



SCIENCE COMMUNICATION BY SOCIAL MEDIA

A Methodical Approach

Presented by Jason Curtis Droboth

COMMUNICATING STEP-BY-STEP USING

Level Analysis

AND

Question Sequence





**WE COMMUNICATE TO BUILD AND
MAINTAIN HEALTHY
RELATIONSHIPS**

SCIENCE COMMUNICATION

SCIENCE COMMUNICATION

Communicating with
the Public(s)

SCIENCE COMMUNICATION STRATEGY

Communicating with
the Public(s)

**SCIENCE
COMMUNICATION
STRATEGY**

Communicating with
the Public(s)

Campaign

Inform

Persuade

Motivate

SCIENCE COMMUNICATION STRATEGY

Communicating with
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Inform

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New

Social

News

Blogs

Traditional

Print

Film

Radio

Television

Advertising

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Facebook

YouTube

WeChat

Instagram

Twitter

Reddit

Snapchat



“

“LET'S CREATE A FACEBOOK PAGE”

A background collage of various social media icons, including Facebook, Twitter, YouTube, and others, rendered in a light, faded style. A solid blue horizontal bar is positioned at the top of the image.

“

“WE NEED A WEBSITE”

“

**“WE SHOULD RECORD THIS AND
PUT IT ON YOUTUBE”**



“

**“MY SUPERVISOR WANTS ME TO
CREATE SOCIAL MEDIA ACCOUNTS”**

“

**“WE SHOULD INTERVIEW A BUNCH
OF SCIENTISTS AND POST THE
INTERVIEWS TO OUR WEBSITE”**

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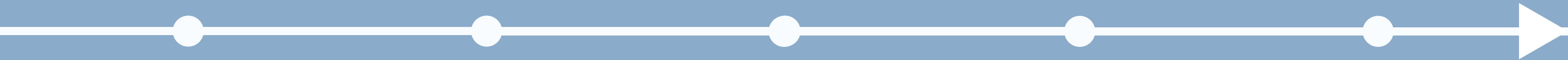
Snapchat

**“IF I HAD AN HOUR TO SOLVE A
PROBLEM AND MY LIFE DEPENDED ON
THE SOLUTION, I WOULD SPEND THE
FIRST 55 MINUTES DETERMINING THE
PROPER QUESTION TO ASK...”**

ALBERT EINSTEIN

The Question Sequence

ASKING THE RIGHT QUESTIONS

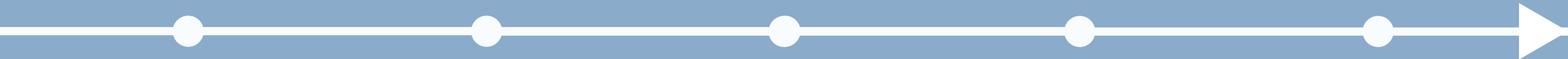


The Question Sequence

ASKING THE RIGHT QUESTIONS

WHAT?

What is the change I seek?



The Question Sequence

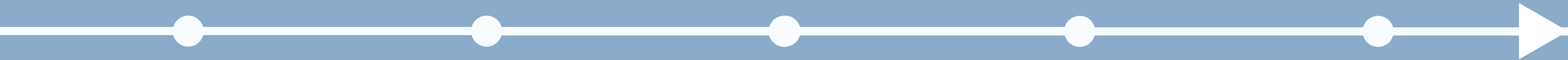
ASKING THE RIGHT QUESTIONS

WHAT?

What is the change I seek?

WHO?

Who is my audience?



The Question Sequence

ASKING THE RIGHT QUESTIONS

WHAT?

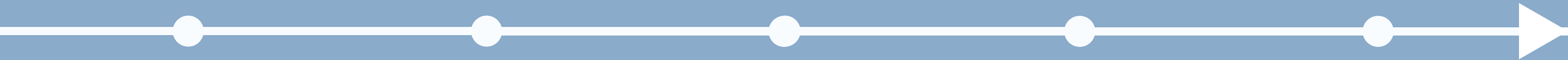
What is the change I seek?

WHY?

Why does it matter?

WHO?

Who is my audience?



The Question Sequence

ASKING THE RIGHT QUESTIONS

WHAT?

What is the change I seek?

WHY?

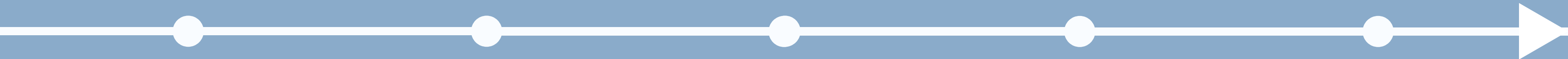
Why does it matter?

WHO?

Who is my audience?

HOW?

How can I do it?



The Question Sequence

ASKING THE RIGHT QUESTIONS

WHAT?

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HOW DID?

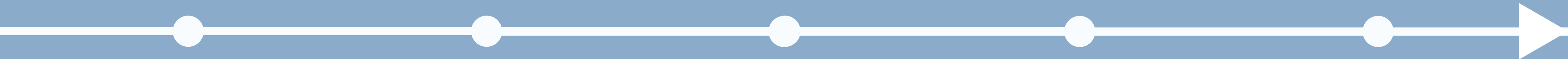
How did it go?

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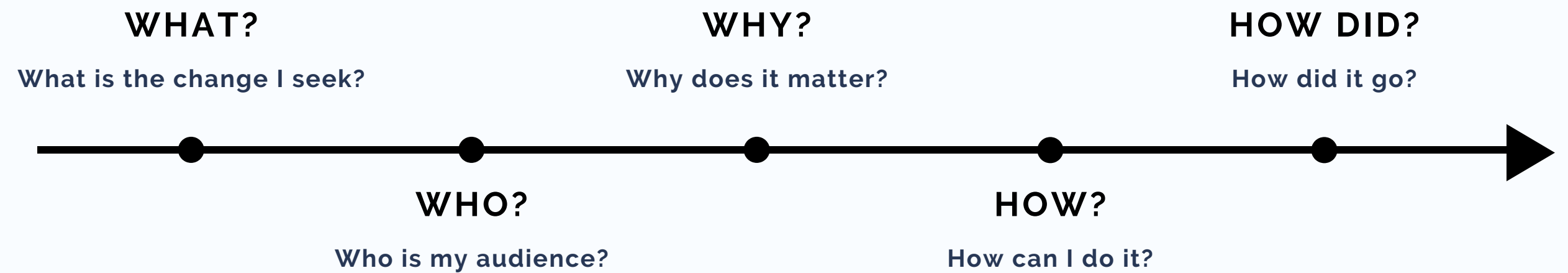
Twitter

Reddit

Snapchat

SCIENCE COMMUNICATION

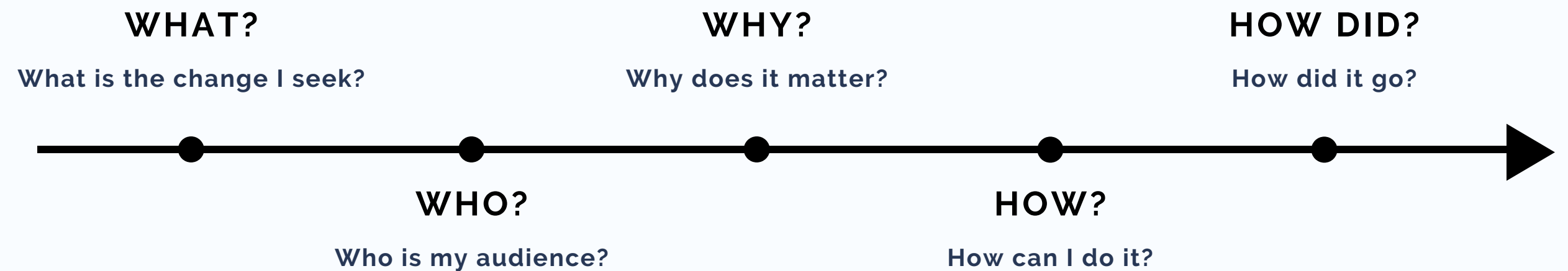
Communicating with
the Public(s)



SCIENCE COMMUNICATION

Communicating with
the Public(s)

The public understands
what Hydrologists do, why
the science is important, &
continues prioritizing its
federal funding



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WHAT?

What is the change I seek?

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HOW DID?

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WHO?

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HOW?

How can I do it?

American citizens most
likely to support cutting
federal funding of science

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Communicating with
the Public(s)

The public understands
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WHAT?

What is the change I seek?

Organizational: Multiple
studies show 25% US
citizens would cut federal
funding of science first.
Personal: Learn how to
become a better
communicator

WHY?

Why does it matter?

HOW DID?

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WHO?

Who is my audience?

American citizens most
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HOW?

How can I do it?

Create a positive brand.
Design around the best
qualitative & quantitative
public opinion data.
Incorporate semiotic
theory

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Communicating with
the Public(s)

The public understands
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WHY?

Why does it matter?

Analyze annually

HOW DID?

How did it go?

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federal funding of science

HOW?

How can I do it?

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theory

Why?

WHY DOES IT MATTER?

Organizational:

Multiple studies show 25% US citizens would cut federal funding of science first.

Personal:

Learn how to become a better communicator

Audience:

All people depend on having an intimate yet complicated relationship with water

Why?

WHY DOES IT MATTER?

