Asking the Right Questions: Data Collection for Health Information Outreach

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Discussion: What frustrating experiences have you had with data collection?

impossible to interpret

not credible

not applicable

too much data

Nailing data collection success

1. Decide what you need to know
2. Identify how to get the information you need
3. Design data collection tools to gather the information

FIRST IMPORTANT TOOL: A GOOD BLUEPRINT

The logic model - a tool to…

- Help organize your thoughts – both before and during a project/program
- Provide a framework for planning and evaluating programs
- Clarify intended outcomes
- Acts as a communication tool

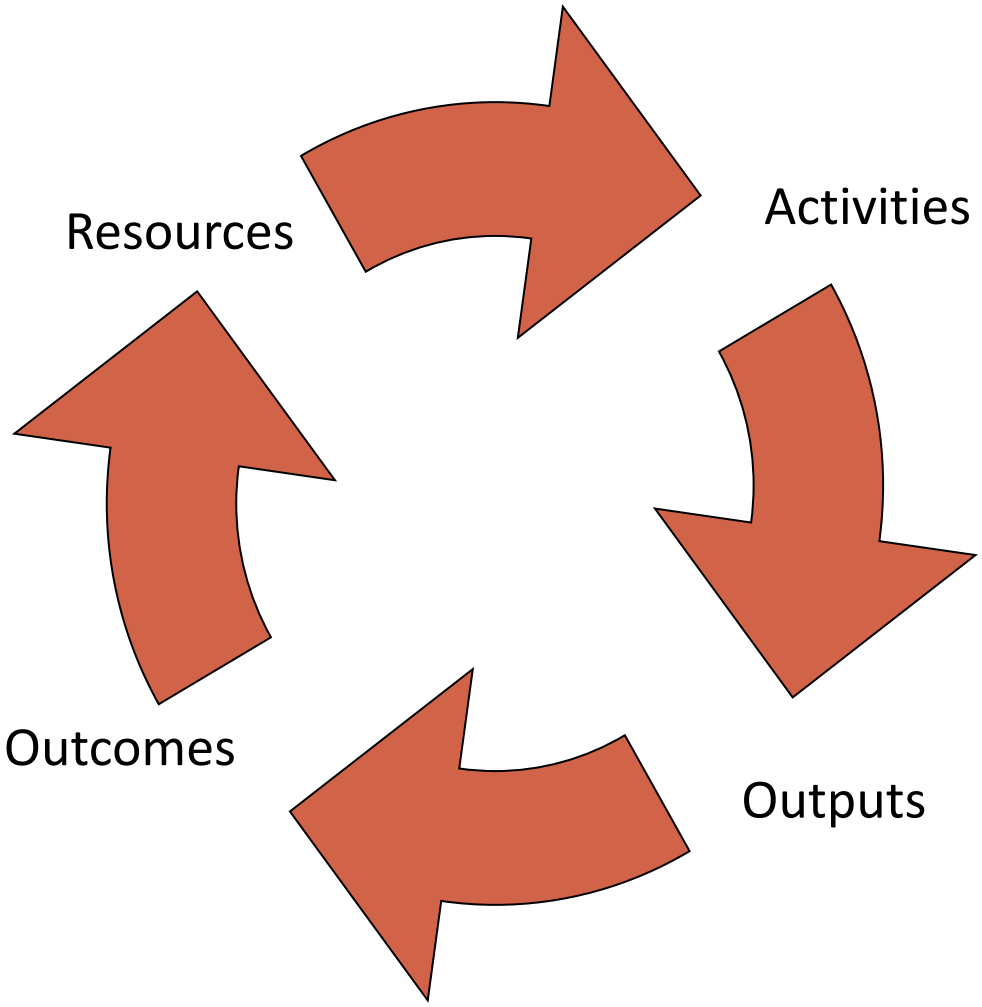
Good source for more information:

W.K. Kellogg Foundation Logic Model Development Guide
(pdf on your thumb drive; see class bibliography for link)

