES AND
GOES**

Photo by Skye Studios



WHY DO “NEW THINGS” OR TRENDS FAIL?



Design thinking is a process for
creative problem solving.

-- Coe Leta Stafford, Managing Director IDEO U



Design thinking

From Wikipedia, the free encyclopedia

 The **neutrality of this article is disputed**. Relevant discussion may be found on the [talk page](#). Please do not remove this message until [conditions to do so are met](#). *(October 2018)* (*[Learn how and when to remove this template message](#)*)

Design thinking refers to the cognitive, strategic and practical processes by which design concepts (proposals for new products, buildings, machines, etc.) are developed by designers and/or design teams.^{[1][2]}

Design thinking is also associated with prescriptions for the innovation of products and services within business and social contexts.^{[3][4]} Some of these prescriptions have been criticized for oversimplifying the design process and trivializing the role of technical knowledge and skills.^{[5][6]}



**DRIVEN BY
CURIOSITY**

Photo by Bing Han



**I DUG
DEEPER**

Photo by takahiro taguchi



Laggard?

Lee Vinsel

[Follow](#)

I do technology studies, co-organize @The_Maintainers, and profess
Society at Virginia Tech.

Dec 6, 2017 · 36 min read

He changed
the title for
The
Chronicle

Design Thinking is Kind of Like Syphilis— It's Contagious and Rots Your Brains



The greatest and **most savage critic** of Design Thinking has emerged from the heart of the Design Thinking world itself. His name is **Bill Burnett**, and he is a **comedic genius**.

--Vinsel, 2017



**DT IS
INTERESTED
IN
SOLUTIONS**

Photo by rawpixel

A photograph showing the lower legs and feet of a person standing on a paved surface. The person is wearing blue jeans and brown shoes. A white arrow is painted on the pavement, pointing downwards from the person's feet. The background is a textured, greyish-brown pavement. In the top left corner, there are several overlapping circles in yellow, orange, and teal. A yellow sticky note is placed on the left side of the image, partially overlapping the pavement.

**BEFORE
THAT, A
STORY FROM
THE PAST ...**

Photo by Smart



Example: What is $\frac{d}{dx}x^3$?

We know $f(x) = x^3$, and can calculate $f(x+\Delta x)$:

Start with: $f(x+\Delta x) = (x+\Delta x)^3$

Expand $(x + \Delta x)^3$: $f(x+\Delta x) = x^3 + 3x^2 \Delta x + 3x (\Delta x)^2 + (\Delta x)^3$

The slope formula: $\frac{f(x+\Delta x) - f(x)}{\Delta x}$

Put in $f(x+\Delta x)$ and $f(x)$: $\frac{x^3 + 3x^2 \Delta x + 3x (\Delta x)^2 + (\Delta x)^3 - x^3}{\Delta x}$

Simplify (x^3 and $-x^3$ cancel): $\frac{3x^2 \Delta x + 3x (\Delta x)^2 + (\Delta x)^3}{\Delta x}$

Simplify more (divide through by Δx): $= 3x^2 + 3x \Delta x + (\Delta x)^2$

Then **as Δx heads towards 0** we get: $= 3x^2$

Power Rule

Example: What is $\frac{d}{dx} x^3$?

The question is asking "what is the derivative of x^3 ?"

We can use the [Power Rule](#) , where $n=3$:

$$\frac{d}{dx} x^n = nx^{n-1}$$

$$\frac{d}{dx} x^3 = 3x^{3-1} = \mathbf{3x^2}$$

(In other words the derivative of x^3 is $3x^2$)

#SCORPIOSEASON

So it is simply this:

$$x^3 \rightarrow 3x^2$$

"multiply by power
then reduce power by 1"