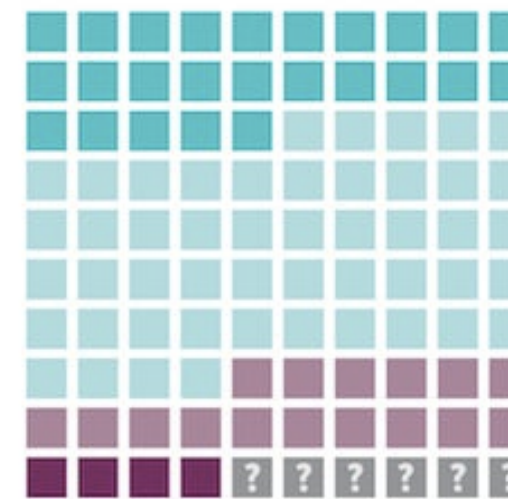
| <i>Top Domestic Program Willing to Cut to Reduce Deficit Among All Voters</i> | 2015 |
|---|-------------|
| Scientific Research | 25% |
| Unemployment Benefits | 19% |
| National Defense | 14% |
| Roads, Bridges, and Other Infrastructure | 9% |
| Public Education | 8% |
| Medical Research | 7% |
| Medicare | 4% |
| Social Security | 2% |
| Veterans Benefits | 2% |
| None of these | 28% |

Source: Public Opinion Strategies/Greenberg Quinlan Rosner – Research Funding – 2015.

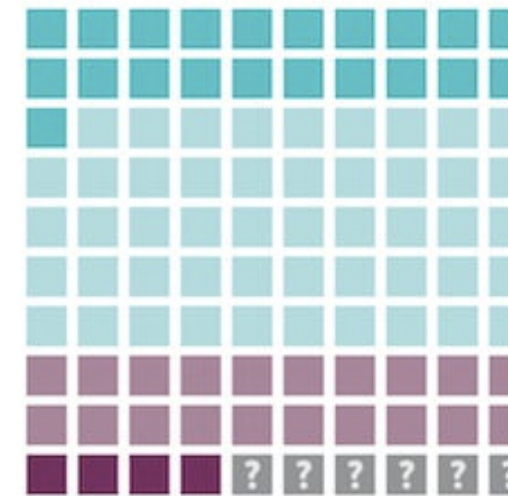
Why?

WHY DOES IT MATTER?

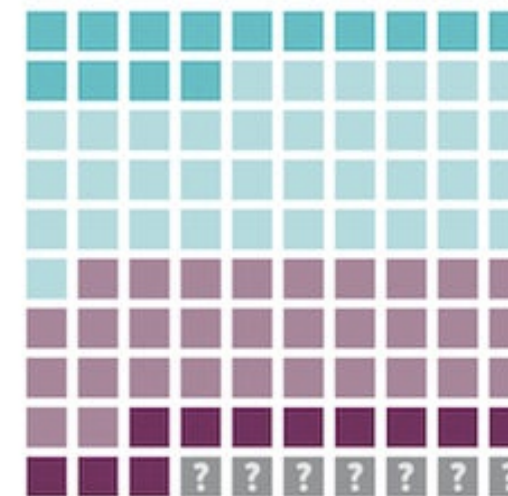
Percentage of Respondents Who Trust Research Scientists to:



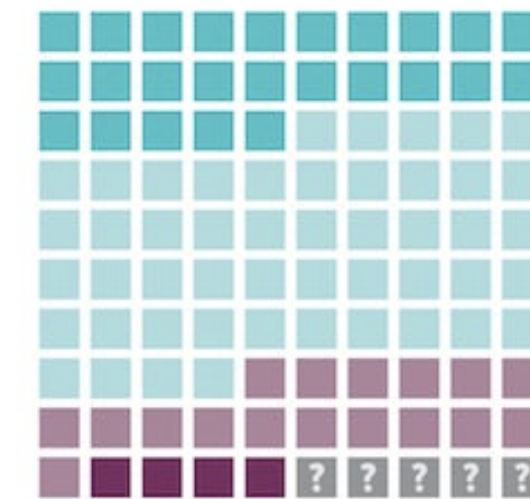
Tell the **Truth**.



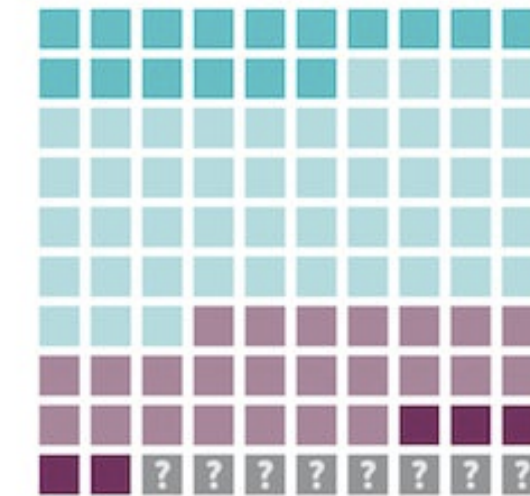
Conduct Scientific Research That is in the **Best Interests** of All Humanity.



Report Findings even if They **Go Against the Sponsor** of the Research.



Report Their Findings **Accurately**.



Give **Impartial Evidence** on Matters of Public Debate.

■ A Great Deal of Trust

■ Some Trust

■ Not Too Much Trust

■ No Trust at All

■ ? Not Sure

Each square represents 1 percent.

SOURCE: ScienceCounts, unpublished data from “Raising Voices for Science: Exploratory and Benchmarking Survey” (survey conducted October 2015).

How?

HOW CAN I DO IT?

Brand:

Create a positive brand.

Data:

Design around the best qualitative & quantitative public opinion data.

Semiotics:

Incorporate semiotic theory

How?

HOW CAN I DO IT?

Brand:

Create a positive brand.

- A Promise
- The most effecient form of communication
- Results in an uncounsious judgment

How?

HOW CAN I DO IT?

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WATER



WATER

LIFE.

PURITY.

POWER.



How?

HOW CAN I DO IT?

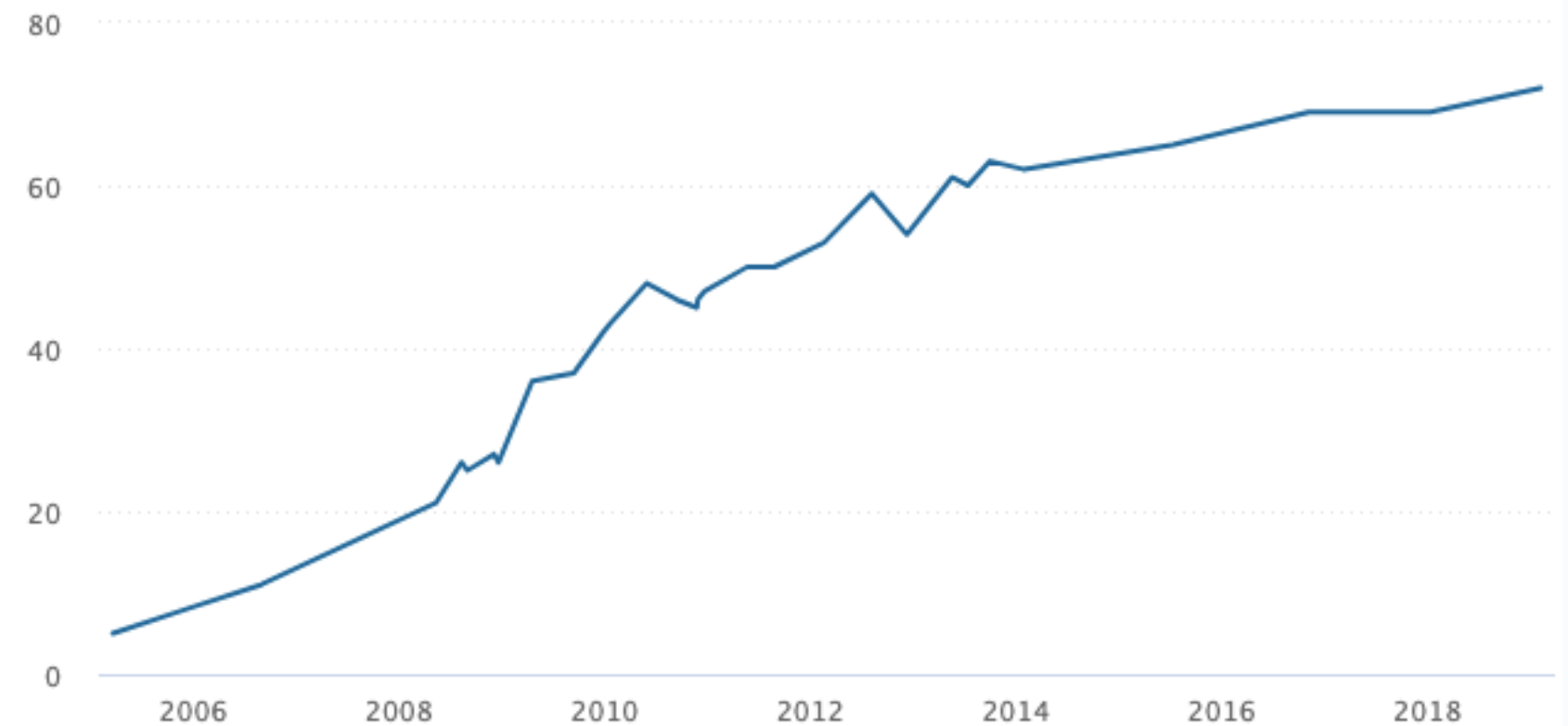


Data:

Design around the best qualitative & quantitative public opinion data.

