

### Making the Most of The Time You Have: Communicating Technical Food Safety Science in a Short Amount of Time

**Moderator**: Katie Overbey Johns Hopkins University, Maryland, USA

### **Presenters:**

- Laura Strawn
- Benjamin Chapman
- Elizabeth Bradshaw
- Danielle Hennis

- Virginia Tech, Virginia, USA
- North Carolina State University, North Carolina, USA
- NC Department of Health, North Carolina, USA
- Make It Memorable, North Carolina, USA

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- Questions should be submitted to the presenters during the presentation via the **Questions section** at the right of the screen.



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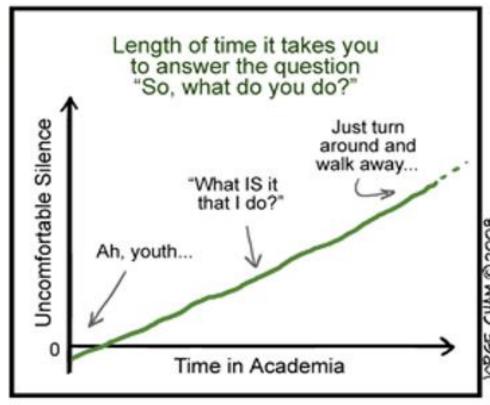
• This webinar is being recorded and will be available for access by IAFP members at <a href="https://www.foodprotection.org">www.foodprotection.org</a> within one week.





## Communicating to Lay Audiences... Isn't Rocket Science







WWW.PHDCOMICS.COM



Dr. Laura K. Strawn Virginia Tech



### Short & Sweet - Tips & Tricks

Credentials: wearer of many communication hats









Know your audience



 Use trade journals or newsletters to understand real-world

Be relatable





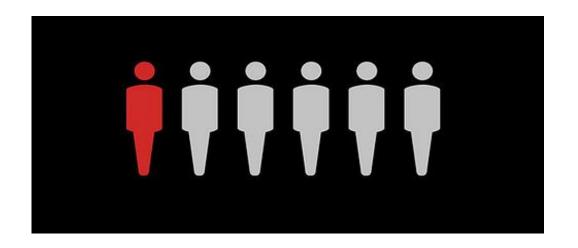




Engage your audience

Let them interrupt you















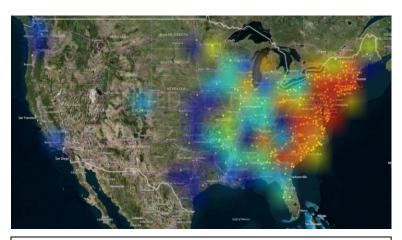
Don't use jargon

Put numbers or terms in context

Make use of images & props







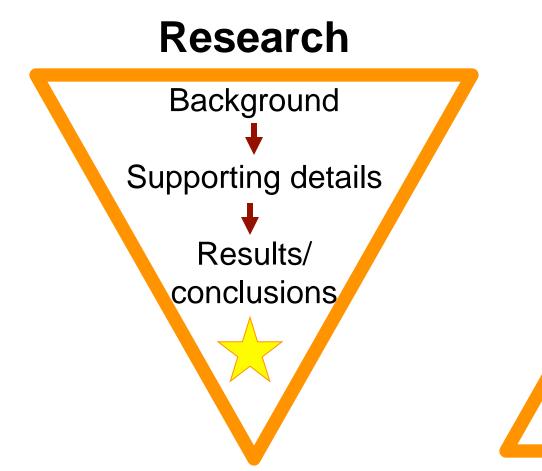
Heat Map of *Salmonella* Newport Pattern 61 cases from 1998 to 2016

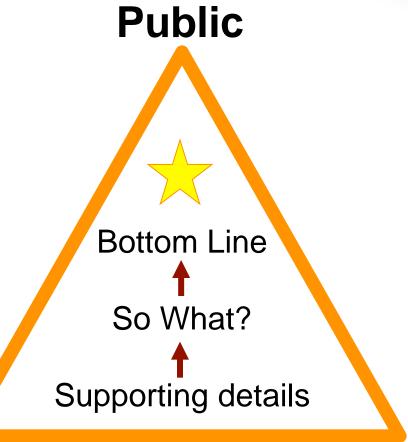




RIPS TRUES

Get to the point, stay focused









Use analogies & metaphors



 Link back to real-life / real-world applications











Be confident

You are the expert

Don't be afraid to be bold











 Use social media to expand your platform & reach





 Channel your inner Ben Chapman







### Questions & Thank You

Dr. Laura K. Strawn

Lstrawn@vt.edu

714-450-0629

lauraKstrawn (Twitter)
StrawnLabVT (Instagram)







## An evidence-based approach to communicating food safety

Dr. Ben Chapman @benjaminchapman or enjamin\_chapman@ncsu.edu NC State University April 28, 2020