Pieces of the logic model

- Outcomes
- Activities
- Resource
- Outputs

The model may change over time



Logic model

Resources	Activity	Outputs	Outcomes

Logic model

Goal: Library collaborations support learning

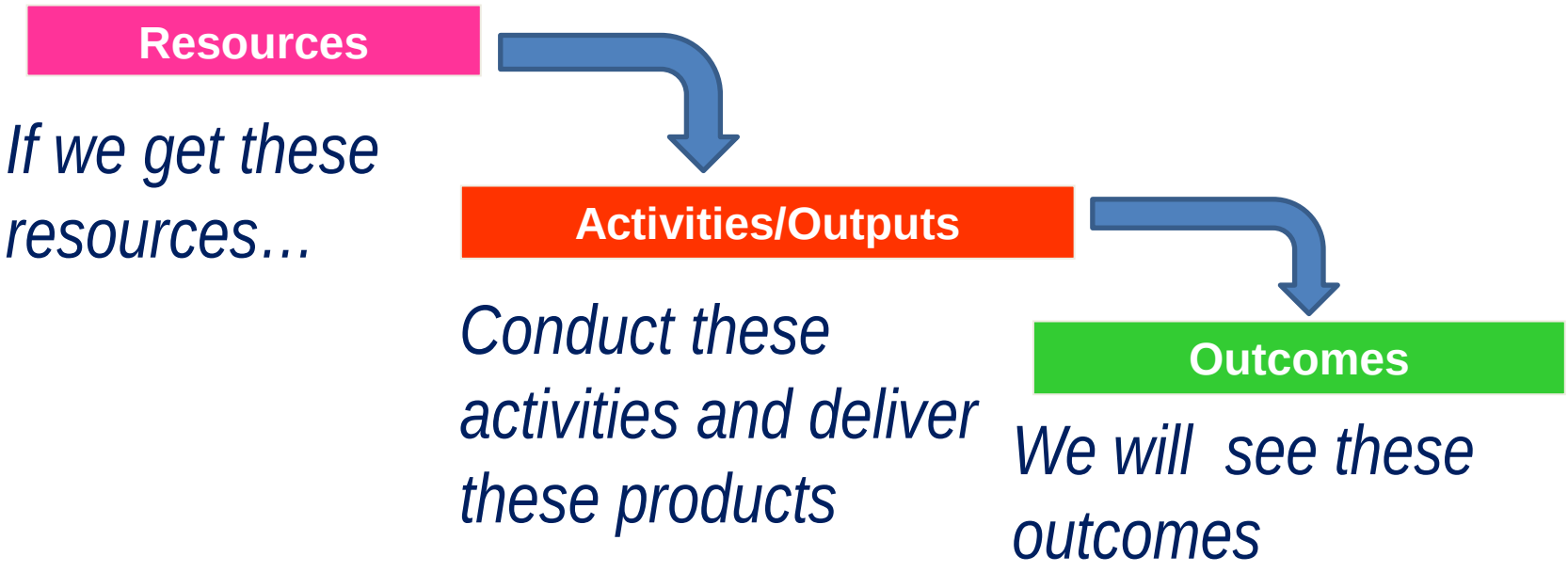
Resources	Activity	Outputs	Outcomes

Logic model

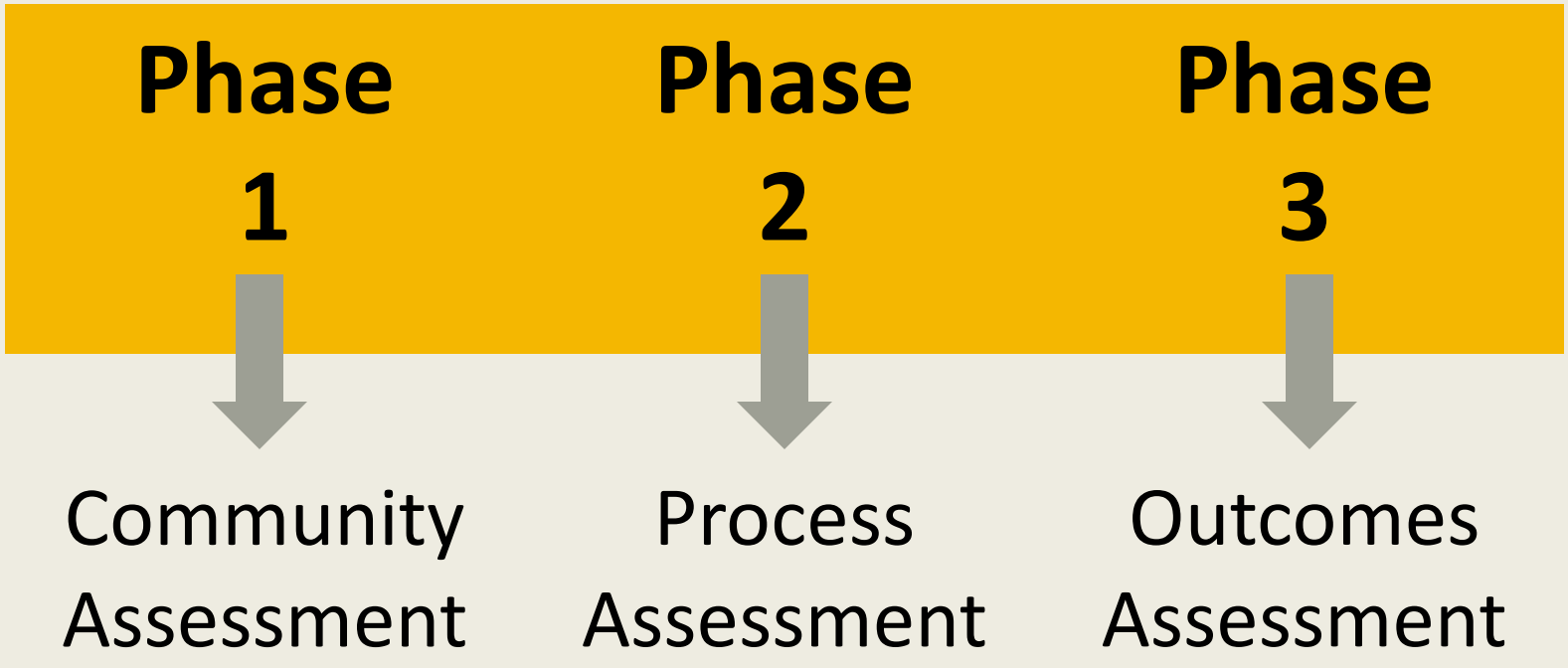
Goal: Library collaborations support learning

Resources	Activity	Outputs	Outcomes
Personnel, money, expertise needed	*What you will do*	*What your activity will produce – data, classes, brochures, etc.*	The SO WHAT – the benefits that accrue as a result of your program
Knowledgeable librarian, teachers	Collaboratively plan a lesson, project, or unit	Lesson plan Session with students Handouts? Assignments	teachers and librarians effectively collaborate on a lesson plan, project or unit
Budget & space	Budget staff time, find and schedule space	Staff time and space commitment	
	Document collaborations	Data demonstrating effect of collaborations on student learning	improved awareness of the library's role in teaching