- Public opinion data
- Public trends and behaviour

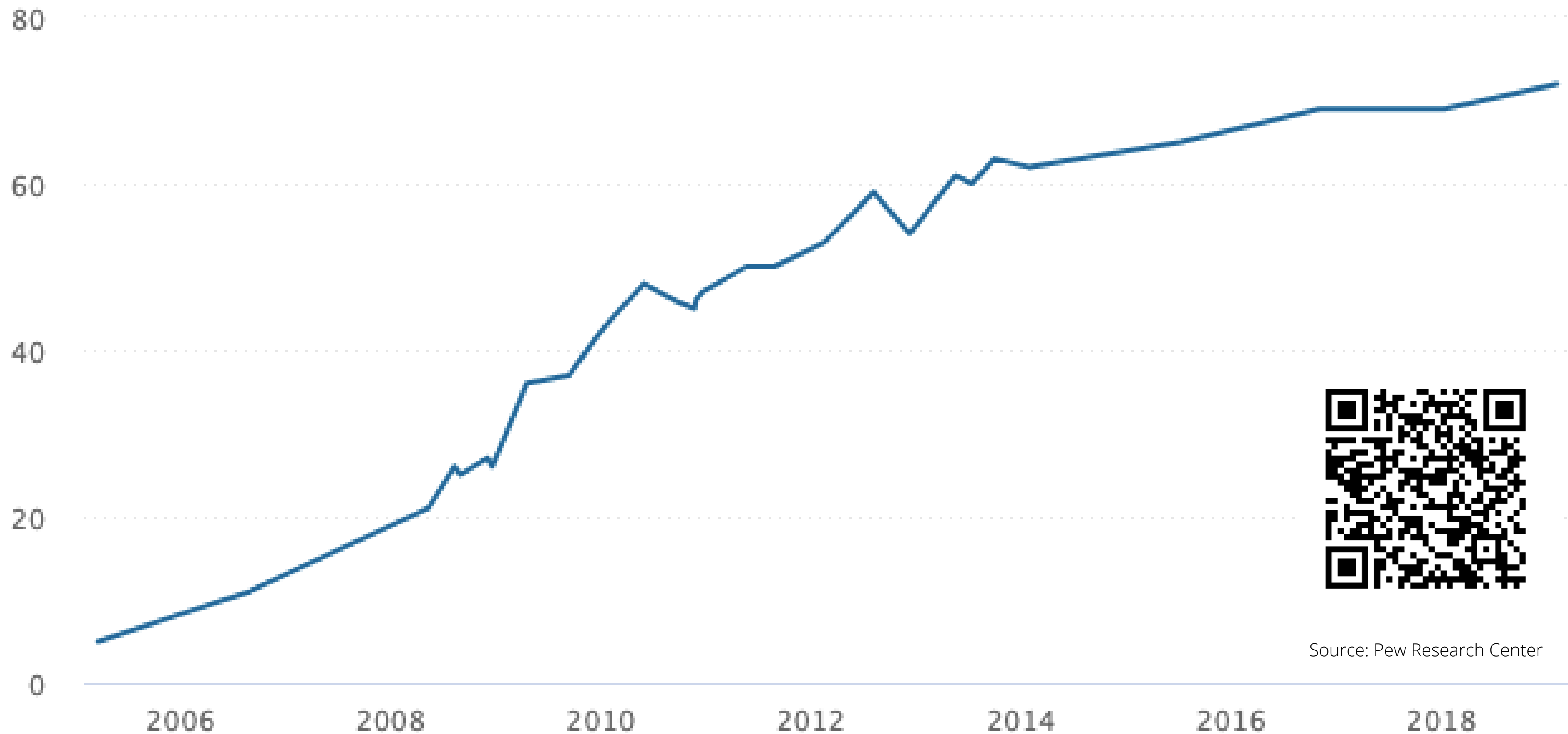
% of U.S. adults who use at least one social media site



Source: Surveys conducted 2005-2019.

PEW RESEARCH CENTER

% of U.S. adults who use at least one social media site



% of U.S. adults who use ...



100

75

50

25

0

2013

2014

2015

2016

2017

2018

2019

Facebook

Pinterest

Instagram

LinkedIn

Twitter

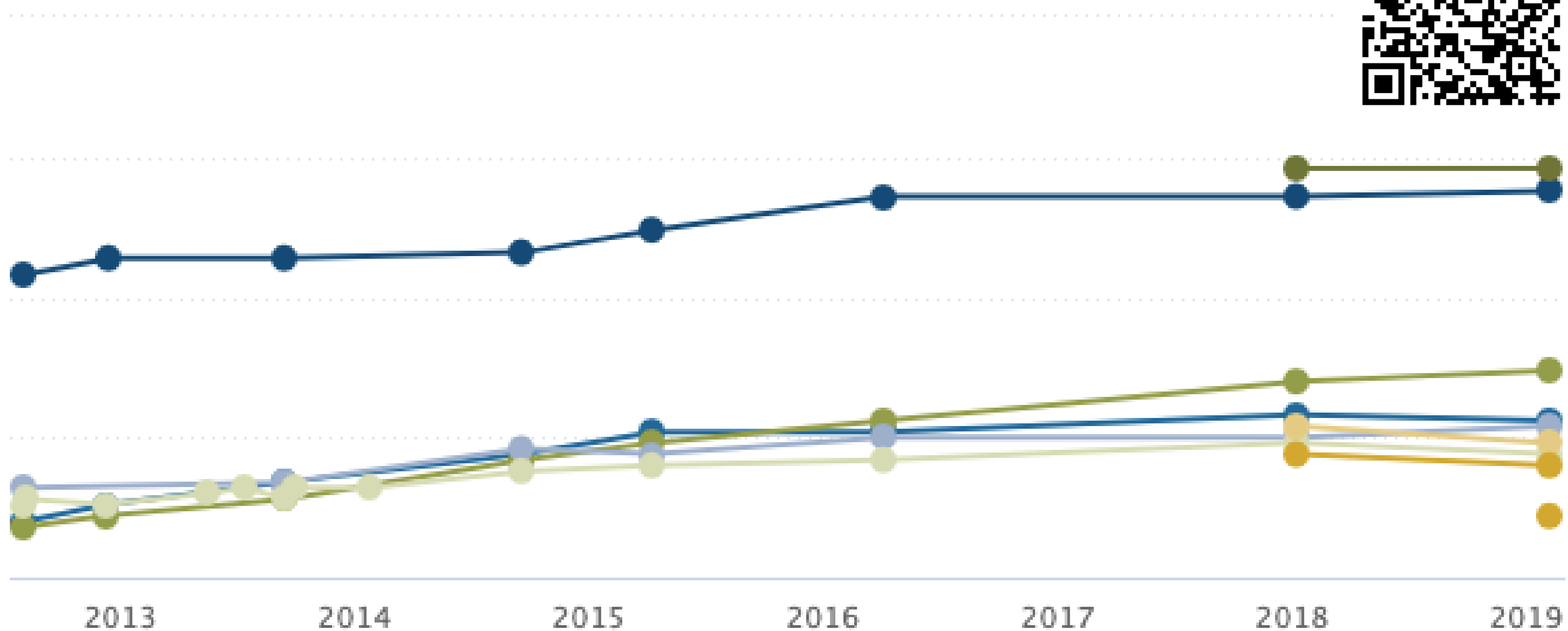
Snapchat

YouTube

WhatsApp

Reddit

Source: Pew Research Center



How?

HOW CAN I DO IT?

Semiotics:

Incorporate semiotic theory

- Study of signs
- Proposes that we only communicate through signs
- Helps us communicate better

How?

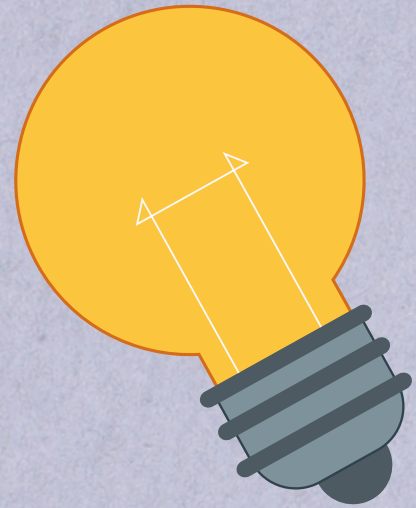
HOW CAN I DO IT?

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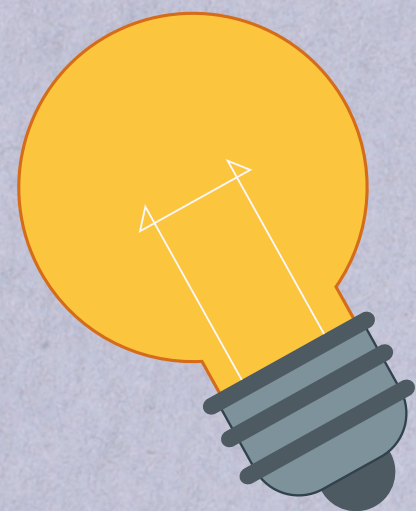




1.