Image from Math is Fun

Design Thinking: A 5 Stage Process

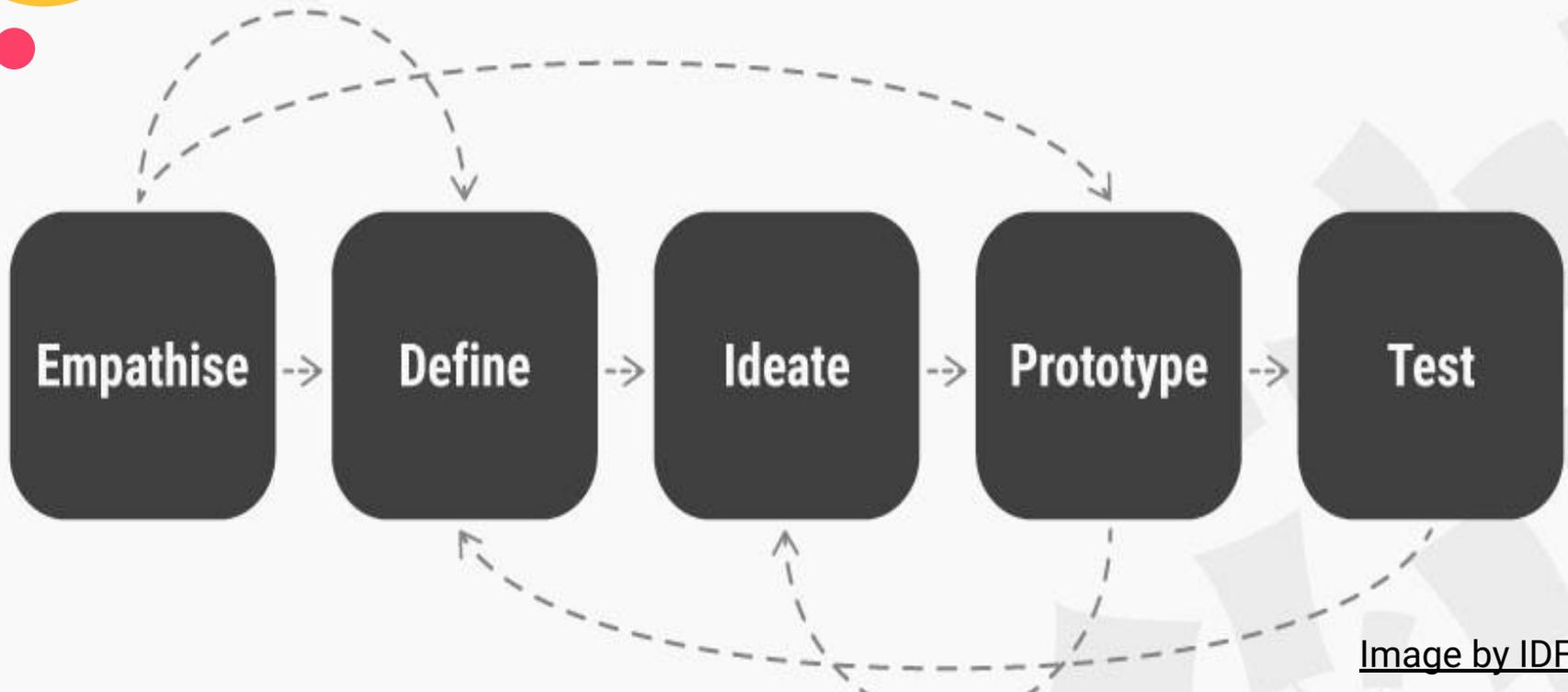
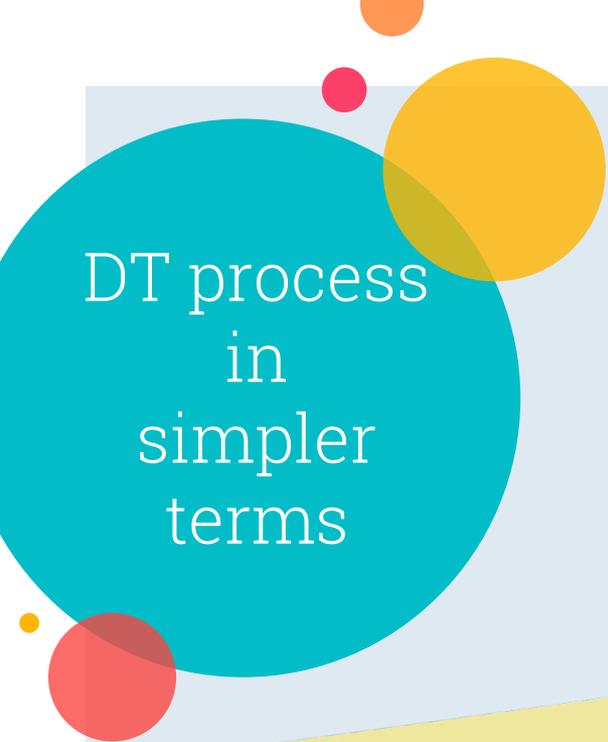


