

# Infographics

## E-VOLVING INSTRUCTION

### FOR VISUAL LITERACY

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# uofginfographics.wordpress.com

## Active Learning

- Techniques used in our workshop

## Readings

- Standards
- Further Readings

## Tools + Resources

- Infographics Tools (visual.ly, piktochart and more)
- Infographics / Visualization websites (see what others are doing)
- Teaching with Infographics (Education Resources)
- Tutorials / How To's / Downloads

## Contact



# Agenda

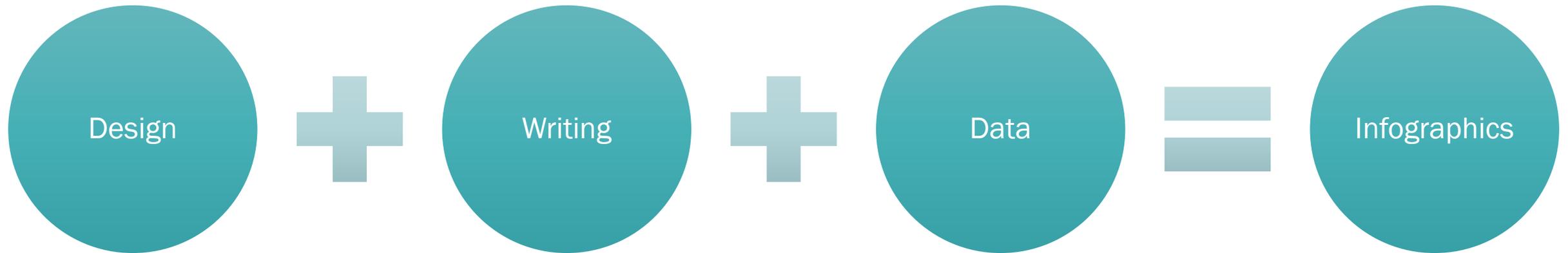
**ACRL Visual Literacy Standards**

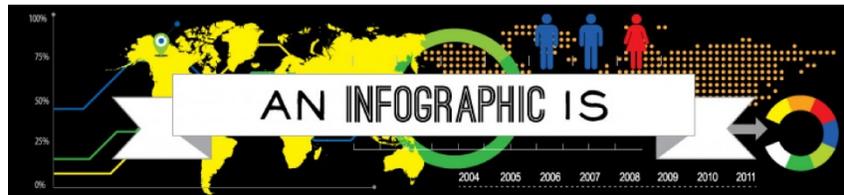
**Infographics Workshop @ the University of Guelph**

**Next Steps**

**Do you have an infographics workshop at your library?**

# What is an infographic?



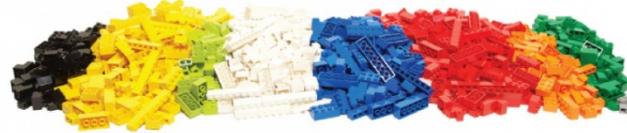


# AN INFOGRAPHIC IS

DATA



SORTED



ARRANGED



PRESENTED  
VISUALLY



PHOTOGRAPHY BY BRANDON ROSSEN PHOTOGRAPHY WWW.BRANDONROSSEN.COM @BRANDONROSSEN



HOT BUTTER STUDIO © 2012 WWW.HOTBUTTERSTUDIO.COM @HOTBUTTERSTUDIO

Source: [visual.ly/what-infographic-2](http://visual.ly/what-infographic-2)

**CBRE Animated Infographics - Project Reel**  
from Peter Cobo

Q4 2013  
€ **1.7**  
billion

€ **17**  
billion  
invested  
**2013**

01:00

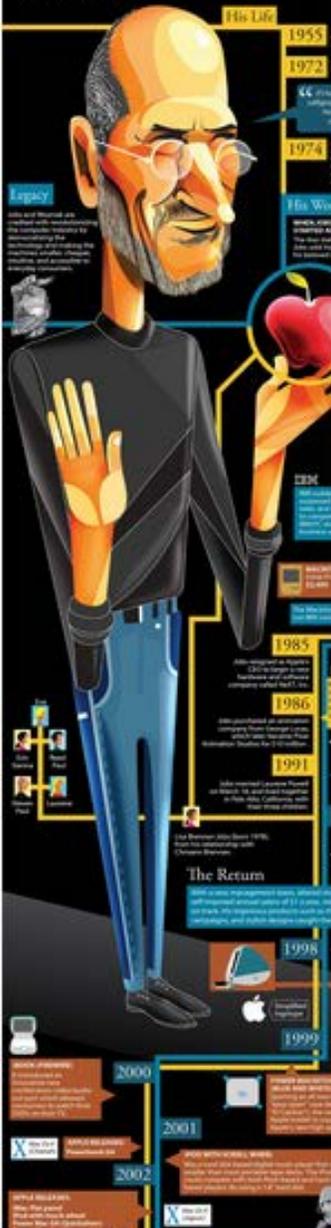
HD vimeo

**Animated**

Source: <http://vimeo.com/92595987>

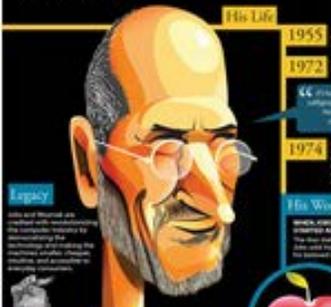
# Farewell To A Genius

A LOOK BACK ON THE LIFE AND TIMES OF STEVE JOBS, THE MAN WHO STRIVED TO MAKE A DENT IN THE UNIVERSE.



# Farewell To A Genius

A LOOK BACK ON THE LIFE AND TIMES OF STEVE JOBS, THE MAN WHO STRIVED TO MAKE A DENT IN THE UNIVERSE.



## His Life

**1955** Jobs was born in San Francisco and was adopted by the family of Paul and Clara Jobs of Mountain View, California.

**1972** Jobs enrolled at Reed College in Portland, Oregon.

“ If I had never dropped in on that single calligraphy course in college, the Mac would have never had multiple typefaces or proportionally spaced fonts. ”

**1974** Jobs returned to California and began attending meetings of the Homebrew Computer Club with Steve Wozniak. He took a job as a technician at Atari, with the primary intent of saving money for a spiritual retreat to India.

## His Work 1976

**WHEN JOBS WAS JUST 21, HE AND WOZNIAK STARTED APPLE COMPUTERS.**  
The duo started in the Jobs family garage, after Jobs sold his Volkswagen bus and Wozniak sold his beloved scientific calculator.