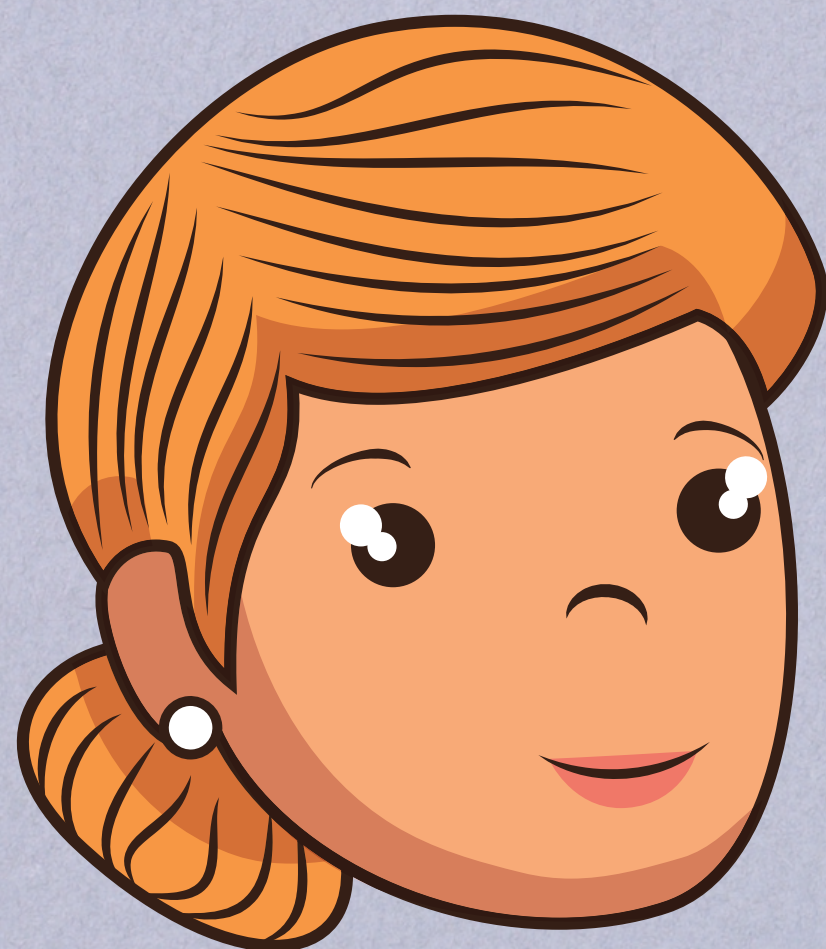
Thought

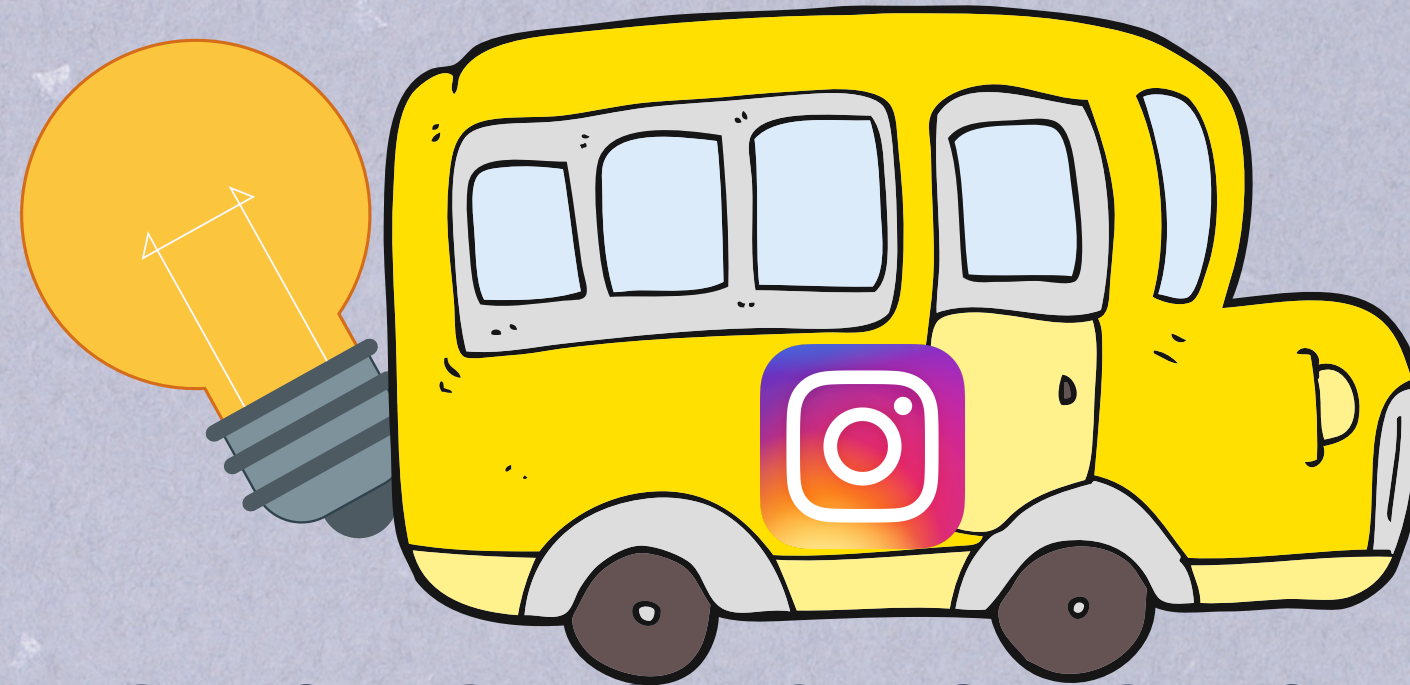




2.

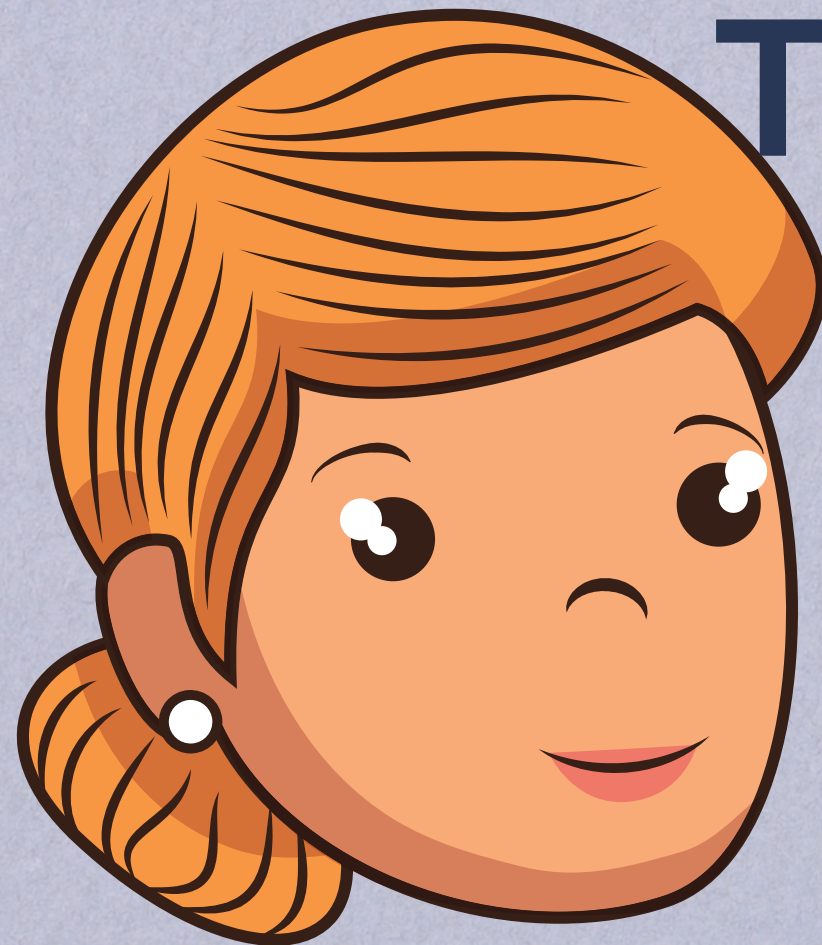
Encoding Sign





3.