Image by IDF



DT process
in
simpler
terms



**Adapted from
Vinsel (2017)**

Understand audience

Come up with a plan

Implement the plan

Evaluate the plan

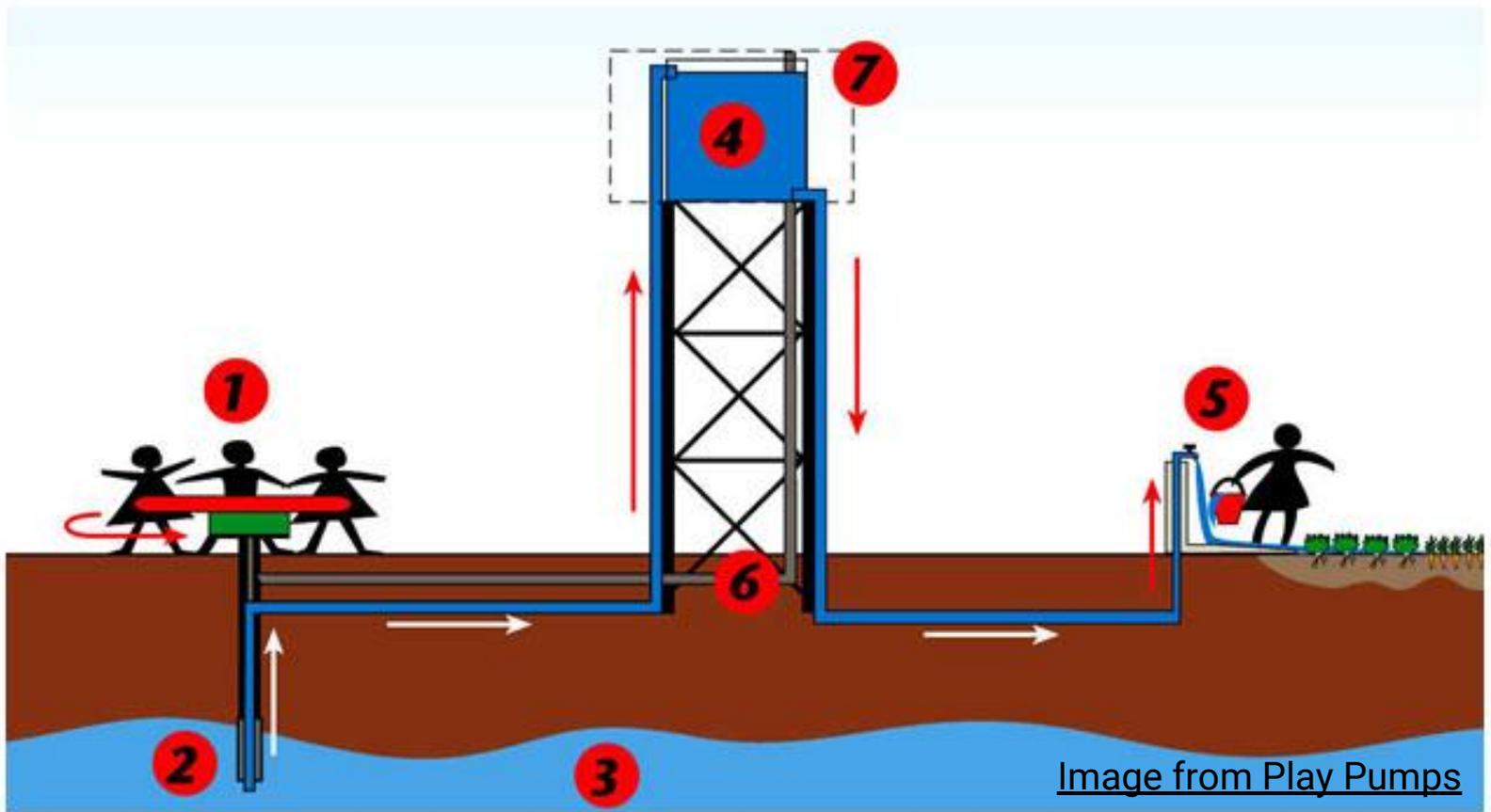


Image from Play Pumps

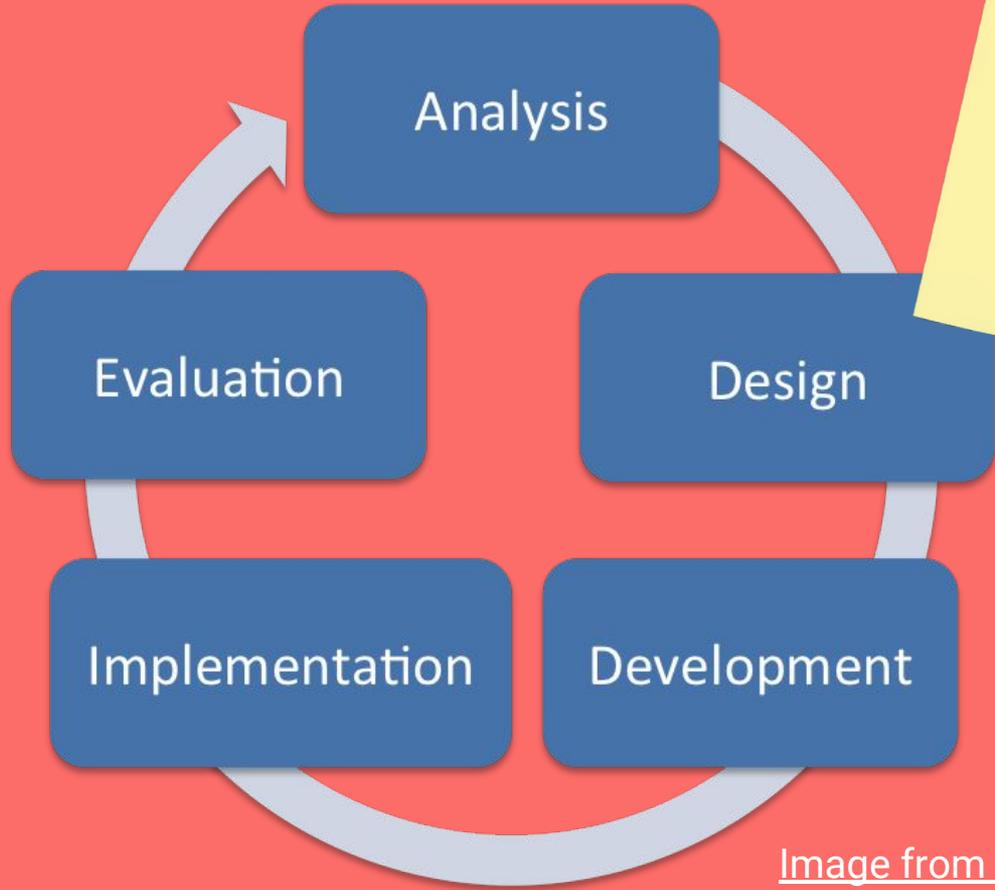


Image from Play Pumps



**DT IS IN
DISGUISE**

Photo by Braydon Anderson



**ADDIE
MODEL**



Image from Wikimedia Commons



Design thinking is the opposite of inclusive design

Fast Company - Sep 26, 2018

In other words, **design thinking**, by giving the **designer** total authority, squashes more inclusive design practices. Even in the **design thinking** ...

"Why are designers whining about design thinking?"

Dezeen - May 24, 2016

Opinion: **Design thinking** is the management phrase that makes real **design** shudder. Can **designers** let go and accept it as a form of flattery, ...

How Design Thinking Became a Buzzword at School

The Atlantic - Jan 4, 2017

Confusion around the precise definition of **design thinking** is ... Final **thinking** requires **designers** to generate ideas—lots of ...

It's Time To Bring Design Thinking Down From On High

Forbes - Aug 15, 2013

In a now-classic TED Talk on **design thinking**, Tim Brown, president and CEO of a construct of a professional “priesthood,” a society of **designers** who, ... Too big for healthcare leaders had to be in crisis before they put people ...

10 design thinking myths debunked

The Enterprisers Project - Nov 5, 2018

Design thinking continues to gain popularity with IT leaders seeking to ... make it easy for non-**designers** to use **design thinking**, says Joshi.

Buzzwords, big talk, and breakthroughs: Real talk about design thinking

Rapid Growth - Mar 14, 2018

... Adam Weiler, who explores why **design thinking** isn't just for **designers** after all. ... understand **design thinking** (and the stuff that's become ...

Why the hot concept of design thinking isn't really about the thinking at ...

Financial Post - Jun 29, 2017

Design thinking is a misnomer, albeit a popular one, because there's nothing about **design thinking** that **designers** hold particular ownership ...