Putting it all together



A thorough data collection plan has three phases

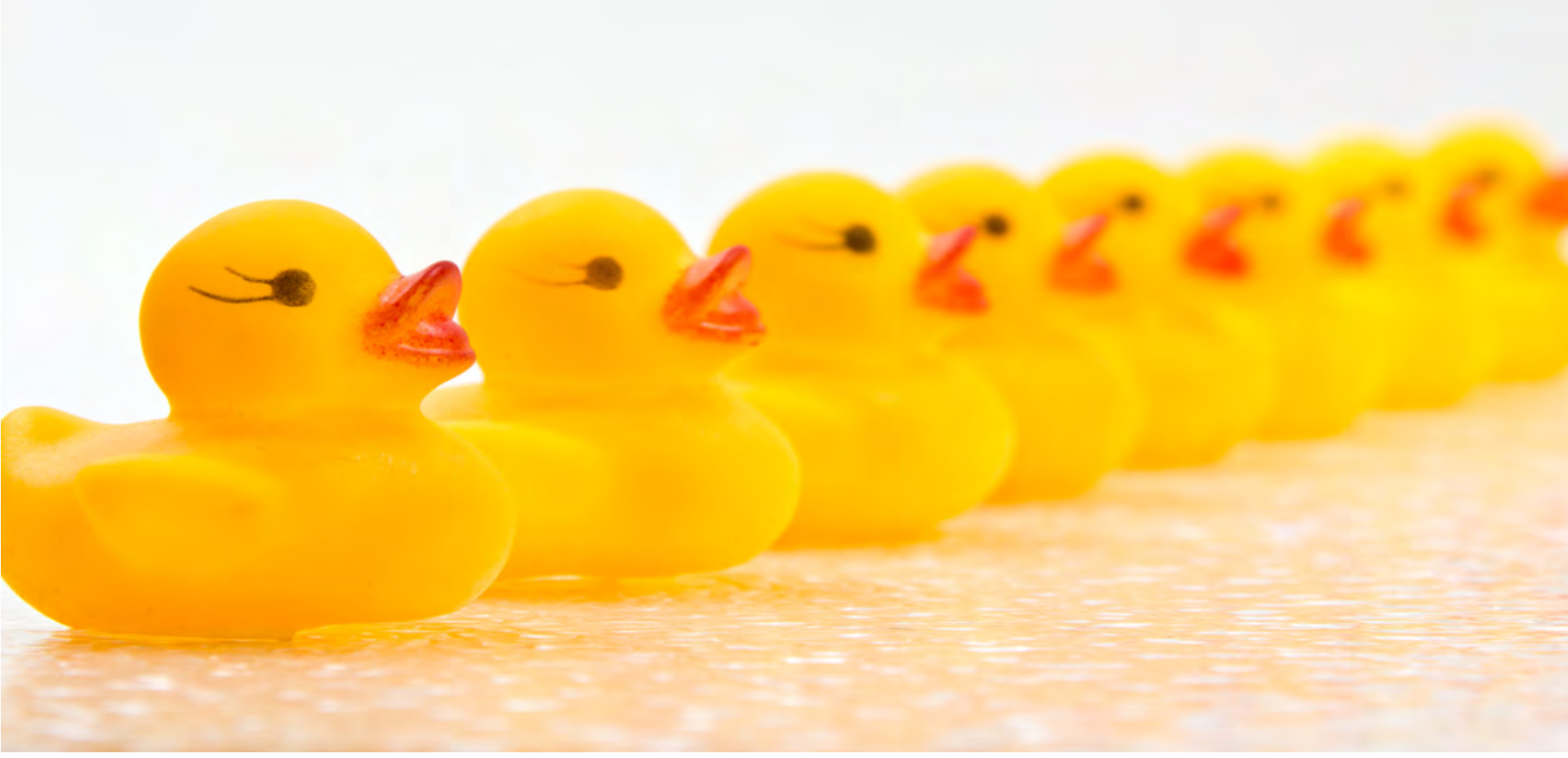


Phase 1:
Describe the program

Logic Model--Activities and resources

- Activities
  - What will you do?
- Resources
  - What you have
    - Income
    - Equipment
    - Collection
  - What you need
    - Operating expenses (e.g., personnel, acquisitions, maintenance, etc.)
    - Funds for new initiatives or services

Process Assessment lets you assess whether your project is on track



Logic Model: Outputs

- Outputs
  - How many did you do?
  - How many attended?
  - How many were distributed?
  - How many times was it used?