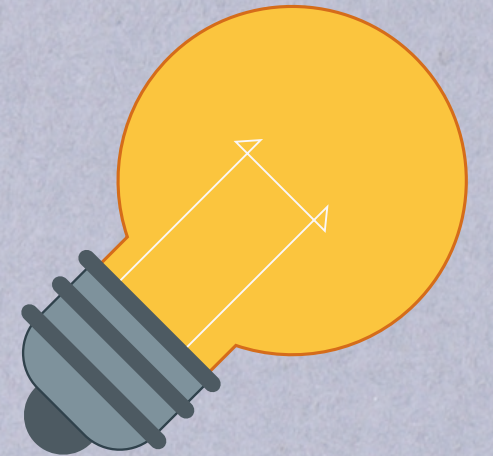
Transmission





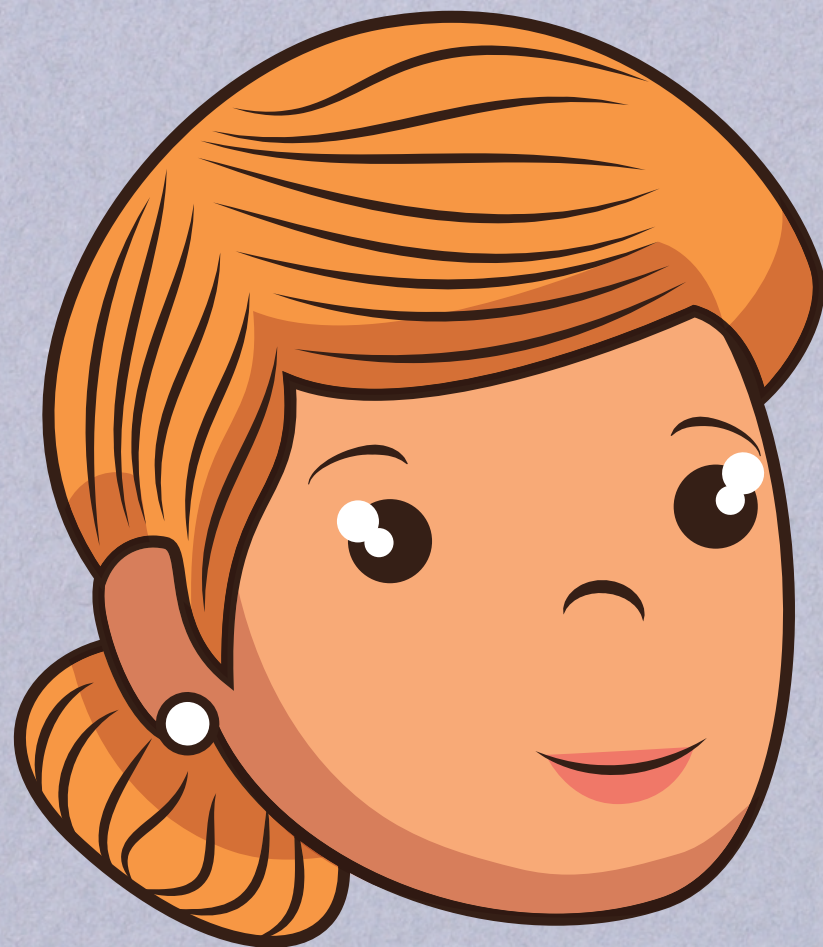
4.

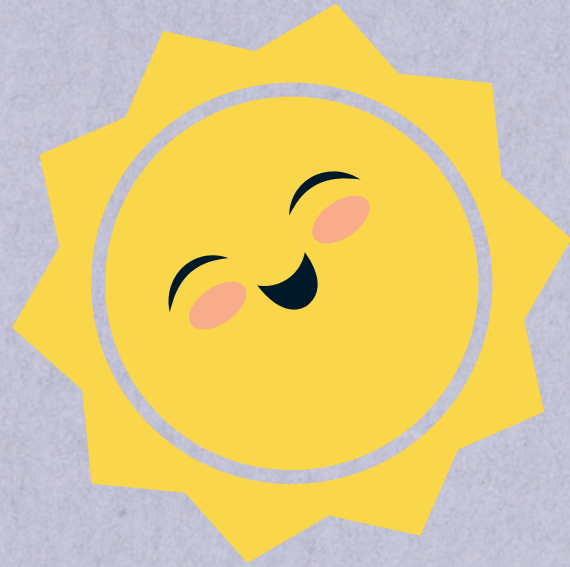
Recieval



5.

Decoding

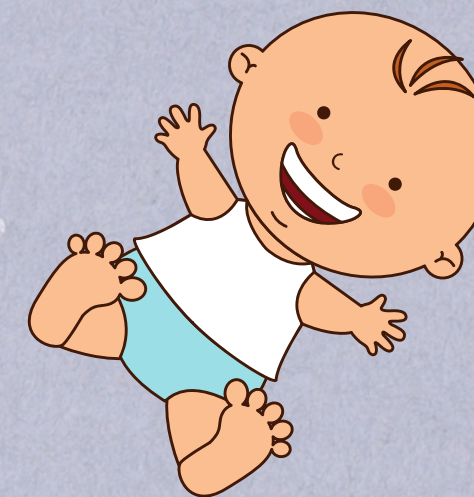
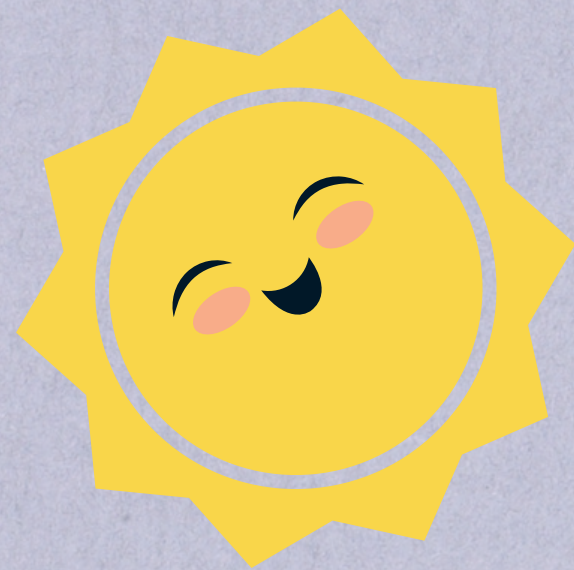




6.

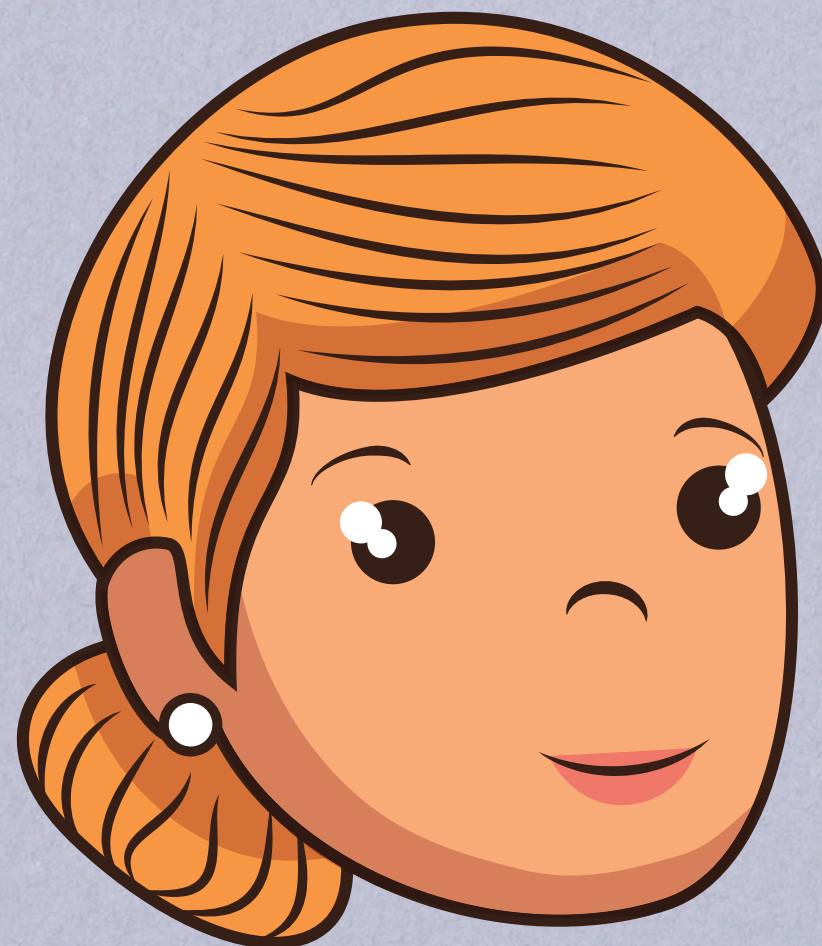
Reaction





6.

Reaction



SCIENCE COMMUNICATION STRATEGY

Communicating with
the Public(s)