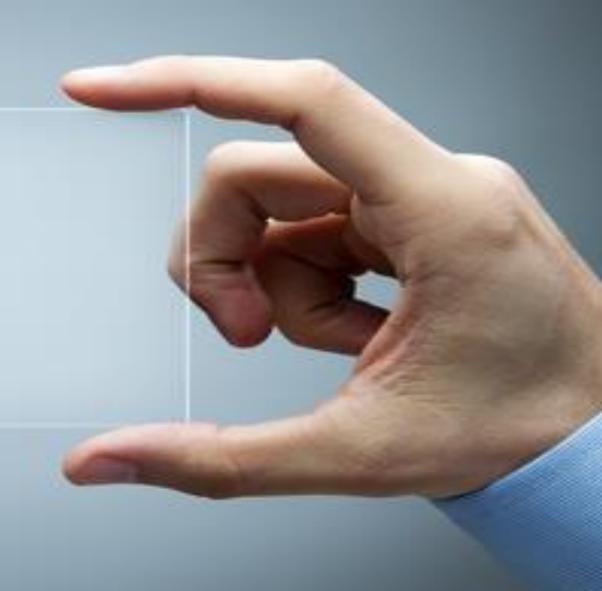
### Food is risky







Storytelling matters.
So does science.





Make things all the time. Try everything.





# Sharing Science: Beyond the Publication

Liz Bradshaw, DVM MPH

Former Extension Associate, NoroCORE

Outreach Coordinator, NC State Laboratory of Public Health

### Words of greatness

"If you are an expert in your field and not taking part in the conversations that are happening, someone else will fill that void and probably not do as good of a job."

- Ben Chapman

### Overview

- Visuals and supporting materials can greatly expand a study's reach
- Why > How for general audiences
- Social media helps, if already invested
- Reach out to your communication experts
- Public health communication is interventionist



### Case Study 1: Significant Science

- Cultivation of norovirus
- A few days' lead time
- Infographic, social media campaign, t-shirts
- 1,500 downloads, 30k Facebook views
- 99th percentile of visibility, Altmetric.com

Ettayebi, K. et al. (2016). Replication of human noroviruses in stem cell-derived human enteroids. Science, 353(6306): 1387-1393.

### NOROVIRUS, CULTURED.

### A 48 YEAR MYSTERY SOLVED

Dr. Mary Estes and her Lab at Baylor College of Medicine have successfully cultured human norovirus in intestinal cells. Scientists have been trying to culture the virus since the first norovirus outbreak was described in 1968 The lack of an in vitro culture system has long been considered the single greatest barrier to norovirus research.

### HISTORY OF NOROVIRUS RESEARCH

Dr. John Zahorsky, a pediatrician. gives the name "winter vomiting disease" to a common childhoo

### 1972

and his team at NIH

### 1992

created by the Estes Lab. These

### **READ THE ARTICLE**

K. Ettavebi et al., Science 10.1126/science.aaf5211 (2016).

An elementary school in The Norwalk virus genome is

cloned, paving the way for an era of molecular studies.

### WHAT IS NOROVIRUS?

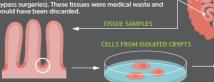
- It is a tiny (≈27nm), spherical virus belonging to the Caliciviridae family
- common cause of foodborne illness ir
- An estimated 1 in 15 Americans experience the virus each year, amounting to around 20 million case



### **HOW DOES THE CULTURE SYSTEM WORK?**

Viruses need host cells to replicate. Human noroviruses replicate in the epithelial cells that line our gut. (This was med by the fact that the culture system works.) nal crypts, which contain stem cells, create these blial cells in our bodies every day, and are rapidly

Drs. Sato and Clevers in the Netherlands and made new



Under the right conditions, the stem cells in the crypts multiply and form the surface (epithelial) layer of our gut, only in miniature and in a dish, to become Human Intestinal Enteroids (HIEs) or "miniguts." They function like the tissue they came from, and can be used indefinitely.

### A SECRET INGREDIENT

### A NEW ERA OF NOROVIRUS RESEARCH

### **GENERAL VIROLOGY**

We can dig deeper into how noroviruses work and what makes them so good at making us sick. This knowledge may shine light on other viruses.

### FOOD AND ENVIRONMENTAL VIROLOGY

This is the first step towards directly testing norovirus to know if they are effective. This could lead to better disinfectants, preve



### **EPIDEMIOLOGY**

**CLINICAL MEDICINE** 

Being able to work with the actual virus

will better understand what the virus does in the body, potentially leading to

will be a boon to vaccine research, and we

We can better understand how the virus evolves, spreads, and how it affects



N r CORE



### Case Study 1: Approachable Science

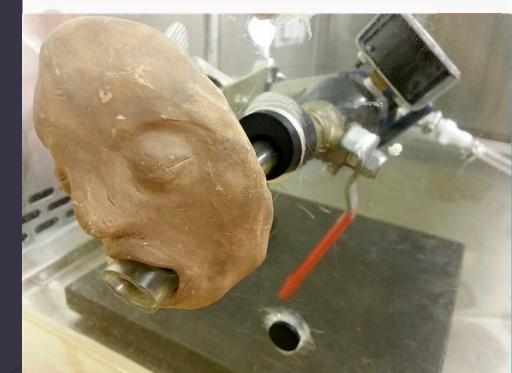
- Vomiting machine
- ► Homemade YouTube video, 45k views
- 116 original news stories and 120+ reposts
  - ▶ BBC, New York Times, SciShow, Buzzfeed
- 99<sup>th</sup> percentile of visibility, Altmetric.com

Tung-Thompson, G. et al. (2015). Aerosolization of a human norovirus surrogate, bacteriophage MS2, during simulated vomiting. *PLoS One*, 10(8): e01342777.