John Spencer: “There's no bullshit like design bullshit”

Design Week - Sep 14, 2018

When did **designers** first come up with the idea that bullshit is good? Why do we think it makes us sound grown-up and clever and important?

Why 'Design Thinking' is becoming a game changer for many ...

CIO - Apr 12, 2016

Even though, the term '**Design Thinking**' has been coined back in the 90s, ... Instead of taking business requirements as marching orders, **designers** were ... what they want may lead a project going in a **wrong** direction... facts ...



“The solution to connecting design thinking principles to practical outcomes is astonishingly simple. Unfortunately, it involves talking to people and most product people find that hard.” -- [Banfield, 2017](#)

“Disagreements, lengthy disputes, and difficult compromises are not an option in design thinking, as acknowledging their existence would necessitate addressing their underlying structures.” -- [Seitz, 2018](#)

“Miller calls the Empathize Mode “ethnography,” which is uncharitable to cultural anthropologists who spend their entire lives learning how to observe other people.” -- [Vinsel, 2018](#)



“Design thinking teaches corporate workers to tell stories about the lives of potential customers and imagine different futures for them.” -- [Irani, 2018](#)

“Business bullshit can and should be challenged. This is a task each of us can take up by refusing to use empty management-speak. We can stop ourselves from being one more conduit in its circulation. Instead of just rolling our eyes and checking our emails, we should demand something more meaningful.” -- [Spicer, 2017](#)

“As real designers, we really don’t use these terms to define our work. We use really, really hard and you know tangible words to describe and to critique our work. None of these words are real criticism of anything. They are buzzwords to sound like corporate jargon” -- [Jen, 2017](#)





ACTUALLY...

**DT IN
LIBRARIES**

ROBERT A L MORTVEDT LIBRARY



Where have you seen DT
show up in libraries?