Campaign

Inform

Persuade

Motivate

New

Social

News

Blogs

Traditional

Print

Film

Radio

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Advertising

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Messengers

Facebook

YouTube

WeChat

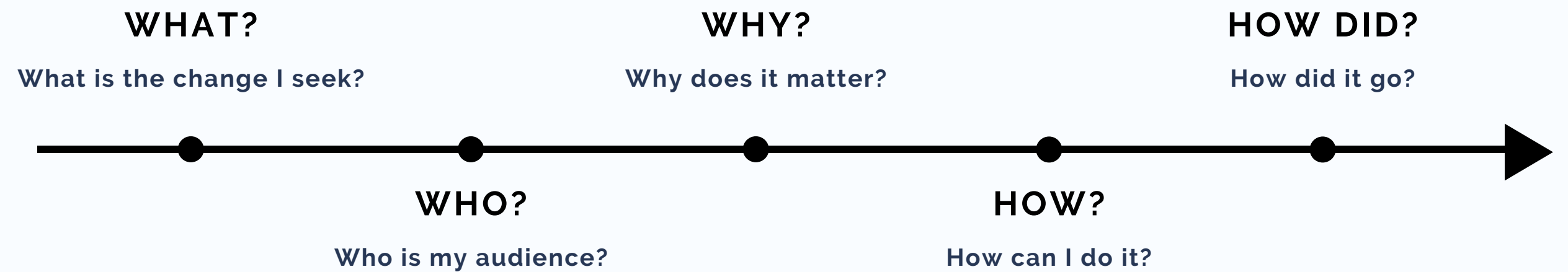
Instagram

Twitter

Reddit

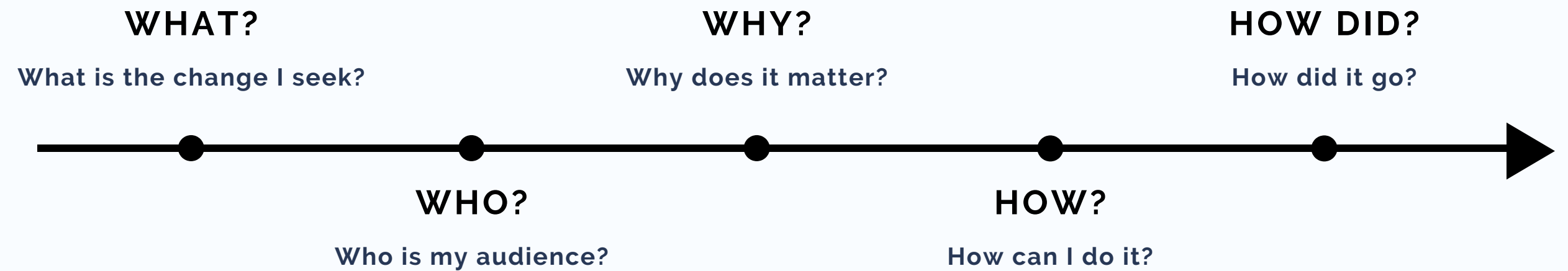
Snapchat

The Platform:
INSTAGRAM
A single story



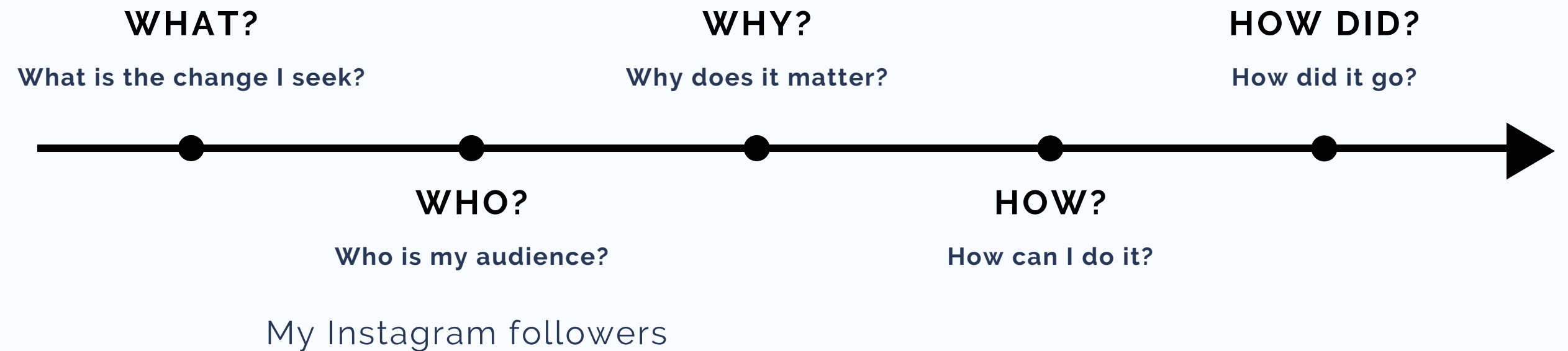
The Platform:
INSTAGRAM
A single story

That I have a better
understanding of what my
audience thinks about
Hydrology



The Platform:
INSTAGRAM
A single story

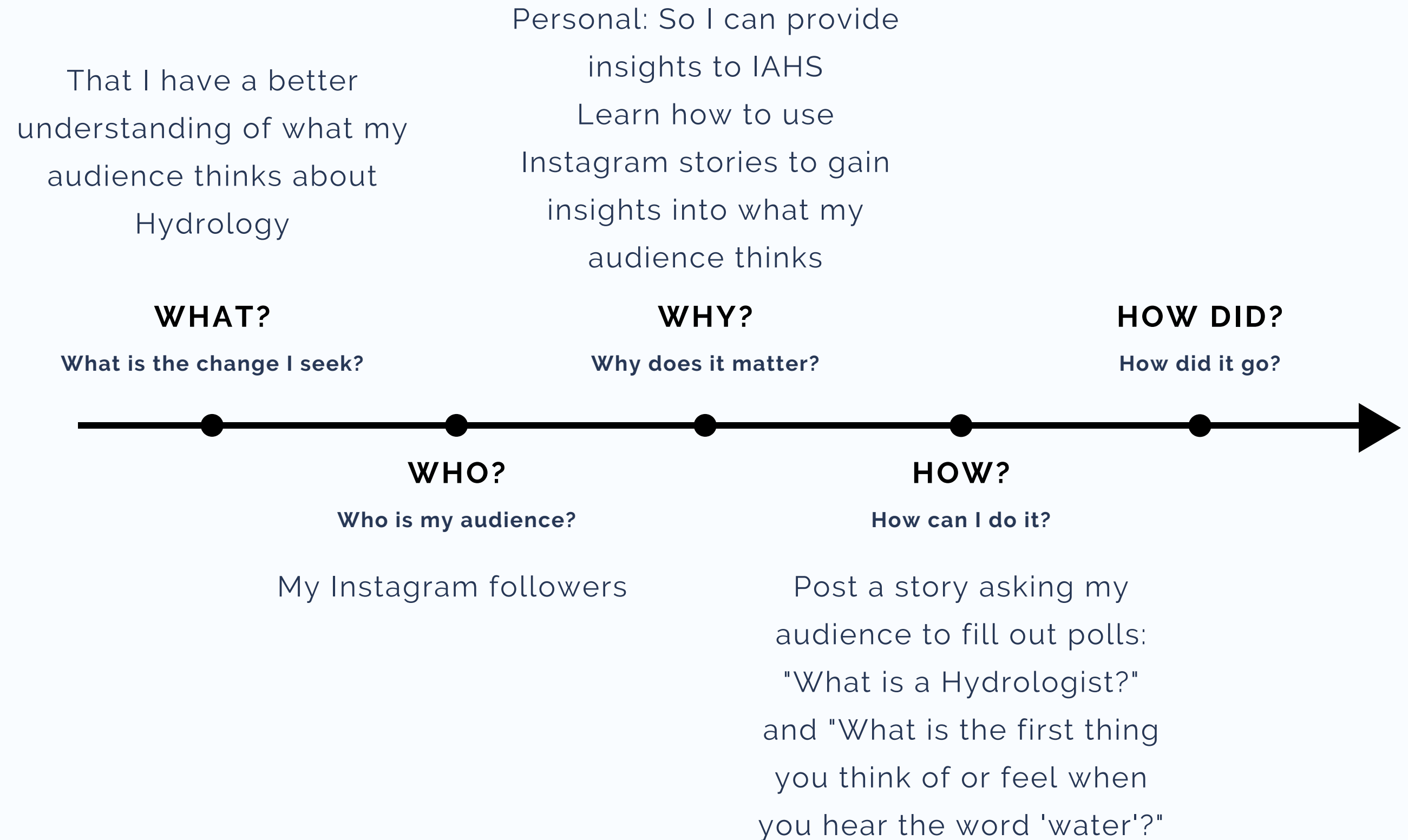
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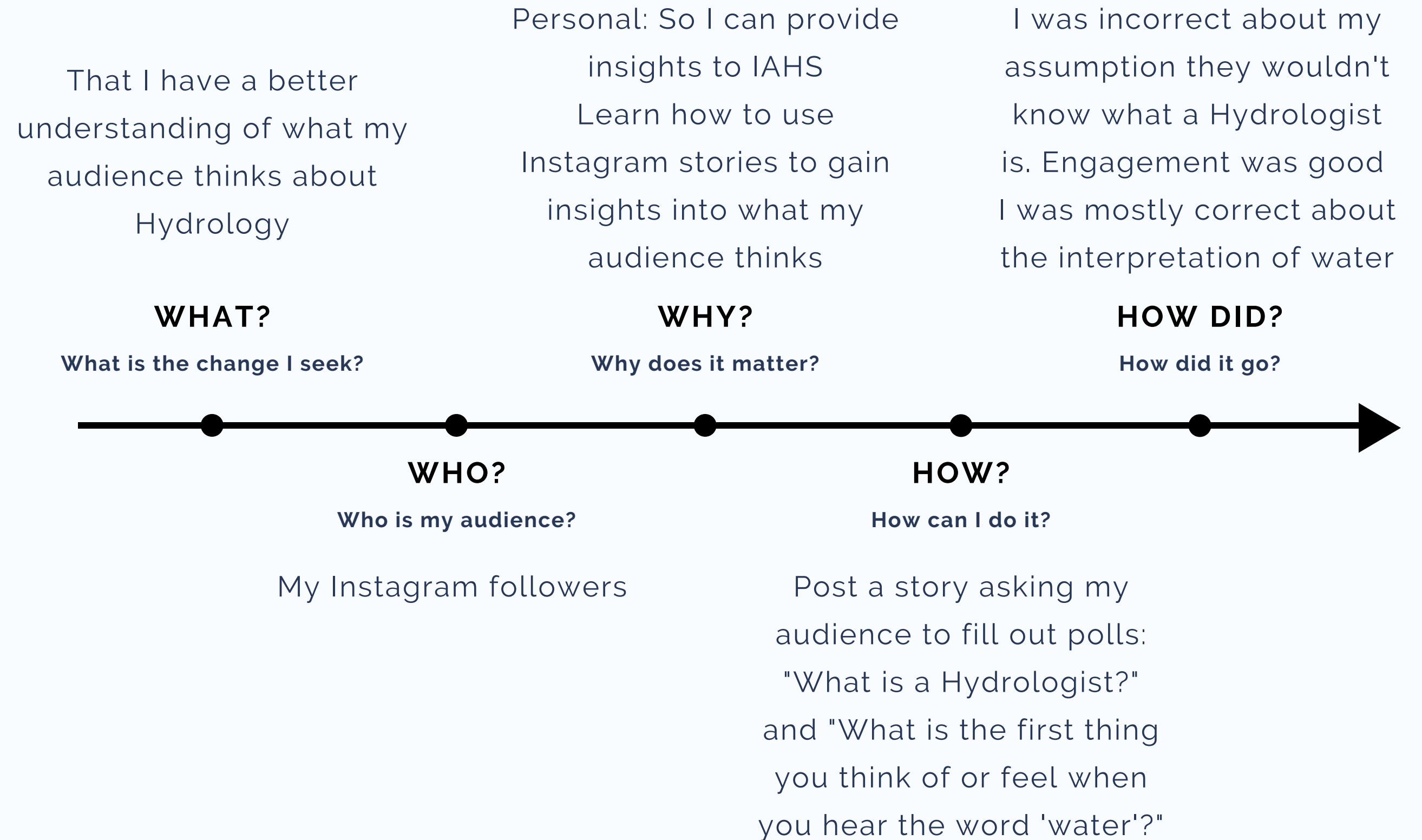
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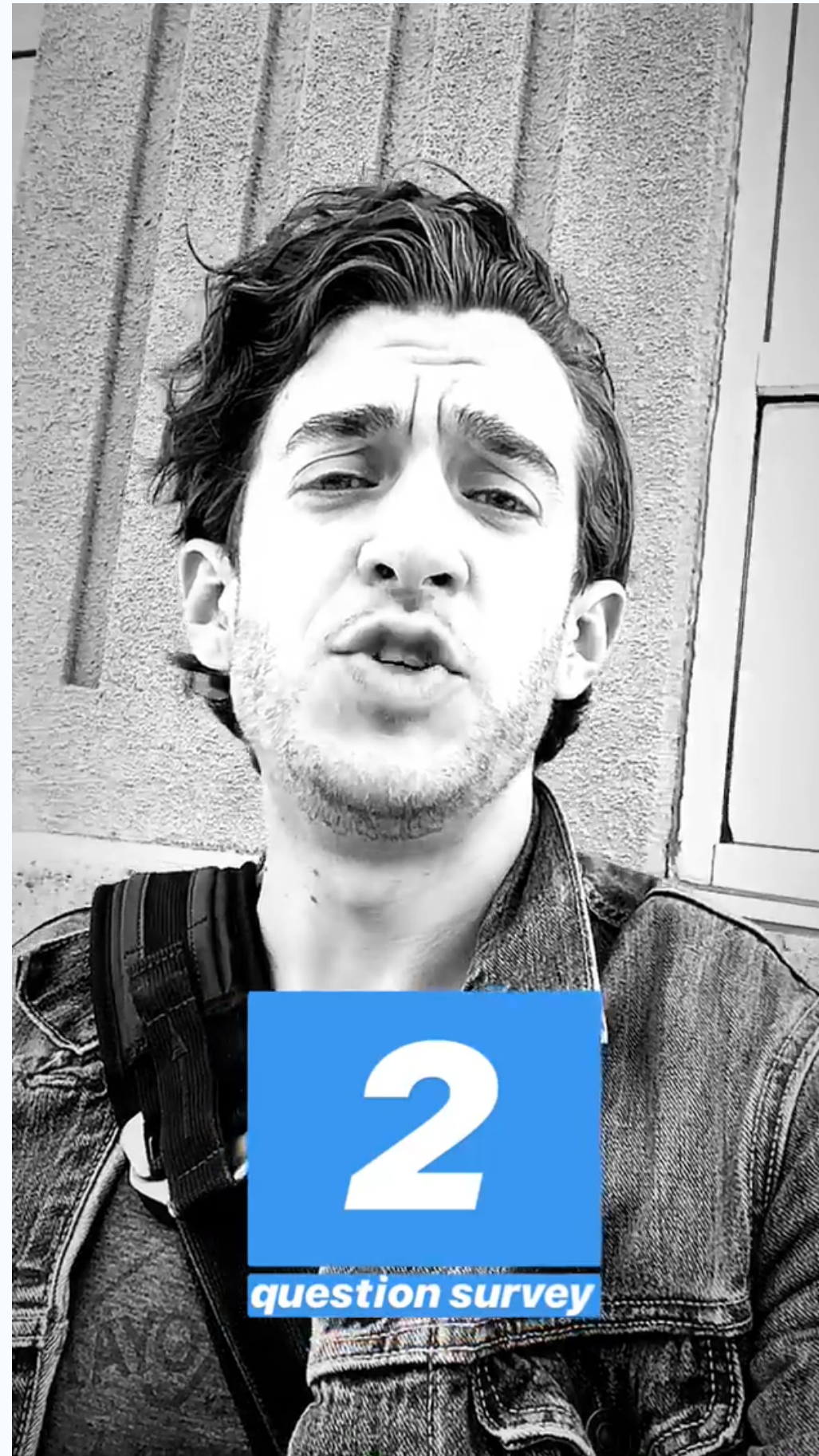
How did?