51,191 views • Nov 11, 2014



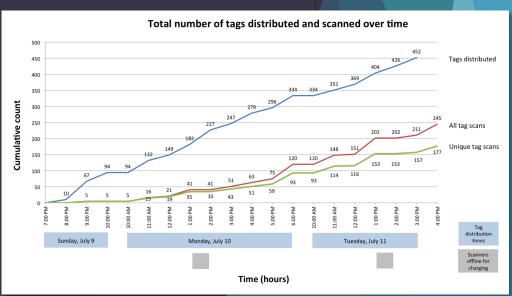


## Case Study 3: Interactive Science

- NoroCORE exhibitions at IAFP
- Button Experiment, 2015; Find the Host, 2017
- Strive for real-time data and simple mechanics









### Liz Bradshaw

Laboratory Outreach Coordinator NC State Laboratory of Public Health

elizabeth.bradshaw@dhhs.nc.gov

### Redesigning Presentations

Using Science and Art to Make Presentations more Memorable

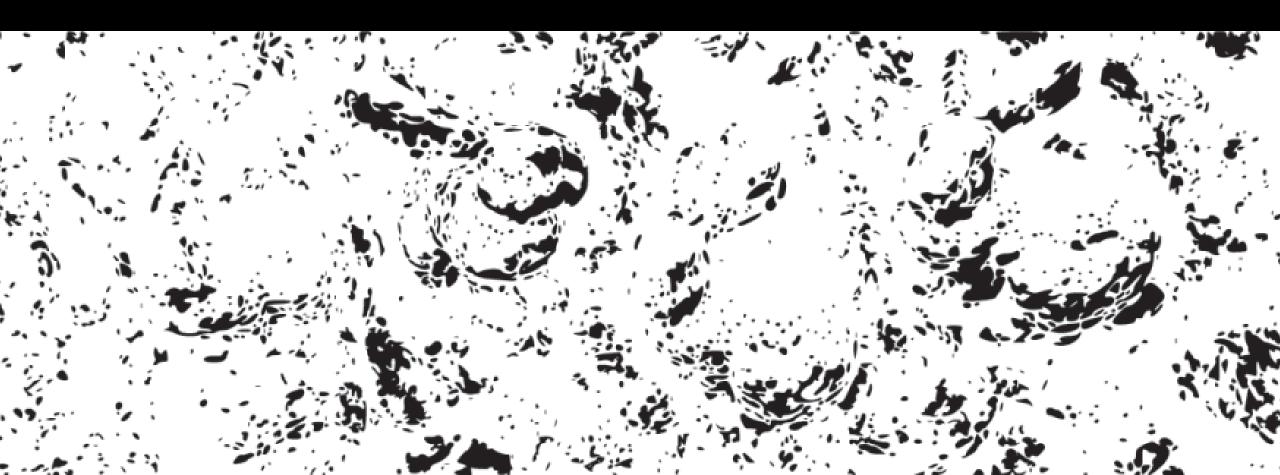
Danielle Hennis
drhennis@gmail.com
www.makeitmemorable.studio