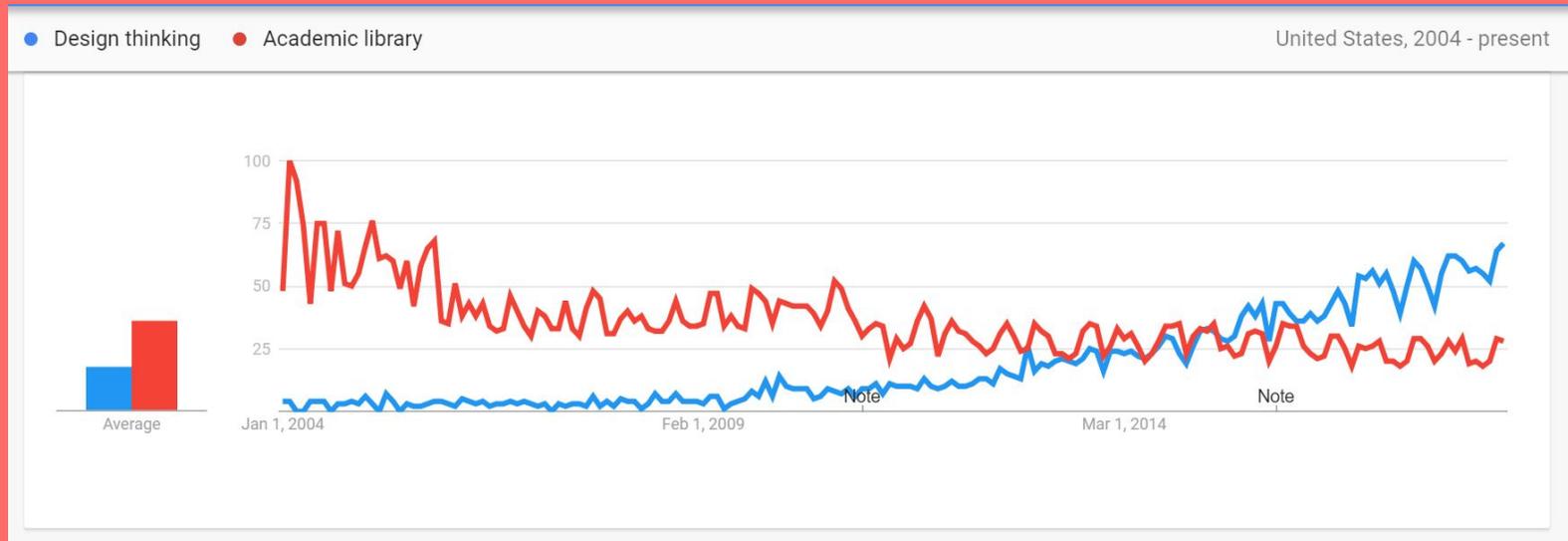
What were the issues trying
to be solved?



[Image from DT for Libraries](#)



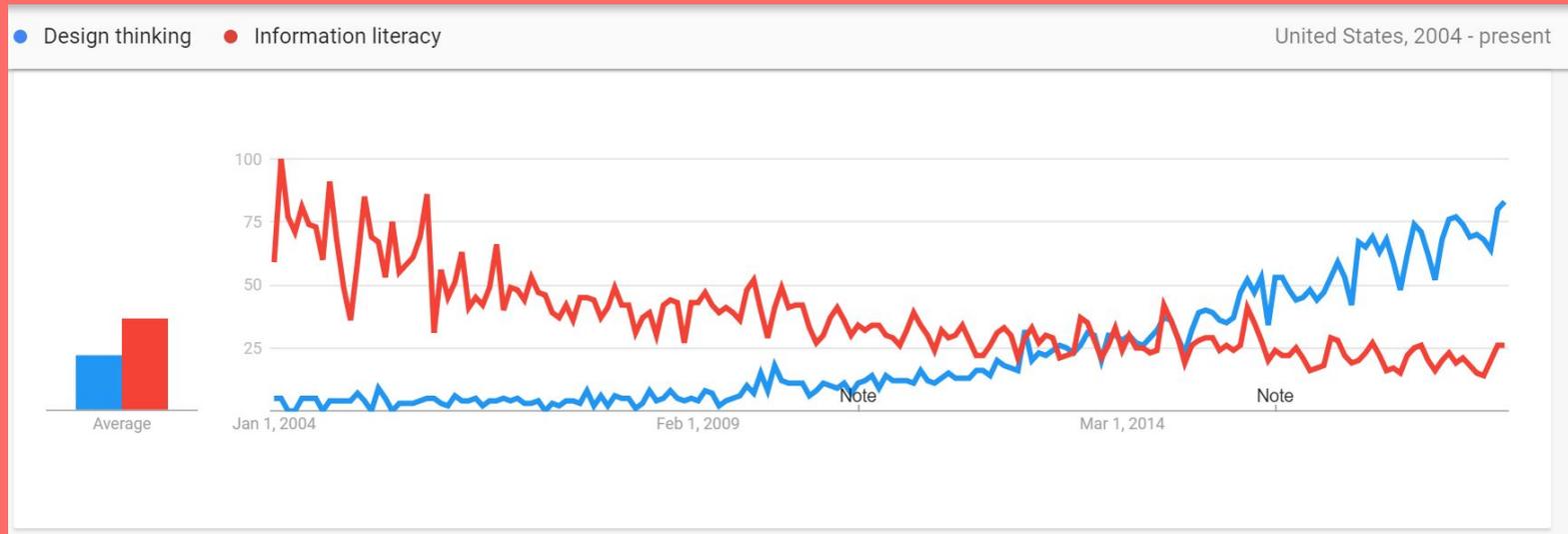
Google searches for “design thinking” and “academic library”



[Image from Google Trends](#)



Google searches for “design thinking” and “information literacy”

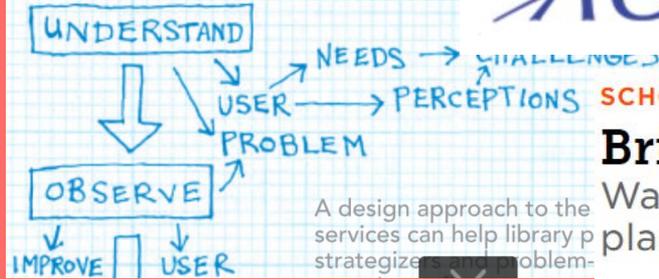


[Image from Google Trends](#)

Design



Keeping up with...
DESIGN THINKING



SCHOOL LIBRARIES

Bringing Design Thinking to the School Library

Want to revamp your library? Design thinking may be just the planning tool you need.