**\$774,000**  
Earned by their first model, the Apple I.

**1979**  
**\$139 Million**  
Apple II sales.

Created by Rob Janoff

**1983**  
Jobs looked to marketing expert John Sculley, CEO of Pepsi-Cola, to help fill the role of Apple's CEO.

**IBM**  
IBM suddenly surpassed Apple.

## Legacy

Jobs and Wozniak are credited with revolutionizing the computer industry by democratizing the technology and making the machines smaller, cheaper, intuitive, and accessible to everyday consumers.

## The Return

Jobs returned to Apple in 1976, and in 1980, he was named CEO of the company. He led the development of the Macintosh, the first all-in-one personal computer with a graphical user interface.

Jobs was diagnosed with pancreatic cancer in 1985 and was forced to leave Apple. He returned to the company in 1997 and led the development of the iMac, iPod, and iPhone.

Jobs died of pancreatic cancer on October 5, 2011, at the age of 52.

Jobs' death was a significant loss to the technology industry and the world.

Jobs' legacy lives on through the products and companies he founded.

Jobs' death was a significant loss to the technology industry and the world.

# Timeline

Source: <http://mashable.com/2011/10/11/life-and-times-of-steve-jobs/>

**2,000**

In America, the average person uses nearly 2,000 gallons of water per day. Every time you flush the toilet, wash your hands, drive your car, or take a bite of your lunch, you're using water.

**95%**

The biggest surprise may be that 95 percent of your water footprint isn't from a long shower or running your washing machine—it's from the food, energy, and products you use every day.

YOUR  
**DAILY DOSE**  
— OF —  
**WATER**

START

GOOD + Levis

GO WATER < LESS

## Interactive

# THE 39 STATS

## CHARTING HITCHCOCK'S OBSESSIONS

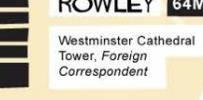
From his early silent films in the UK to his 'golden years' at Paramount, Alfred Hitchcock returned to the same motifs and themes time and time again. Here we analyse some of these trademark obsessions. Warning: there are spoilers throughout.

### 1 A DYING FALL

Like Wile E. Coyote, Hitchcock characters are always plunging to their doom from great heights. But who falls the furthest?



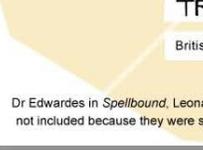
### 3 BLONDE/NON-BLONDE?



### 4 ONE BAD MOTHER

Character	Percentage
Blonde	54%
Non-Blonde	33%

### 5 50 WAYS TO KILL A CHARACTER



Dr Edwardes in *Spellbound*, Leonard in *North by Northwest*, Mrs Elster in *Vertigo* and Ramon in *The Man Who Knew Too Much (1934)* are not included because they were shot or dead before their fall. Others (like Eve in *North by Northwest*) dangle but don't fall and some (like Jeff in *Rear Window*) fall but don't die.