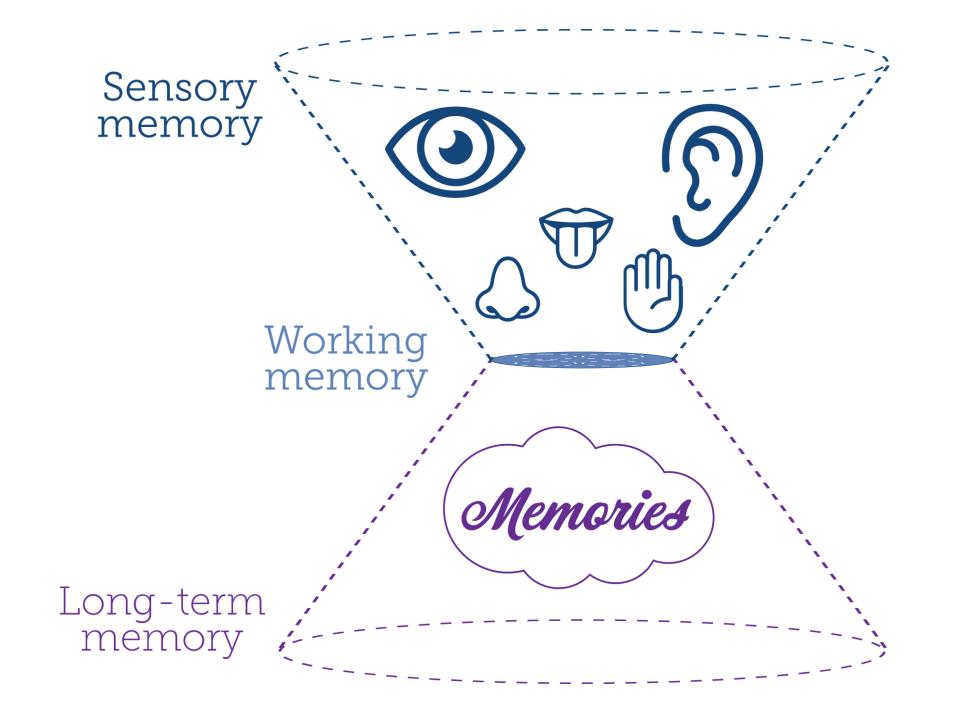


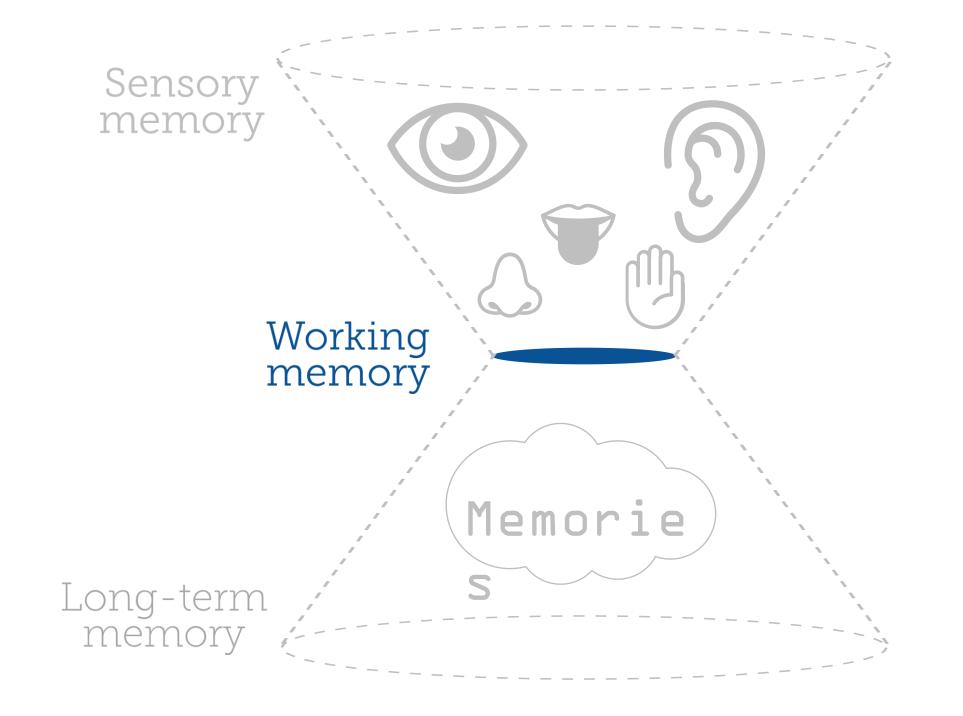
## Eurse of Knowledge



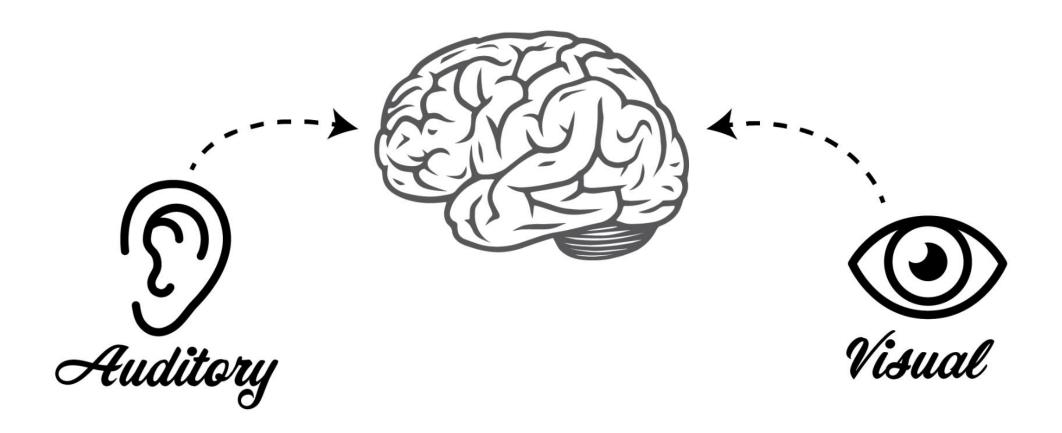
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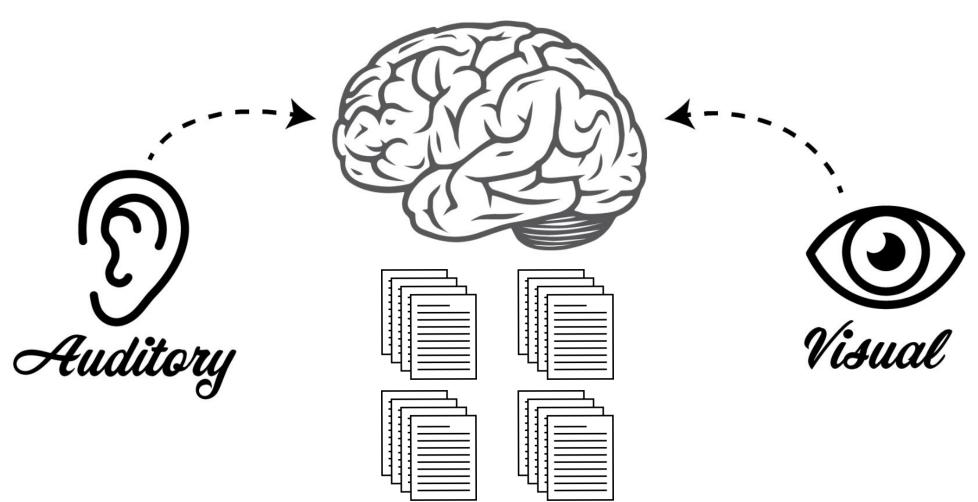