HOW DID IT GO?

**Assumption #1: Most respondents
would not have the correct definition
of Hydrologist**

How did?

HOW DID IT GO?



Question

#1

Please answer without
looking it up

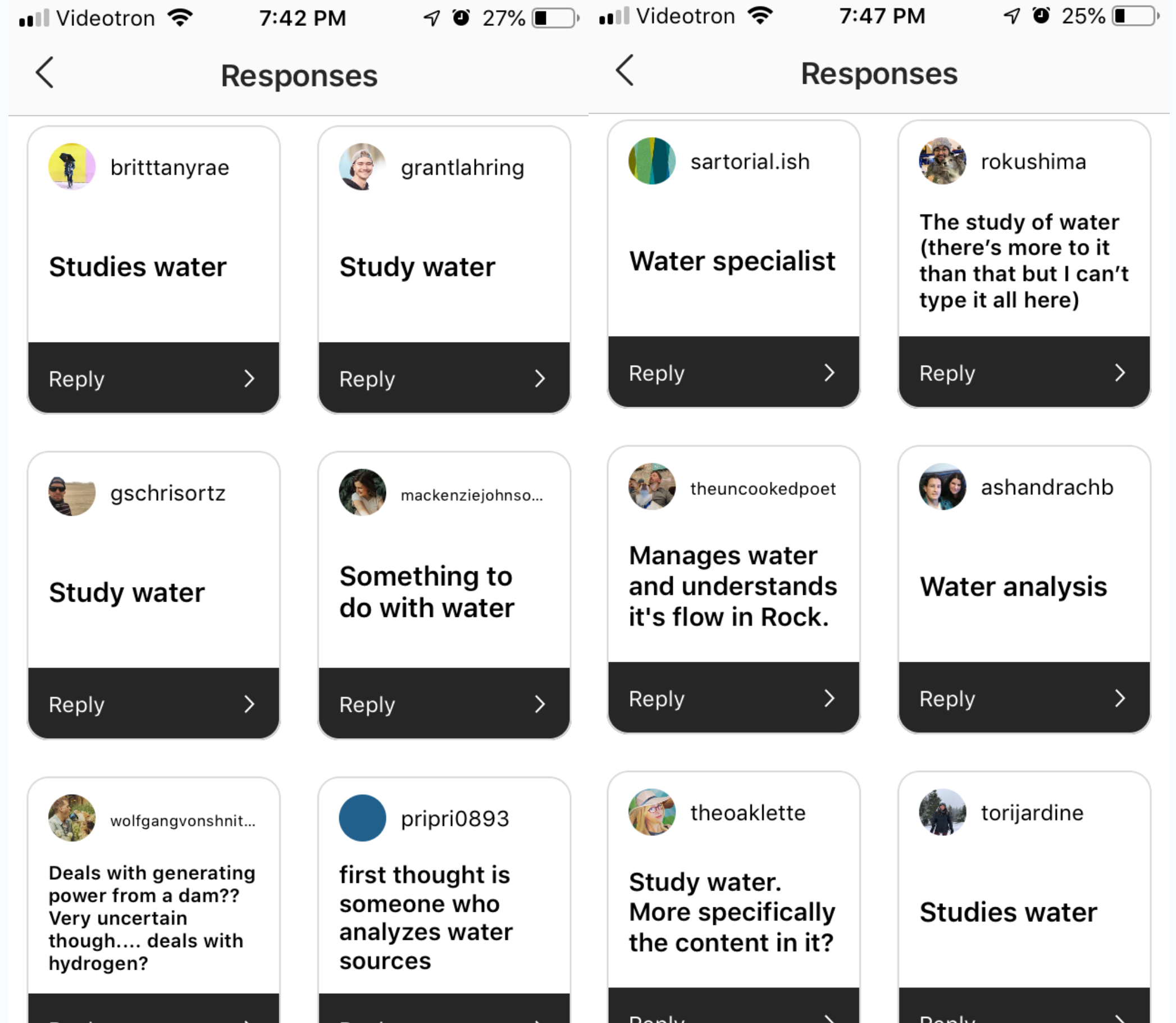


What does a Hydrologist
do?