Long

If the world were a village of 100 people

## LITERACY



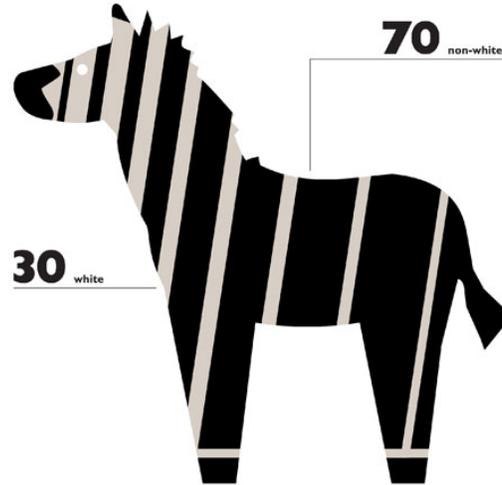
**86** can read

**14** can't read

or

If the world were a village of 100 people

## SKIN COLOUR

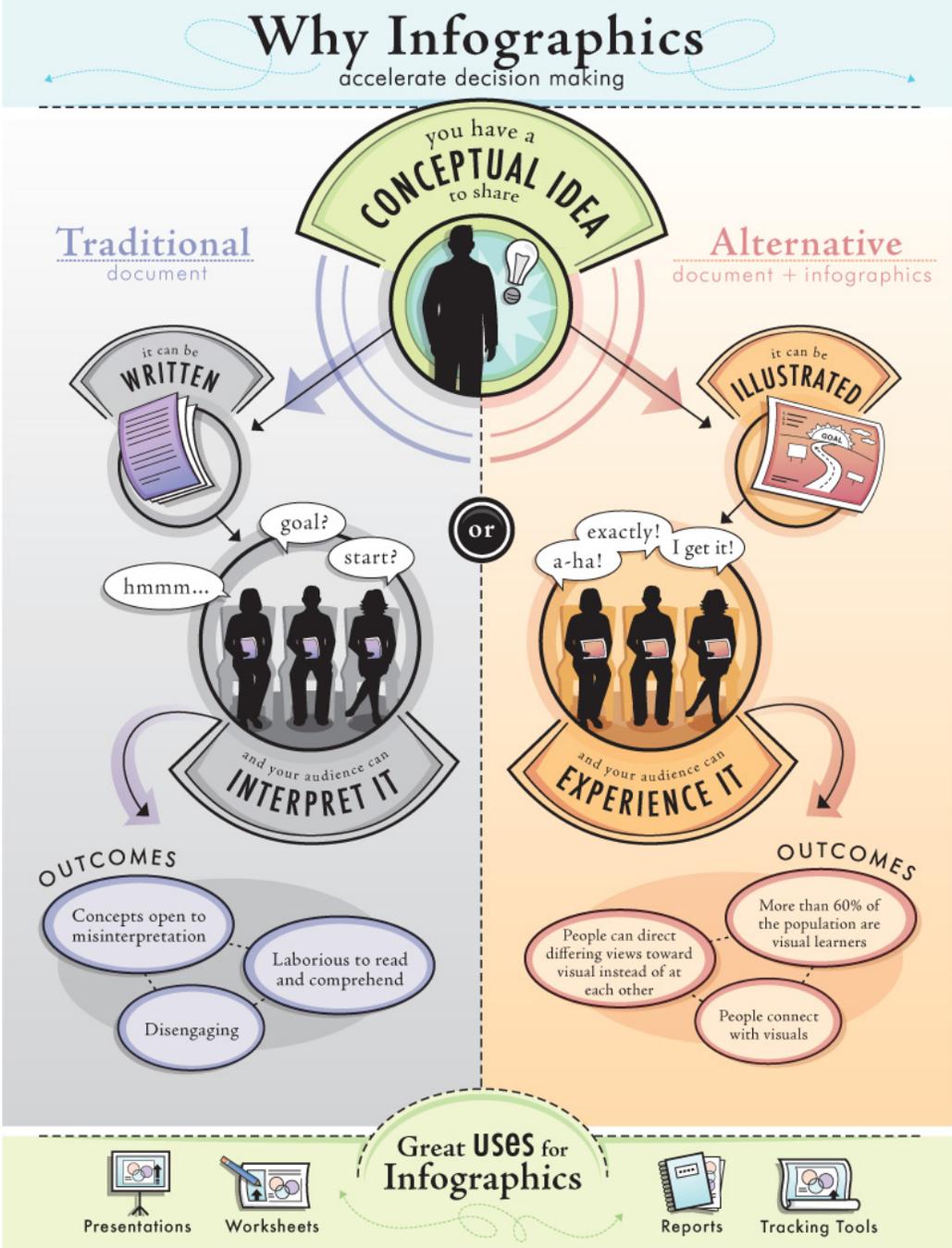


**70** non-white

**30** white

# Short

# Why should students care?



Source: [infographicsshowcase.com/](http://infographicsshowcase.com/)

# A LIBRARIAN'S WORTH

Forget about that image of librarians as mousy book worms. More and more of today's librarians are high-tech information sleuths, and clever interrogators, helping patrons plumb the oceans of information available in books and digital records.

What are librarians worth? We will take a look at the numbers and facts on librarians and the libraries they work in.



## WHAT ARE LIBRARIANS WORTH AROUND THE WORLD?

AVERAGE SALARIES FOR LIBRARIANS AND PEOPLE WORKING IN THE EDUCATION SECTOR

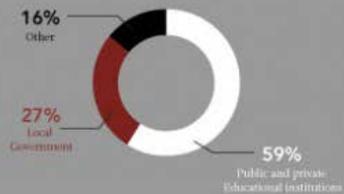


## EXPECTED WAGE BY AGE

AVERAGE HOURLY EARNINGS (\$/HOUR)



## EMPLOYMENT



# Why should libraries care?

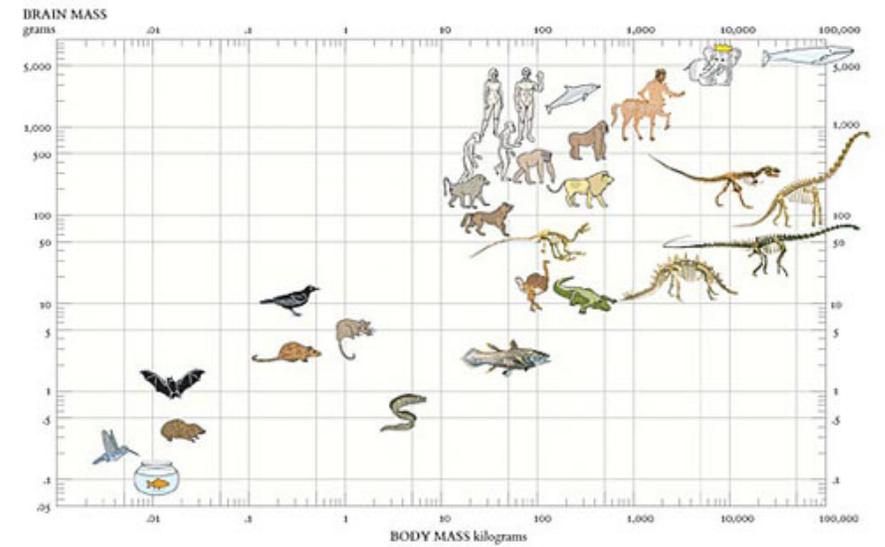
EDWARD R. TUFTÉ

## VISUAL EXPLANATIONS



IMAGES AND QUANTITIES, EVIDENCE AND NARRATIVE

# Tufte?



The screenshot shows the ACRL website header with the logo and tagline "Advancing learning Transforming scholarship". Navigation links include "ALA", "ALA Connect", "Contact ALA", "Give ALA", "Join ALA", and "Login". A search bar is present. Below the header, a breadcrumb trail reads "You are at: ALA.org » ACRL » Guidelines & Standards » ACRL Visual Literacy Competency Standards for Higher Education". A left sidebar menu lists various categories, with "Guidelines & Standards" highlighted. The main content area features the title "ACRL Visual Literacy Competency Standards for Higher Education", a date "Approved by the ACRL Board of Directors, October 2011", and sections for "Introduction" and "Visual Literacy Defined".

# Visual Literacy Standards

“Visual literacy is a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media.”

Evaluate Images  
and their sources.

Design and create  
meaningful  
images and visual  
media.