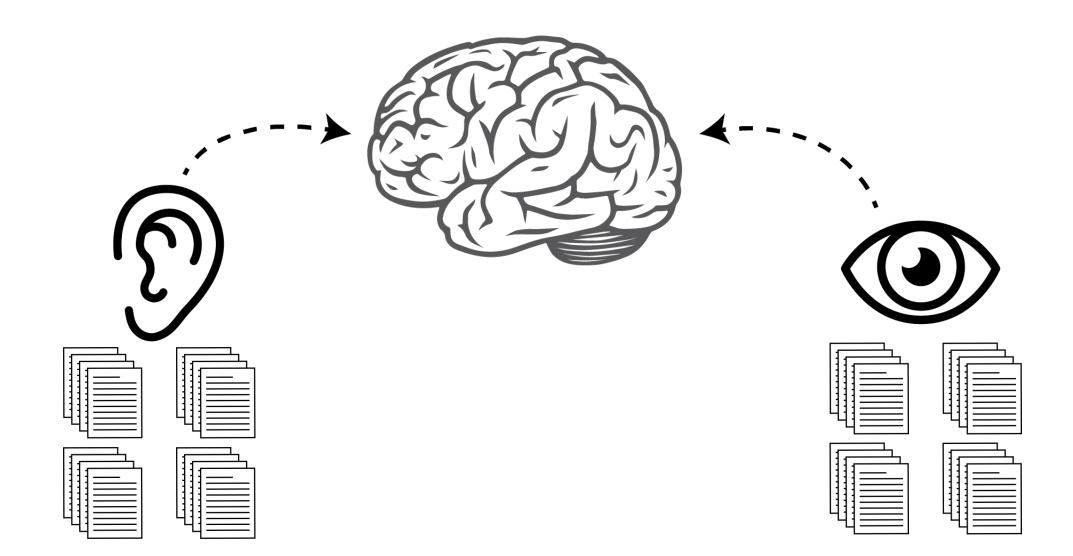
### Dual Coding Theory & The Multimedia Effect



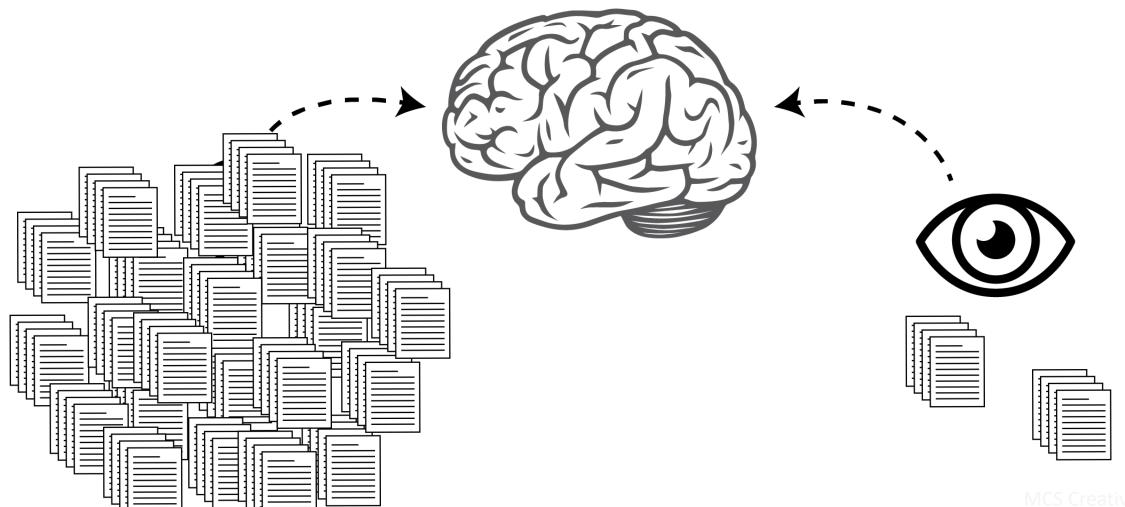
### Dual Coding Theory & The Multimedia Effect