INFO 287-11

SEMINAR IN INFORMATION SCIENCE

TOPIC: DESIGN THINKING [2 UNITS]

FALL 2017 SYLLABUS

Signage by Design: A Design-Thinking Approach to Library User Experience

[Home](#) > [Vol 77, No 6 \(2016\)](#) > [Meier](#)

**What MAKES A Library?,
Issue No. 1 – Design Thinking**

Turning the revolution into an evolution: The case for design thinking and rapid prototyping in libraries



**DT IS
ALREADY IN
LIBRARIES**

Photo by [brittany gaiser](#)



Photo by Oscar Sutton



Critical Information Literacy is in a sense an expanded version of IL that places the **learner at the center** in a more empowered role and focuses on the sociopolitical, economic, and cultural aspects of all types and stages of information and the research process. It is very concerned with the **power relationships** that impact information production and dissemination and tries to move IL **beyond the purely mechanical and technical**. It pulls from critical theories, including critical pedagogy, critical literacy, and others.

-- Downey, 173, 2016

A detailed photograph of a wooden tray filled with a vast collection of vintage type letters. The letters are made of various materials, including dark wood and metal, and feature a wide range of fonts and styles, from simple sans-serif to highly decorative, ornate, and calligraphic designs. Some letters are plain, while others have intricate carvings or patterns. The tray is organized into rows and columns, with some letters standing upright and others lying flat. A central wooden divider separates the letters into two main sections. Several small white labels with handwritten text are attached to the tray, including one that reads "LARGE WOOD LETTERS 1870-1940".

**CIL ADDS
COMPLEXITY**

Photo by Bruno Martins



**STUDENTS
HAVE
DIVERSE
NEEDS**

**#critlib CARES
ABOUT
LEARNER
AGENCY**

Photo by John Froschauer



**IMPORTANCE
OF
POSITIONALITY**

Photo by Chelsea London Phillips



Teaching and learning have always been (and will always be) **deeply subjective.**

**WE MUST
BRING OUR
WHOLE SELVES**

-- Morris & Stommel, 33, 2018



**I WILL GO IN
ANOTHER
DIRECTION**

Photo by Jungwoo Hong



**OUR
SITUATIONS
ARE
DIFFERENT**



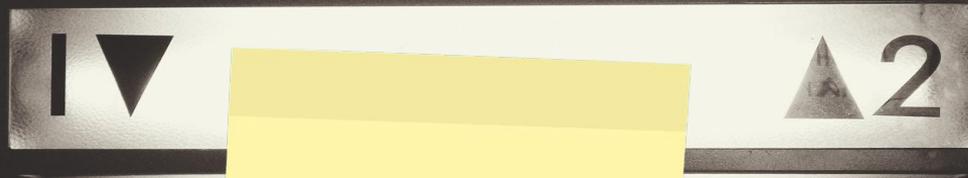
Photo by Daniele Levis Pelusi

... IN CASE YOU
DIDN'T FINISH
READING



Critical Information Literacy is in a sense an expanded version of IL that places the **learner at the center** in a more empowered role and focuses on the sociopolitical, economic, and cultural aspects of all types and stages of information and the research process. It is very concerned with the **power relationships** that impact information production and dissemination and tries to move IL **beyond the purely mechanical and technical**. It pulls from critical theories, including critical pedagogy, critical literacy, and others.

-- Downey, 173, 2016



**ELEVATE THE
WORK OF
OTHERS**

Photo by Franck V.

A black and white photograph of a young boy with short hair, shown in profile from the chest up. He has his mouth wide open as if shouting or singing. He is positioned in front of a professional studio microphone on a stand, which is equipped with a pop filter. The background is a plain, light-colored wall.