**We chose two.**

# Introduction to Infographics *at the University of Guelph*

## Development



Old  
Supplemental  
Program

New  
Self-Directed  
Program

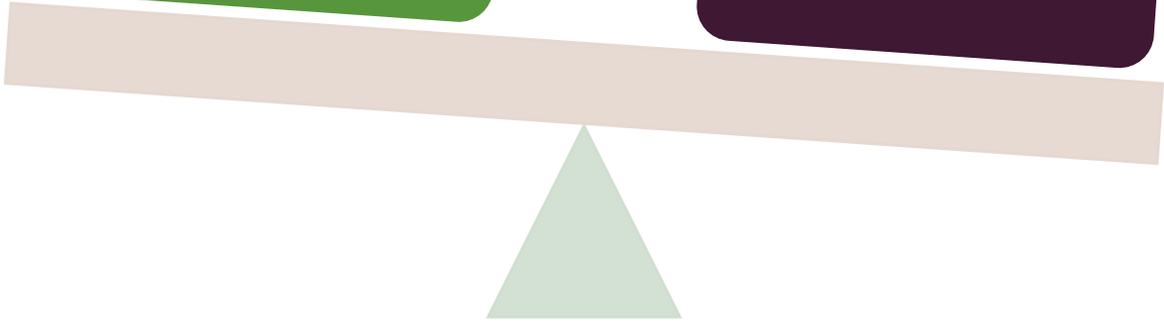
RefWorks

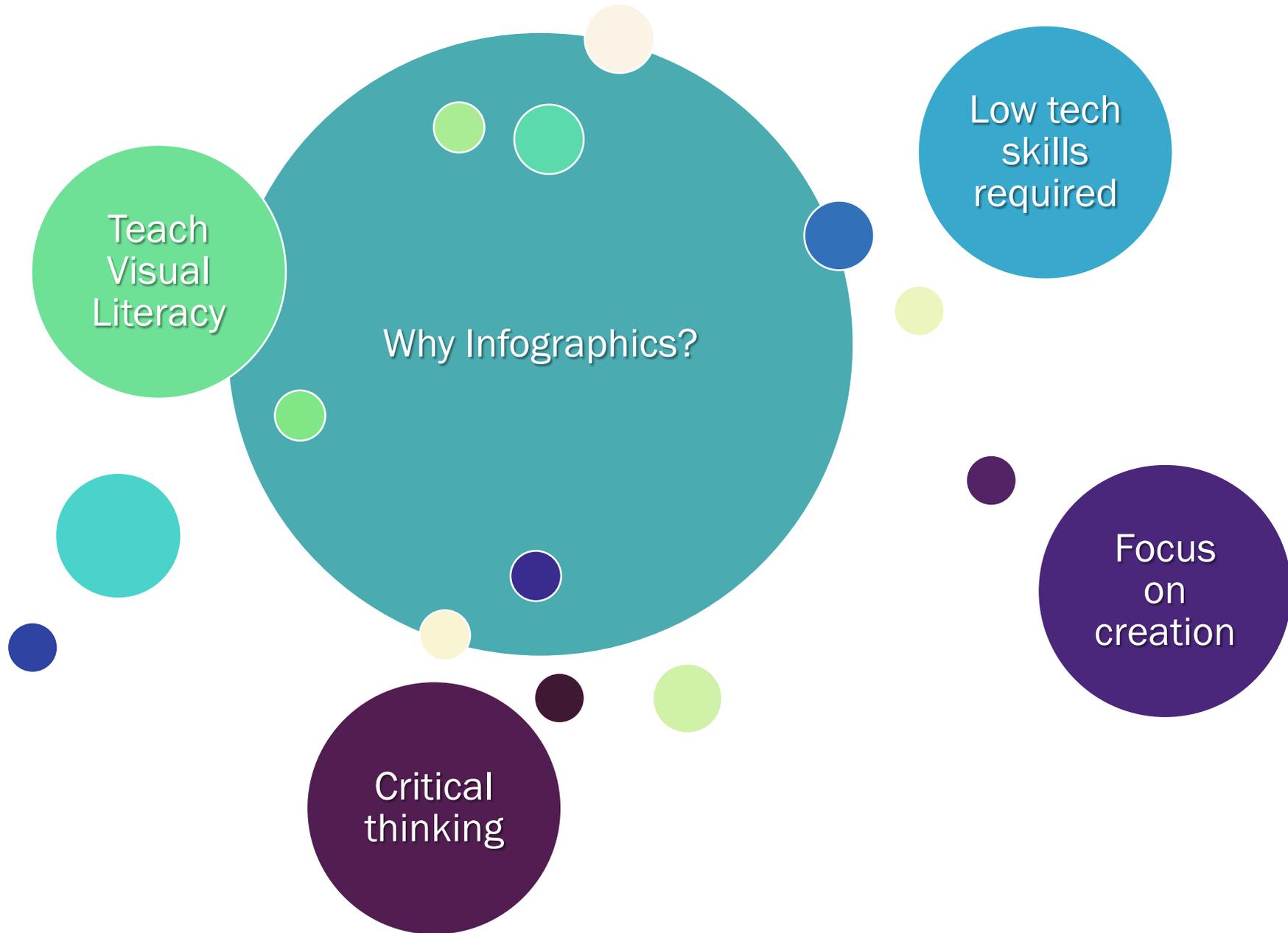
Research in 8  
1/2 Steps

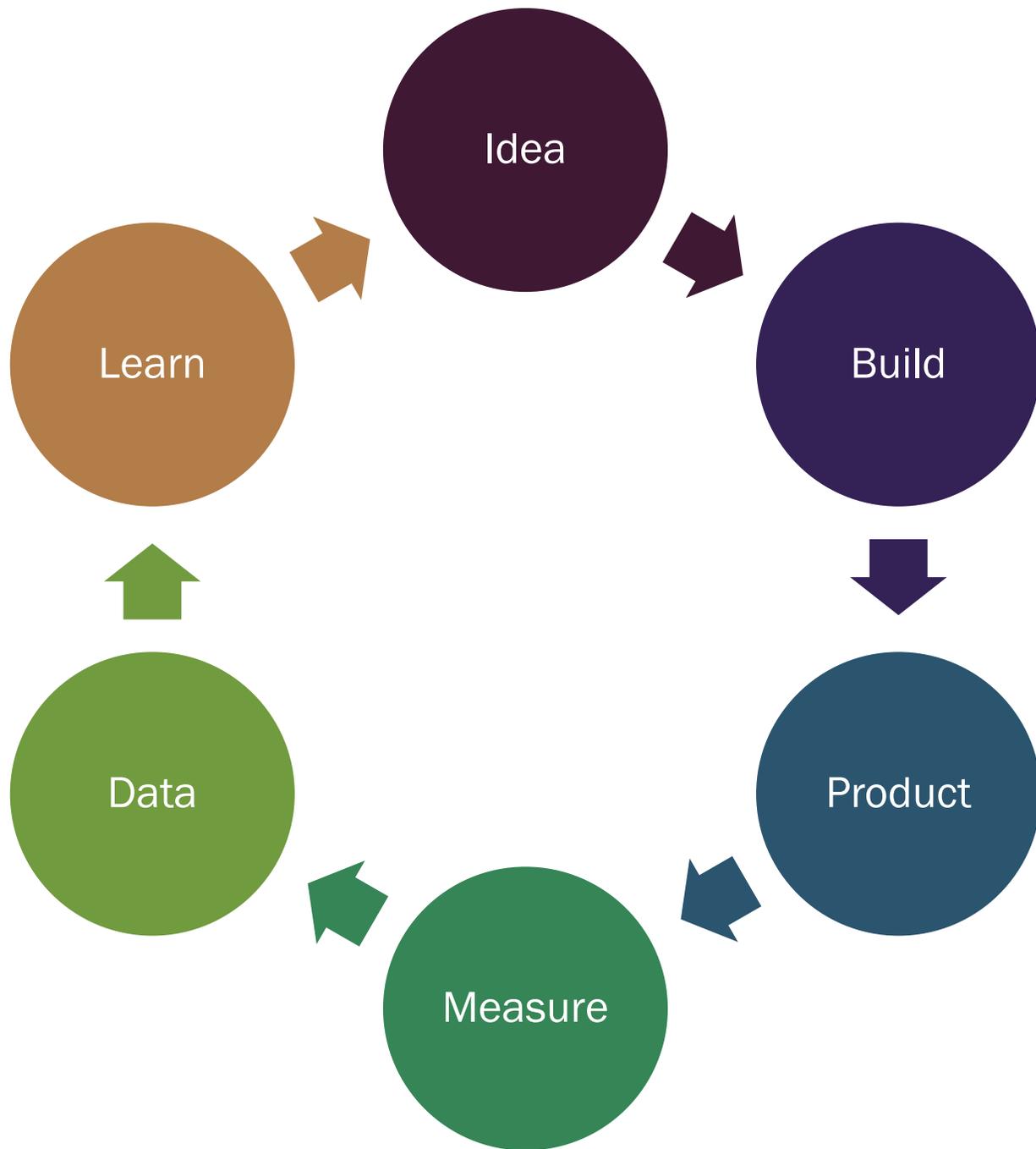
Introduction to  
Infographics

Information  
Literacy

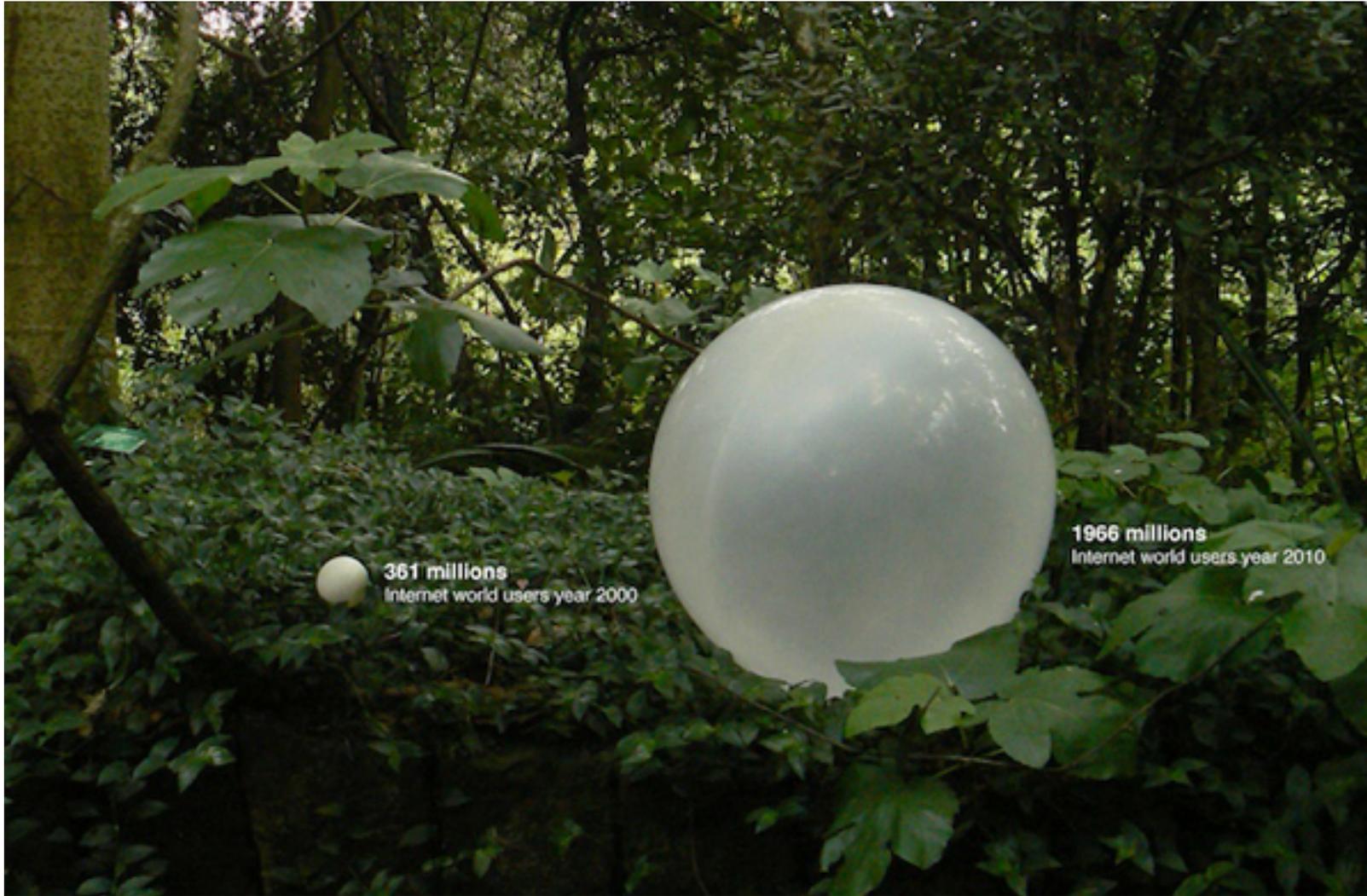
Multiliteracies







**Lean Startup Method**





Define what an infographic is

Identify why infographics are used

Identify and apply the criteria to judge an infographic

Create a basic picture infographic

**Learning Outcomes**

# Active Learning: Open Ended Question

- Students are eased into the workshop environment with a simple questions: “What the heck is an infographic?”
- Provides an opportunity to voice prior knowledge as well as creating an encouraging environment.