# Dual Coding Theory & The Multimedia Effect

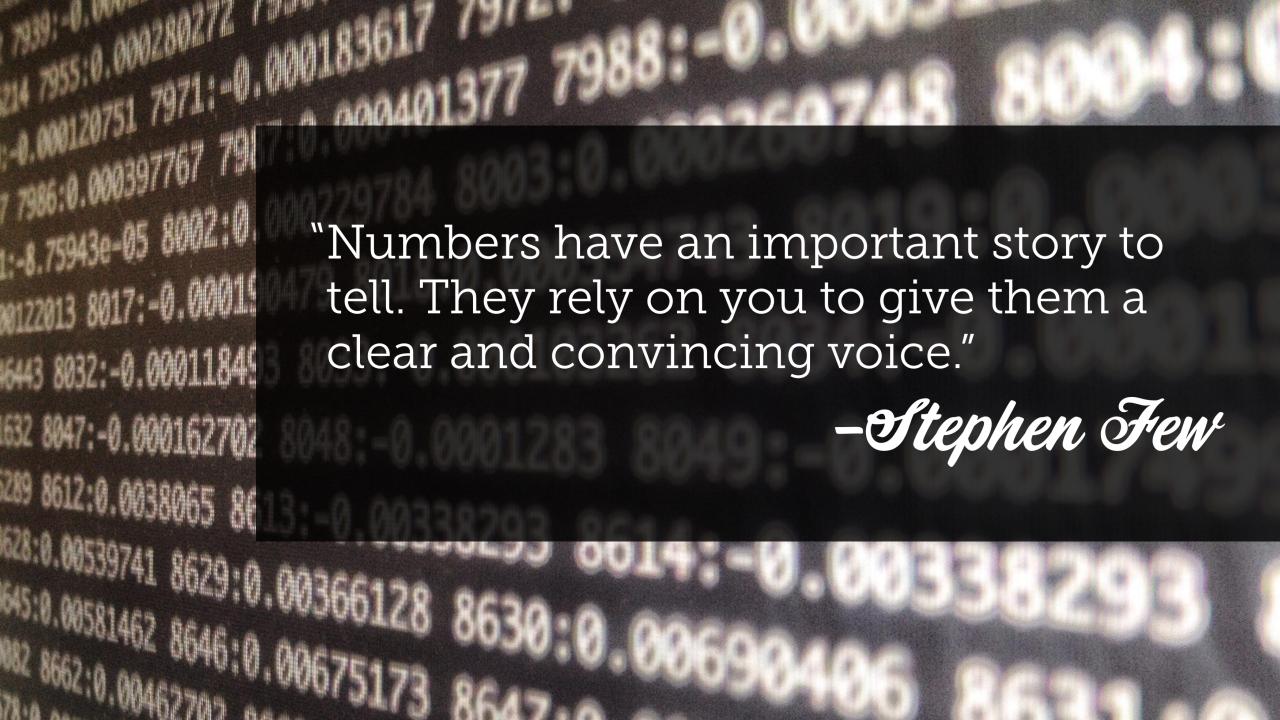


## Dual Coding Theory & The Multimedia Effect



# Why is this important?

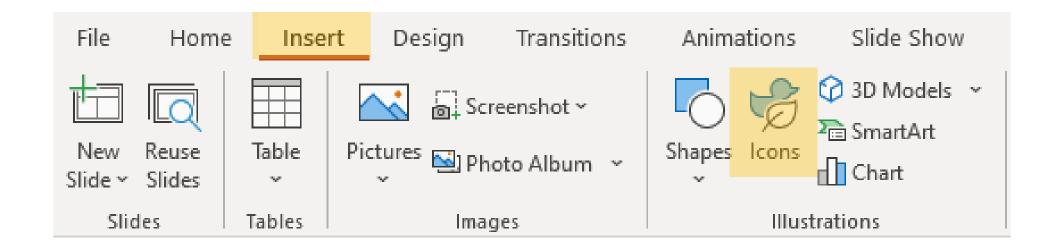
**Using visuals** adds depth to what you're saying without creating cognitive overload. Only add relevant visuals to your slides.