LEARNER EMPOWERMENT

Photo by Jason Rosewell



**CID WANTS TO
EQUALIZE
POWER**

**.... BUT THERE'S
A LOT TO BE
DONE YET**

EVERYONE

Photo by Søren Astrup Jørgensen



**TRANSFORM
CRITICAL
PEDAGOGIES**

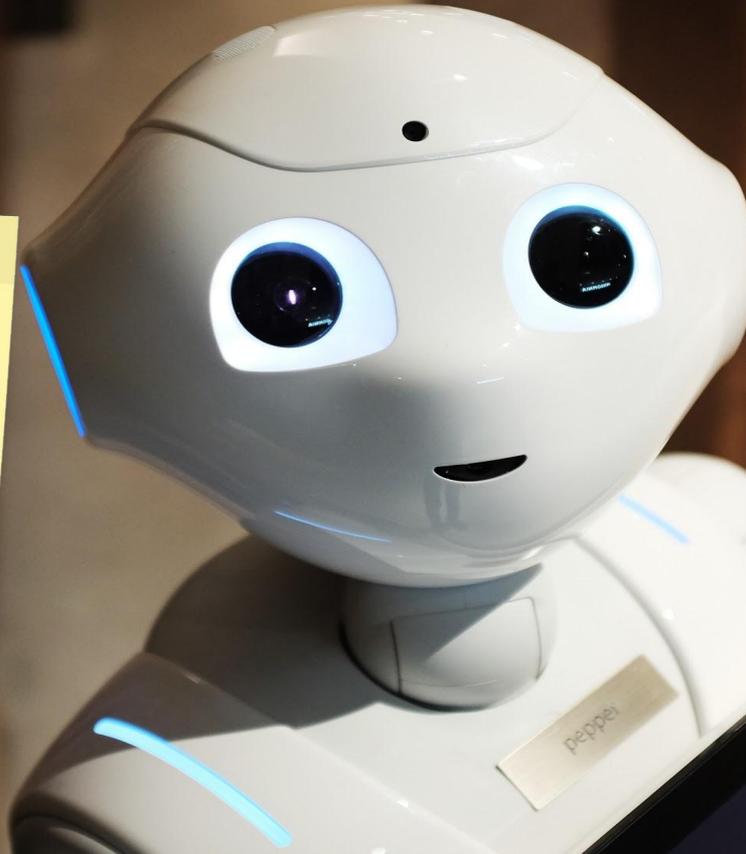


Photo by Alex Knight



Cooperative

LEARNER-CENTERED PEDAGOGY

Photo by Danielle MacInnes



Harvard
Business
Review

ENTREPRENEURSHIP

Design Thinking Is Fundamentally Conservative and Preserves the Status Quo

by [Natasha Iskander](#)

SEPTEMBER 05, 2018



**THE
BIG
U**

Image from Rebuild by Design



**LEARNERS
SHOULD DRIVE
WHAT WE DO**

Photo by John Froschauer



REFLECTIVE PRACTICE

Photo by Bekah Russom



Non-inquiry **blinds** us to the environment
in which we are actually teaching.