# **Evaluation Criteria**

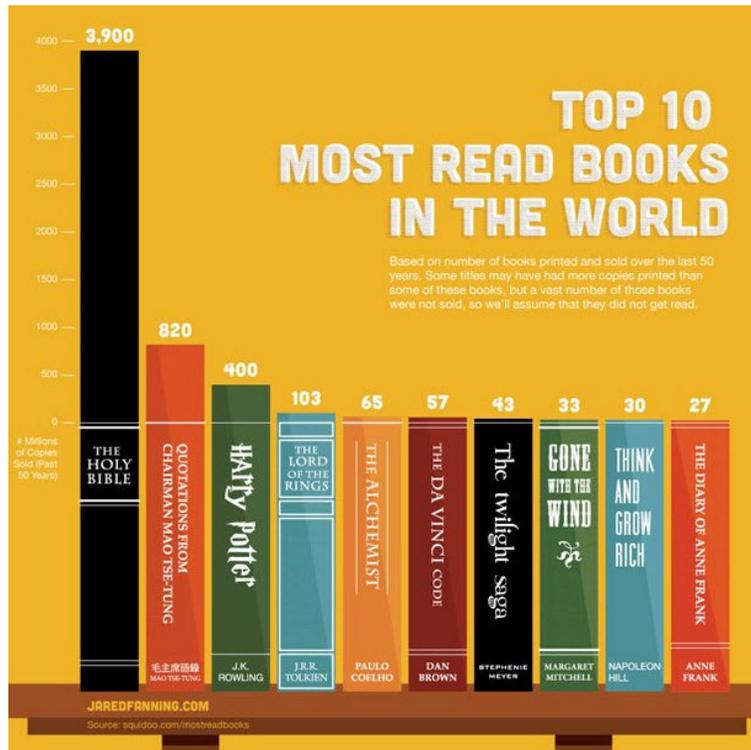
# DIE HARD WITH A VENGEANCE

STATS

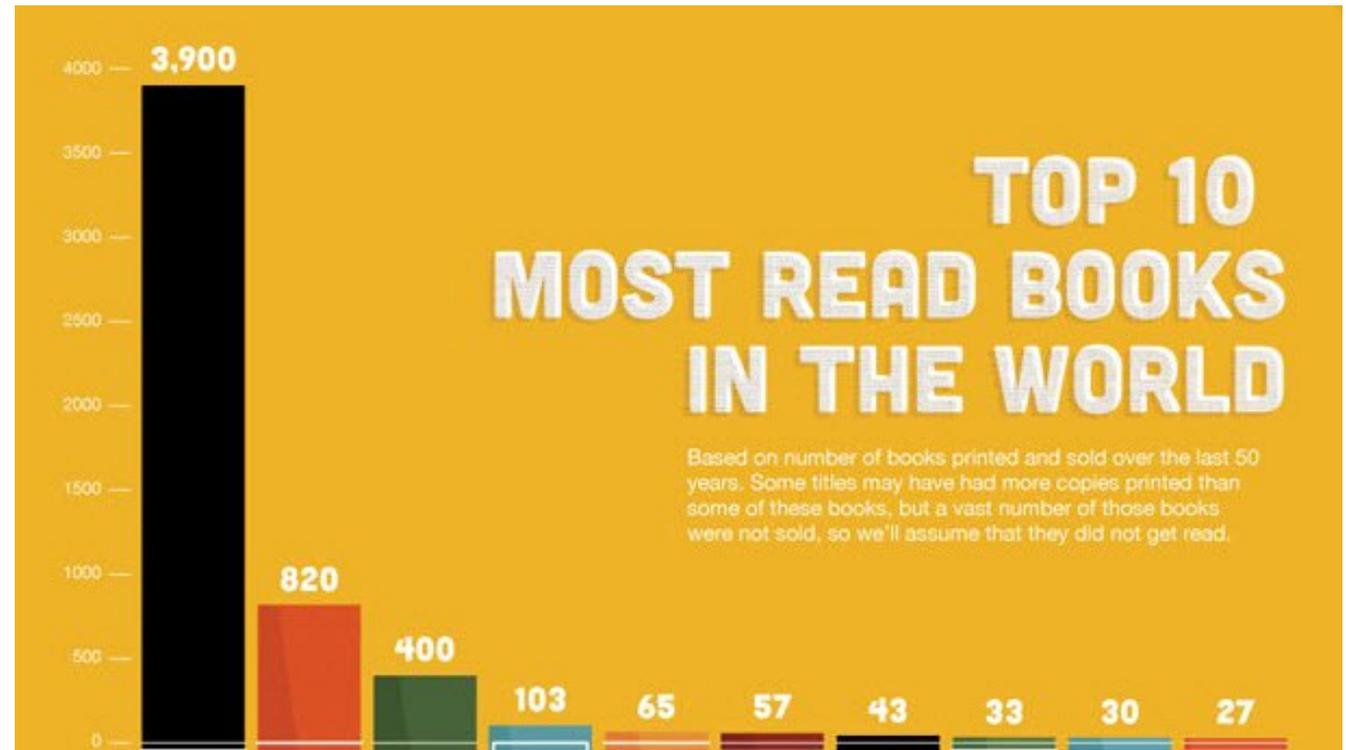
INITIAL RELEASE: MAY 19, 1995



Evaluation Criteria: Does it tell a story?



VS.



Evaluation Criteria: Does it use good/useful data/information?  
Is it an *infaux*graphic?

Source: <http://timoelliott.com/blog/2013/07/what-are-infauxgraphics.html>



### Thinking Critically About Data

3 weeks ago • 21 views

This short Library video will give you some tips for thinking critically about data. Not all data is created equal and you want to make sure that the data you include is credible a...

CC



### What is Data?

4 weeks ago • 38 views

This short Library video will introduce you to the basics of data. You'll learn what data is, why we use it and how it is collected. ...