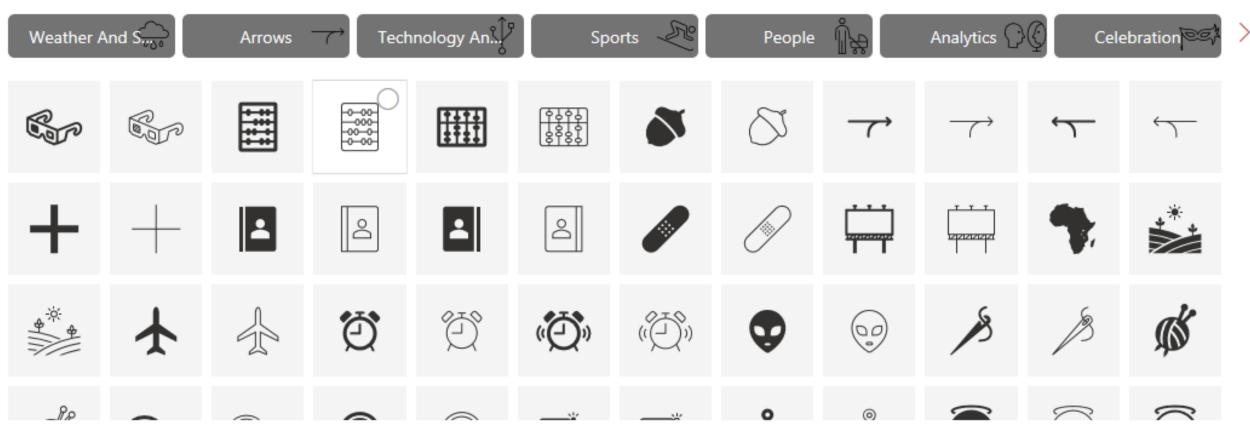
# Dogs are amazing

- 74% of people like dogs
- 41% of people like cats
- 10% of people like rabbits
- 5% of people like gerbils
- 3% of people like fish

# 3 aut of 4 people like dogs



(3)

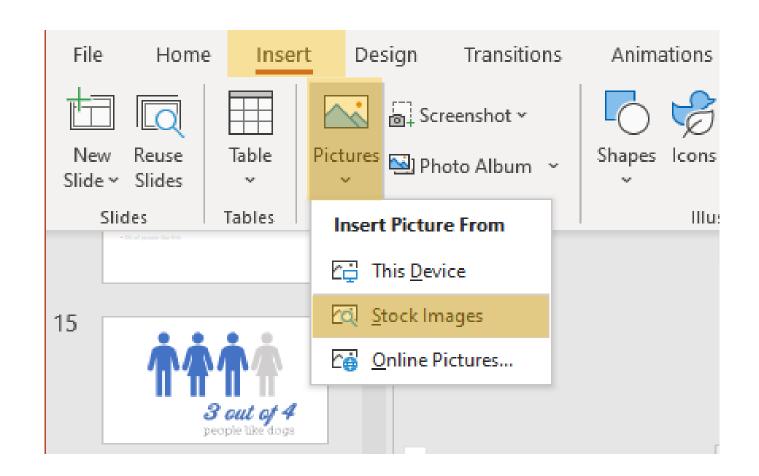


Insert

Cancel

# 74% of people like dogs





Stock Images Cutout People Stickers Icons













**Flamingo** 

70%





### Icons for everything

Over 2 Million curated icons, created by a global community

#### Q Search for anything















































































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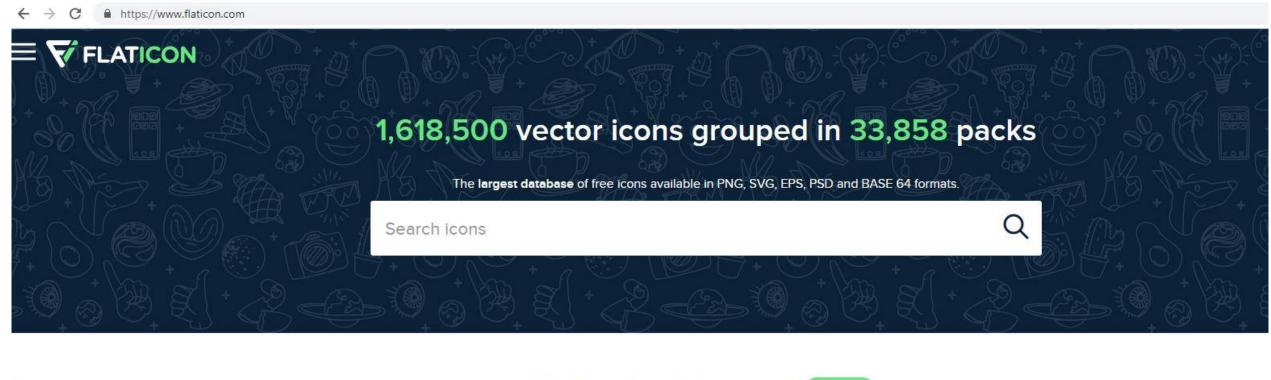
Get icons in your workflow