-- Morris & Stommel, 133, 2018



**WHAT ARE THE
ELEMENTS OF
YOUR
PRACTICE?**

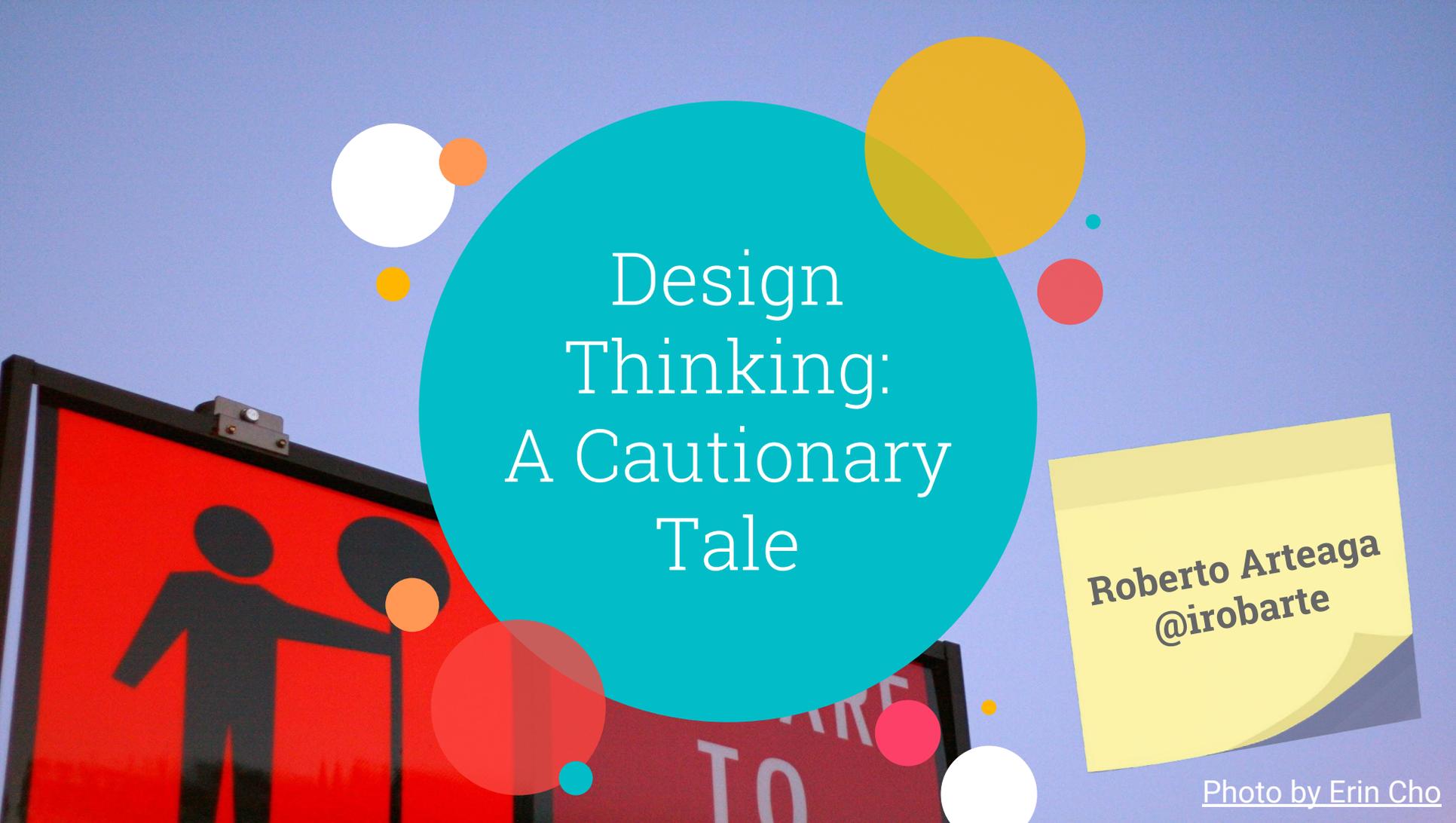
Photo by Chris Lawton



**USE YOUR
PEDAGOGY AS
ADVOCACY**



Photo by Daria Nepriakhina



Design Thinking: A Cautionary Tale

Roberto Arteaga
@irobarte

Photo by Erin Cho



CATALYST

feminism, theory, technoscience

CRITICAL PERSPECTIVES

“Design Thinking”: Defending Silicon Valley at the Apex of
Global Labor Hierarchies

Lilly Irani
UC San Diego



Economic nationalism depends on
hierarchies of race and economic practice
to mobilize people in the name of
whiteness and economy.

OMG!!!

-- Irani, 14, 2018



**WHAT'S THE
STATUS QUO IN
LIBRARIES?**

Photo by Sylvia Yang



2042 is the year all goes to hell.

-- Jeff Chang @ #RPNC2018



Minorities in U.S. set to become majority by 2042

By SAM ROBERTS AUG. 14, 2008

Ethnic and racial minorities will comprise a majority of the population of the United States in a little more than a generation, according to new Census Bureau projections, a transformation that is occurring faster than anticipated just a few years ago.

The census calculates that by 2042, Americans who identify themselves as Hispanic, black, Asian, American Indian, Native Hawaiian and Pacific Islander will together outnumber non-Hispanic whites. Four years ago, officials had projected the shift would come in 2050.

Source: New York Times



**OUR STUDENTS
DON'T HAVE
THAT LONG**

Photo by Aron



**CHANGE IS
HARD TO
IMPLEMENT**

**WE ARE
CONSTANTLY
PROVING OUR
VALUE**

Photo by Fleur Treurniet



Together, We Create!

Photo by "My Life Through A Lens"



Thanks!

Roberto Arteaga

@irobarte

rarteaga@plu.edu



**WHAT
QUESTIONS DO
YOU HAVE?**



Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs from [Unsplash](#)



What I Cited and/or Recommend Reading

- **ACRL. (2018). Keeping Up With... Design Thinking.**
- **Bogost, Ian. (2016). Who Needs Convertible Slippers?**
- **Downey, Annie. (2016). Critical information literacy: Foundations, inspiration, and ideas.**
- **Gardner, Lee. (2017). Can Design Thinking Redesign Higher Ed?**
- **IDEO. (2015). Design Thinking for Libraries Toolkit.**
- **Irani, Lilly. (2018). "Design Thinking": Defending Silicon Valley at the Apex of Global Labor Hierarchies. Catalyst: Feminism, Theory, Technoscience, 4(1).**
- **Iskander, Natasha. (2018). Design Thinking Is Fundamentally Conservative and Preserves the Status Quo. Harvard Business Review.**



What I Cited and/or Recommend Reading

- **Jen, Natasha. (2017). Design Thinking Is Bullsh*t.**
- **Morris, Sean Michael. (2018). Instructional Designers Are Teachers.**
- **Morris, Sean Michel, & Stommel, Jesse. (2018). An Urgency of Teachers.**
- **Seitz, Tim. (2018). The “Design Thinking” Delusion.**
- **Vinsel, Lee. (2017). Design Thinking is Kind of Like Syphilis – It’s Contagious and Rots Your Brains.**
- **Vinsel, Lee. (2018). Design Thinking Is a Boondoggle.**
- **Vinsel, Lee. (2018). There’s So Little There There: A Response to the Stanford d.school’s Defense of Design Thinking**



**REJECTED
SLIDES**



**KNOW
YOURSELF AND
YOUR
ENVIRONMENT**

Photo by Annie Spratt



**IN CASE I
WASN'T CLEAR
ENOUGH**

Photo by Marvin Esteve



Photo by Jamie Templeton