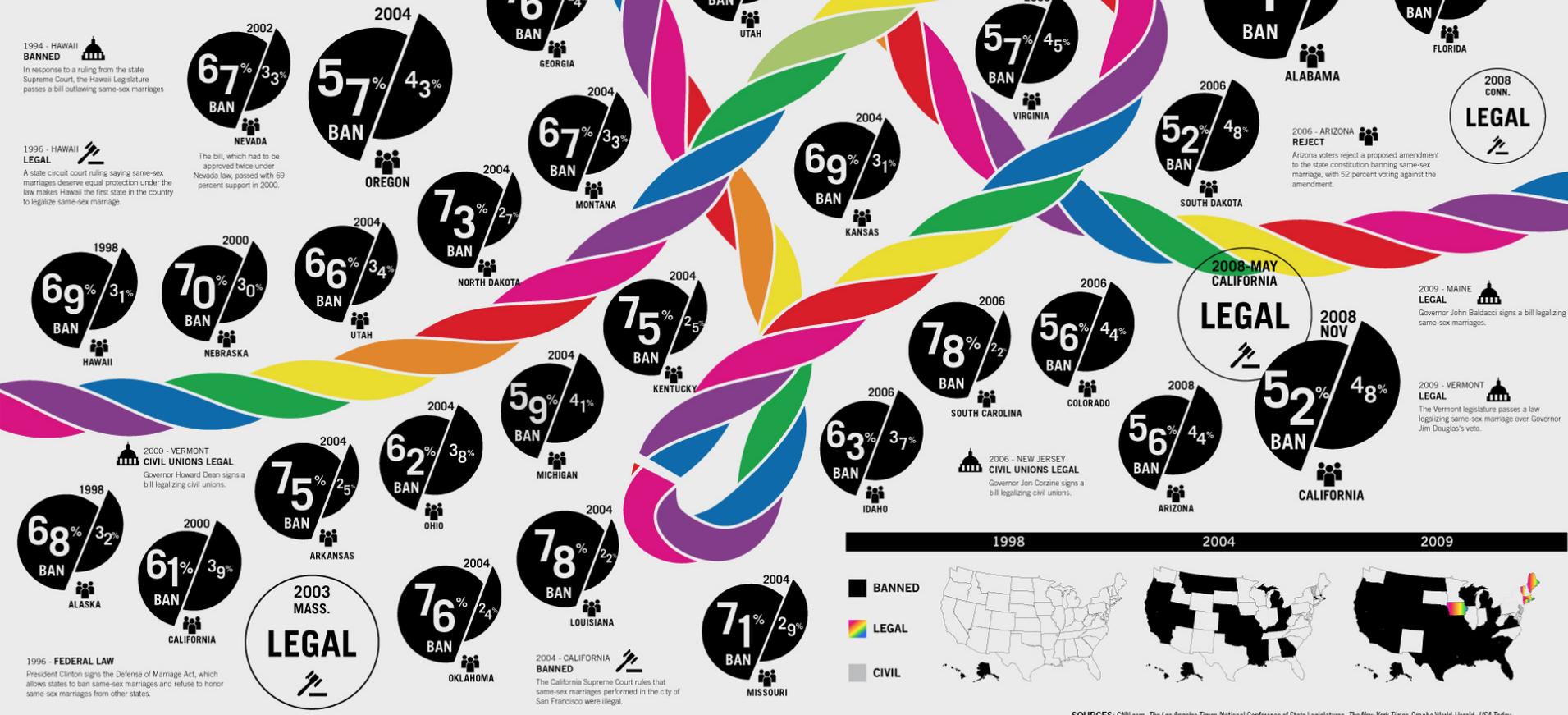
CC

**Evaluation Criteria: Does it use good/useful data/information?**

# KNOT TIED

The California Supreme Court will soon hand down its decision on whether or not Proposition 8 violates the state constitution. As it has deliberated, Iowa, Maine, and Vermont have all made same-sex marriage legal, while the rush to ban the practice by popular vote slowed in 2008. This timeline of the changes to state same-sex marriage laws shows where state laws were changed via legislatures, courts, or voters.

COURTS ELECTED OFFICIALS VOTERS



SOURCES: CNN.com, The Los Angeles Times, National Conference of State Legislatures, The New York Times, Omaha World-Herald, USA Today

## Evaluation Criteria: Does the Visual Style help/hinder?

Source: <http://danizablu.files.wordpress.com/2011/02/badinfo.jpg>

# **6 things people accomplish while listening to boring webinars**

1. Binge watch kittens on YouTube
2. Catch up on email
3. Update their LinkedIn profile
4. Bang the crud out of their keyboard
5. Christmas shopping on Amazon
6. Defriend anyone on Facebook still posting their Candy Crush scores



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boomm.com

**Evaluation Criteria: Should the content be in an infographic?  
All info / no graphic.**

Source: [http://37.media.tumblr.com/5edd1624bbc75ff91fbf83ae3f7795ed/tumblr\\_mvugjwidWy1t0rrapo1\\_1280.jpg](http://37.media.tumblr.com/5edd1624bbc75ff91fbf83ae3f7795ed/tumblr_mvugjwidWy1t0rrapo1_1280.jpg)

# Active Learning: Think-Pair-Share

- Students were given an infographic to evaluate. They had a moment to study the elements, and then paired with a student to discuss their views.
- The class rejoined as a larger group and held a discussion.
- It provided the students with an opportunity to think critically and apply new knowledge.



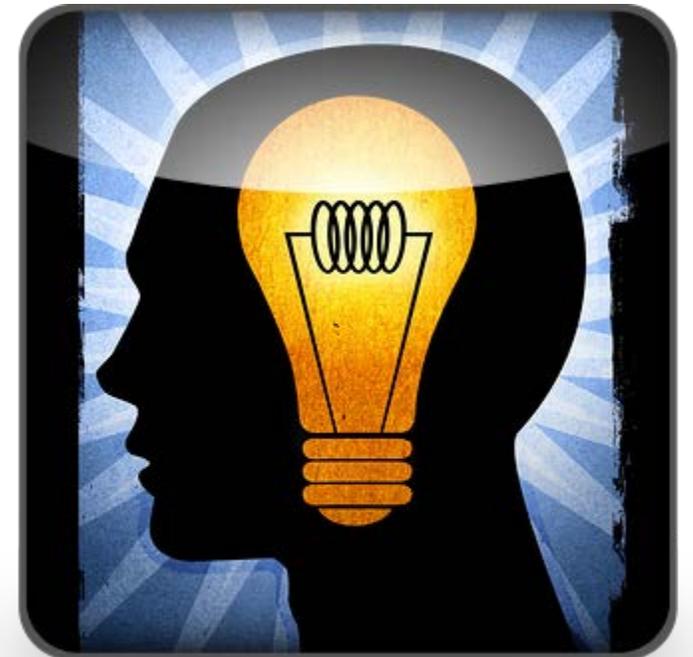
# Active Learning: Hands-On Activity

- By far the most challenging, students are paired and provided with a simple statistic and asked to represent it visually. They are challenged to think of ways to create a simple photographic infographic in a very short period of time.
- Once the photo is taken, they work together to edit the image in PowerPoint.
- A simple guide to using the design features of Power Point is provided.