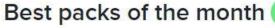
Check out the apps



Customize any icon for the perfect fit

Try it out

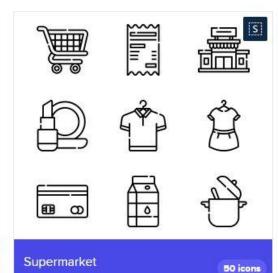




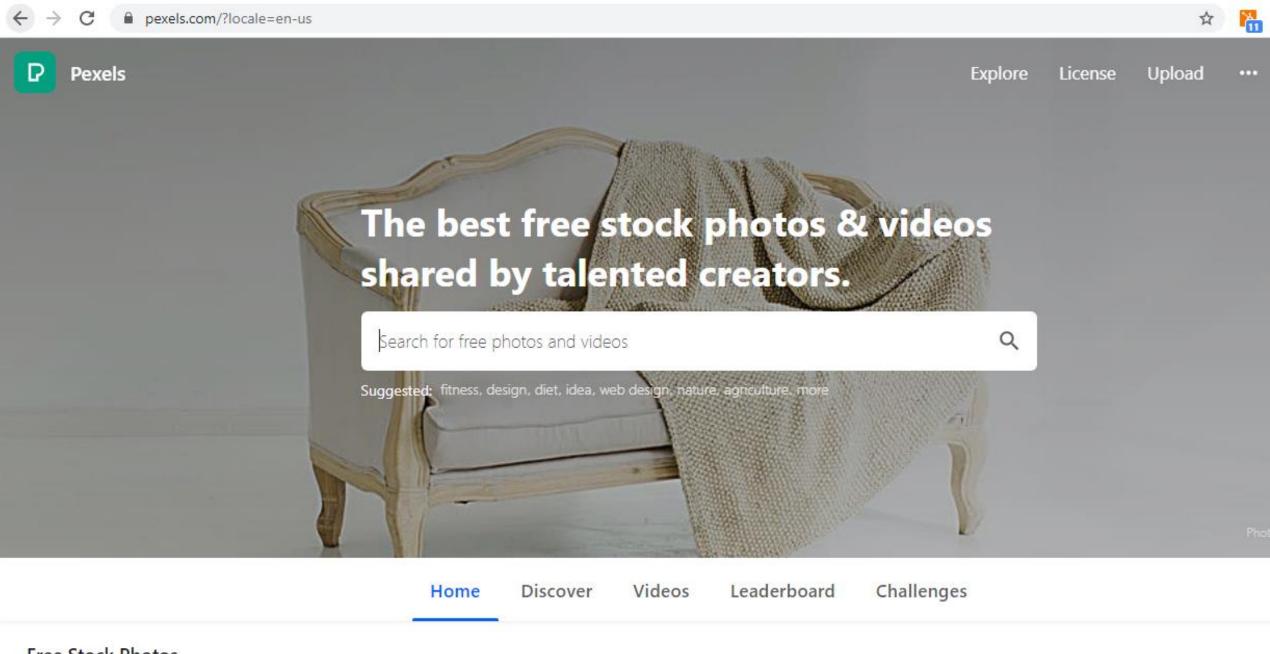


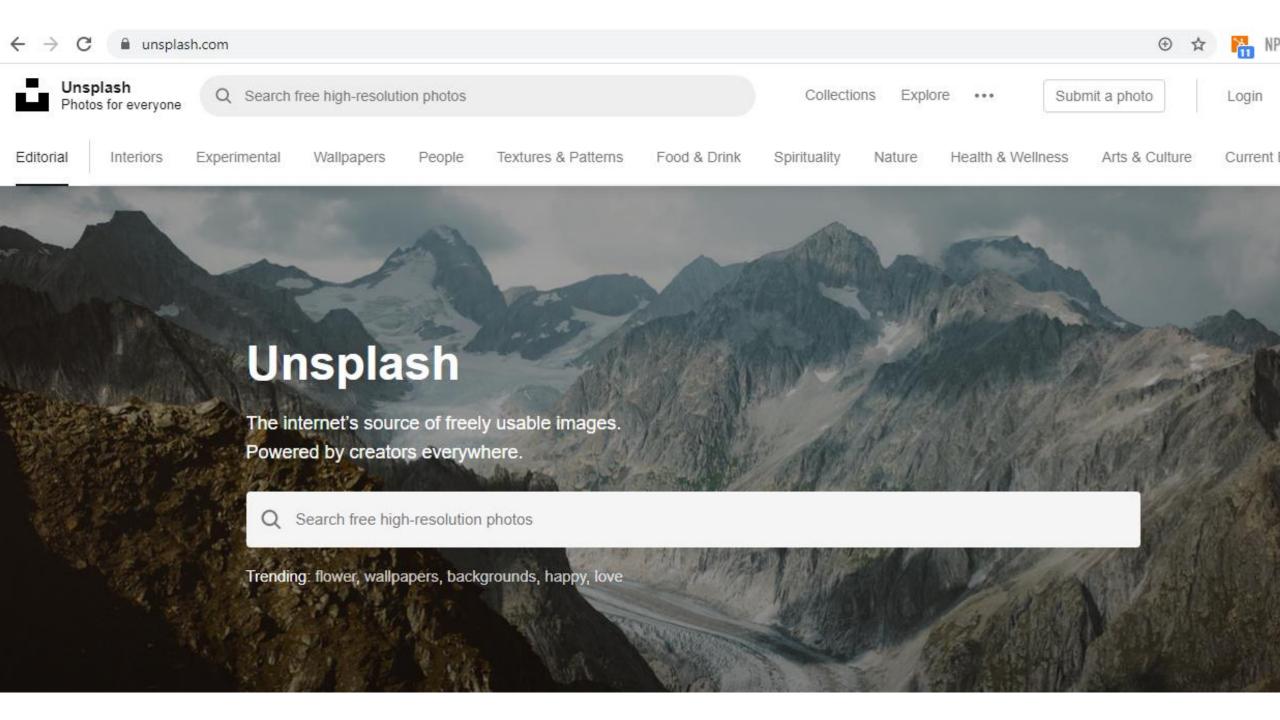














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