Type something....

How did?

HOW DID IT GO?



How did?

HOW DID IT GO?

**Assumption #1: Most respondents
would not have the correct definition
of Hydrologist**

Wrong

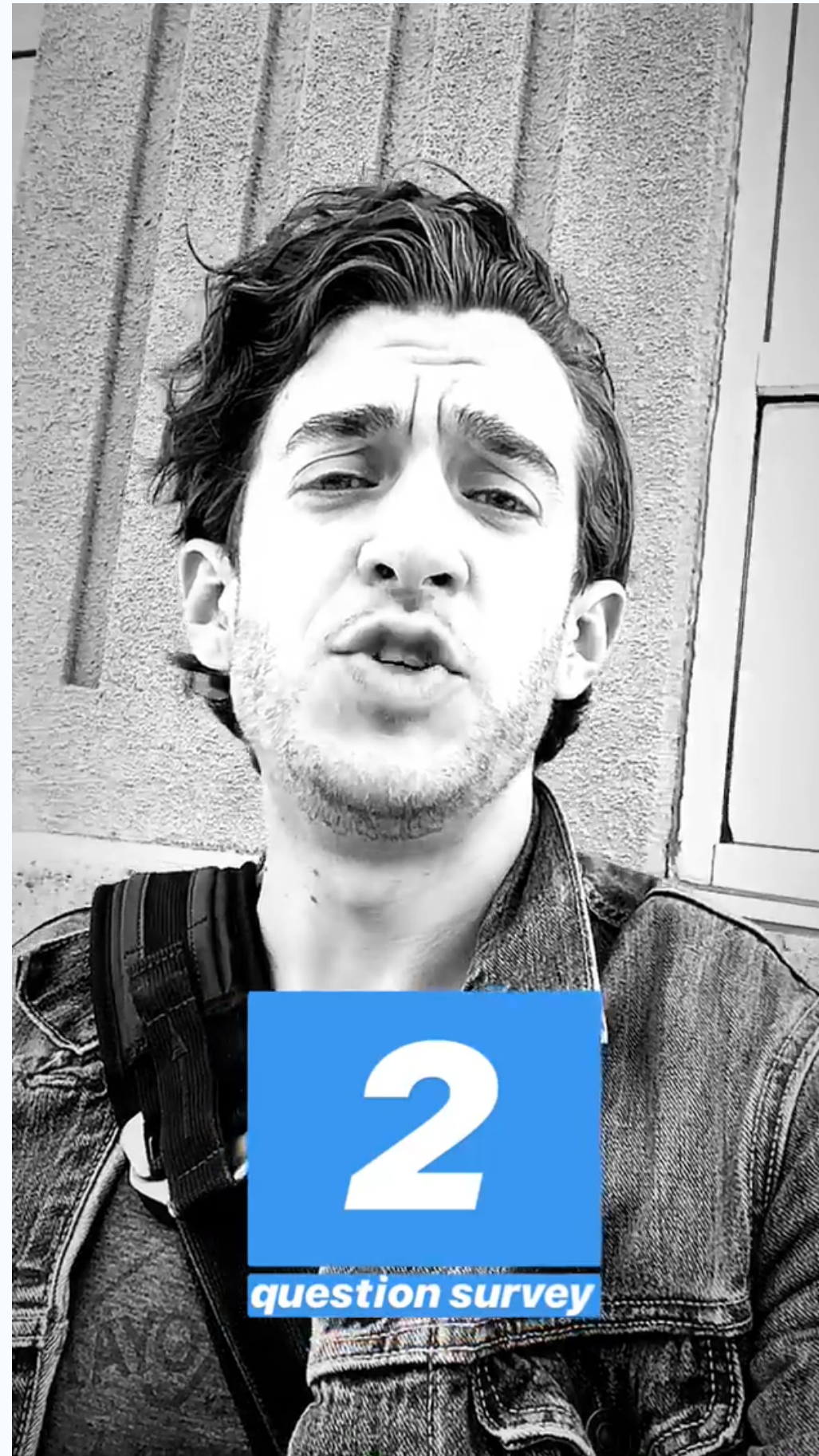
How did?

HOW DID IT GO?

Assumption #2: Respondents would associate 'water' with: Life, Purity, and Power.

How did?

HOW DID IT GO?



Question

#2

Ex: Life,
refreshment, etc.

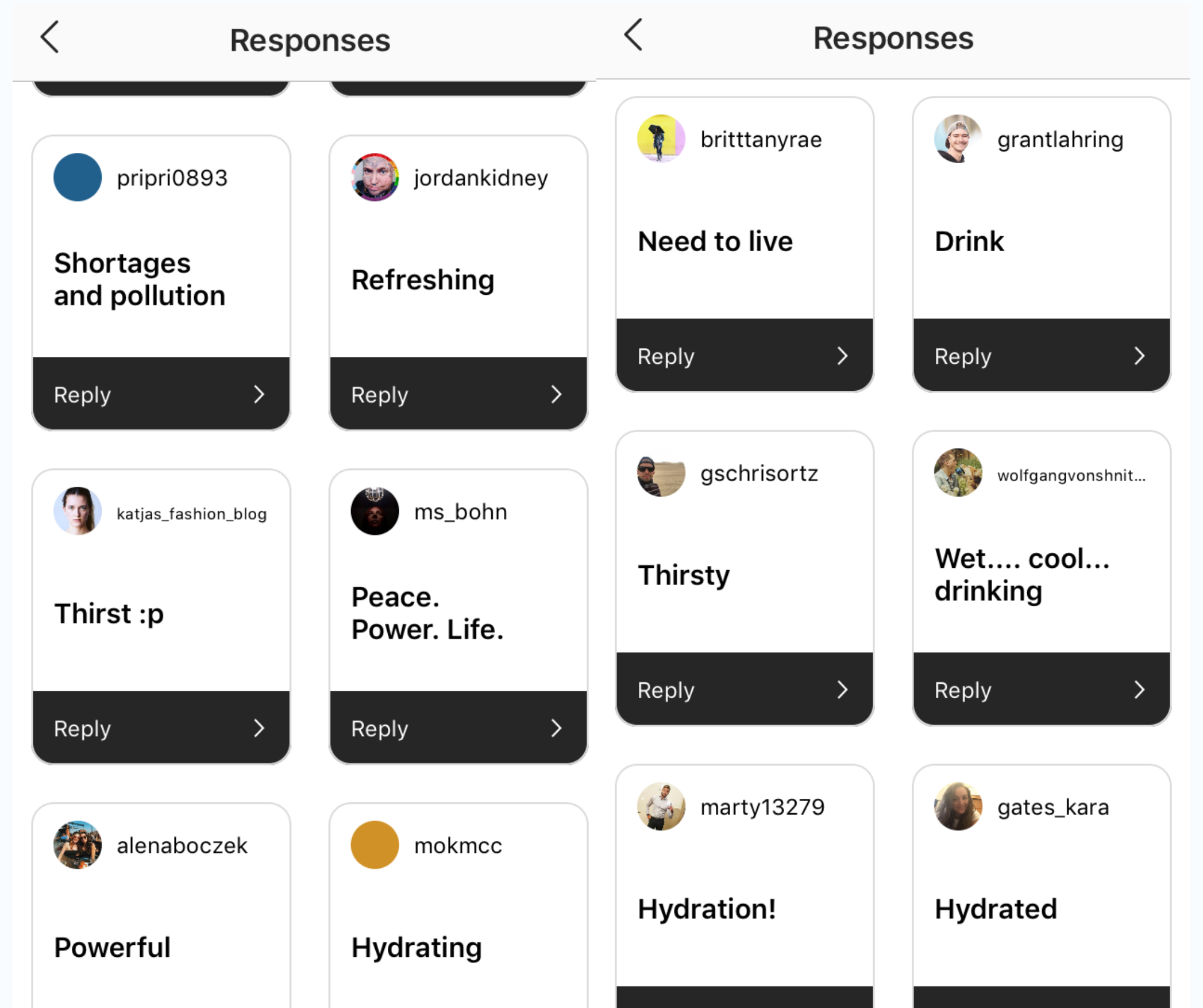


What's your first thought
or feeling when I say
"Water"?

Type something....

How did?

HOW DID IT GO?



How did?

HOW DID IT GO?

Assumption #2: Respondents would associate 'water' with: Life, Purity, and Power.

Mostly Right

WATER

LIFE.

PURITY.

POWER.



WATER

HYDRATE.

LIFE.

POWER.



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The Question Sequence

ASKING THE RIGHT QUESTIONS

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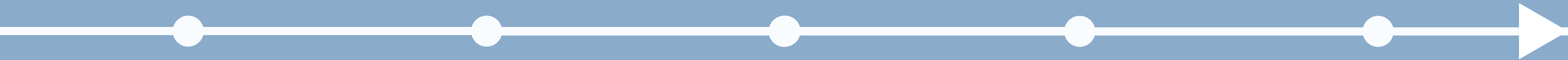
How did it go?

WHO?

Who is my audience?

HOW?

How can I do it?



Thank You

MAKE CONTACT. ●

SCIENCE COMMUNICATION

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