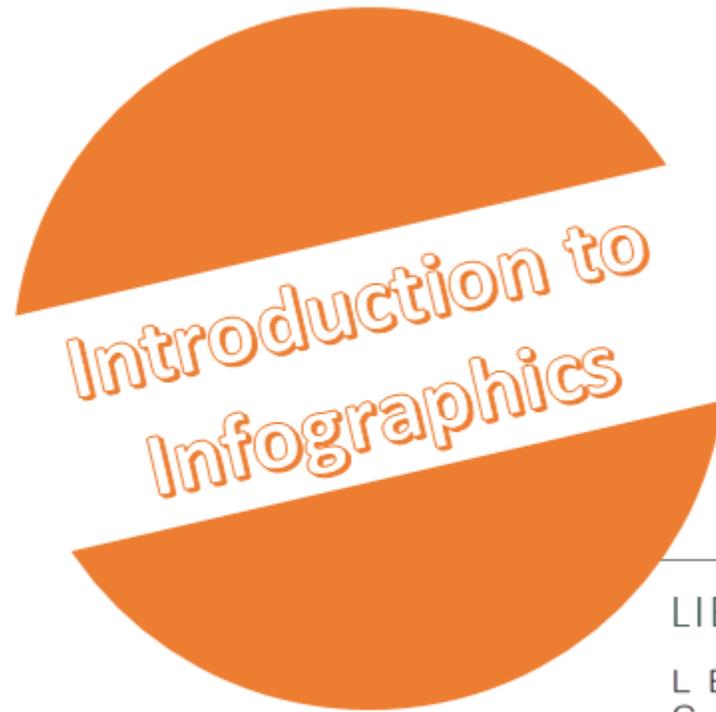


# Active Learning: Share & Reflect

- At the end of the workshop, the final products are presented and each student shares what they enjoyed most about the project and what they found challenging about the process.



# Our Experience



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LIBRARY WORKSHOP

LEARNING  
COMMONS  

---

LIBR@RY

# User Groups

## Staff

- Openness to try new things varies
- Varying tech skills
- Out of comfort zone
- Over analyze

## University Students

- Out of comfort zone
- Completed the activity
- Positive Feedback
- Excited about opportunity

## High School Students

- Jumped right in
- Least hesitant
- Varying skill levels
- Very open

# Continuous Improvement

Move to kits  
(less choice)



Introduction to  
Data



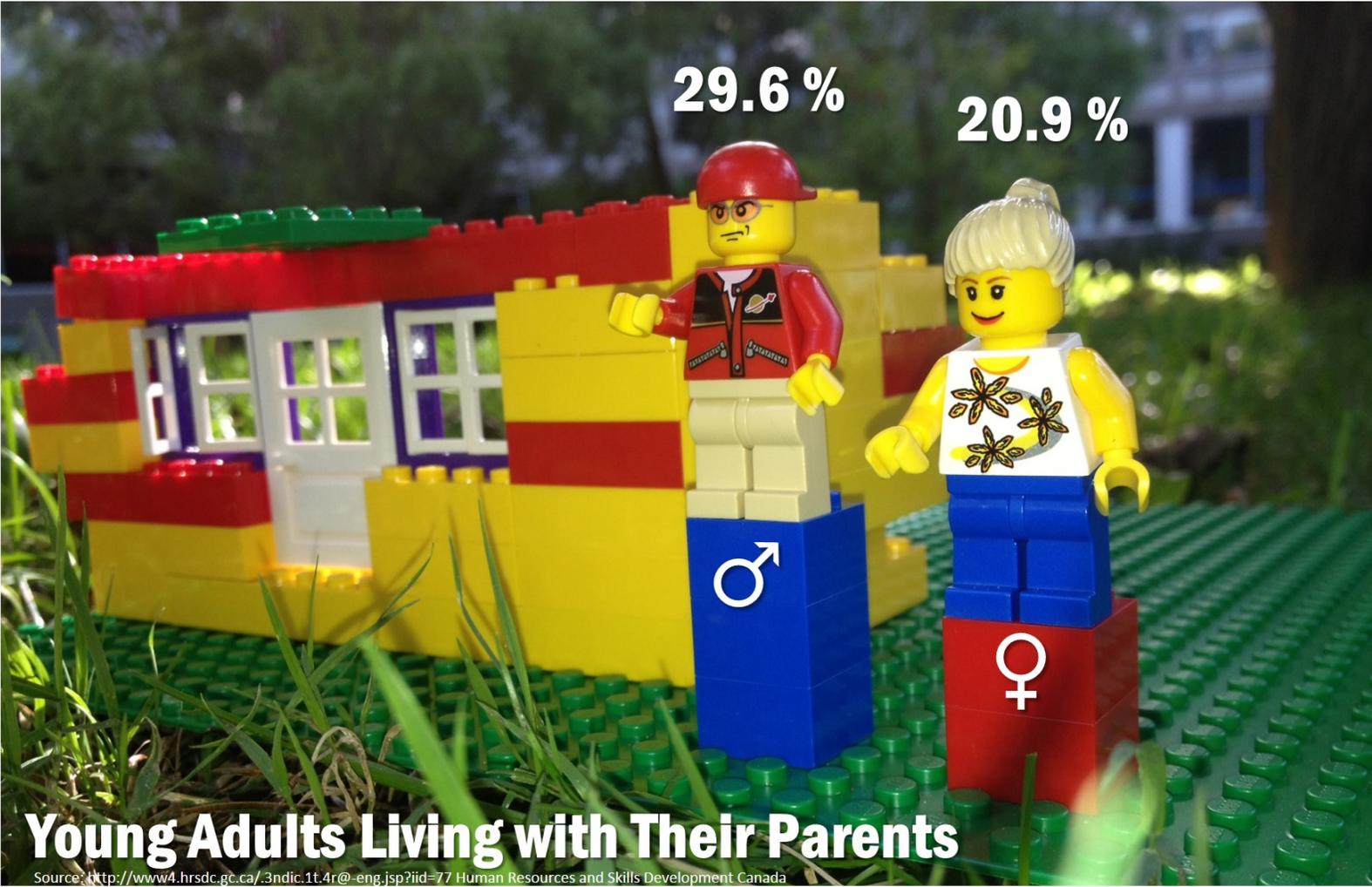
All use same  
dataset



Simplified  
dataset



Dataset that  
might not be  
taken so  
literally



# Reading in Canada vs. USA



**87%** of Canadians read  
a book in 12 months

**57%** of Americans read  
a book in 12 months

# Canadian\* vs. US\*\* Yearly Reading Rates



\* 2005 PCHstudy

\*\*2002 Reading at Risk

People came!

Data literacy  
component +  
partnership with  
Data Resource  
Centre

Lean Startup and  
Continuous  
Improvement

Challenge: Team  
Environment

Challenge: Outside of  
traditional scope

Challenge: Marketing

**What did we learn?**

What  
software?

Advanced  
Workshop

Collaboration  
opportunities?

Offer as an in-  
class option?

Rubrics

**What comes next?**

# **Activity: Advanced Workshop Brainstorm**

# Summary



# References

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- [Framework for Information Literacy for Higher Education](#)
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- [Fernandez, C. \(2012\). "How to create an accessible infographic." Access iQ.](#)
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