Here are some typical methods for assessing implementation

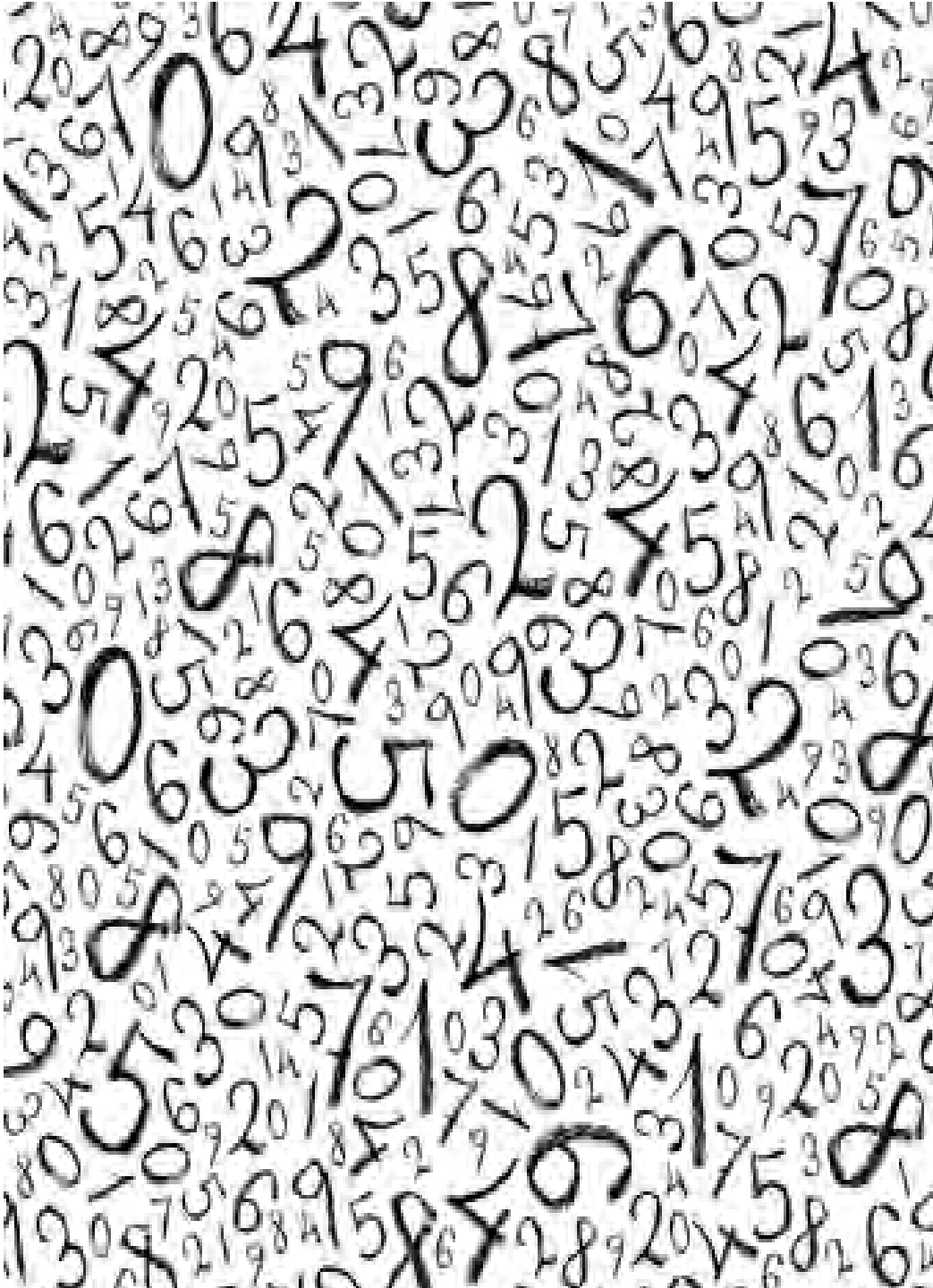
Attendance at workshops	153 consumers
Number of sessions	22
Participant satisfaction	Grade A or B = 87%
Number of public libraries linking to MedlinePlus	12
Number of brochures distributed at public libraries	809

Outcomes assessment demonstrates results and value of your program

Logic Model: Outcomes

- Outcomes - *changes* in attitude, behavior, skills, knowledge or situation
  - Short, medium and/or long term
  - Intended or unintended
  - Positive as well as negative
  - S.M.A.R.T.

QUANTITATIVE DATA



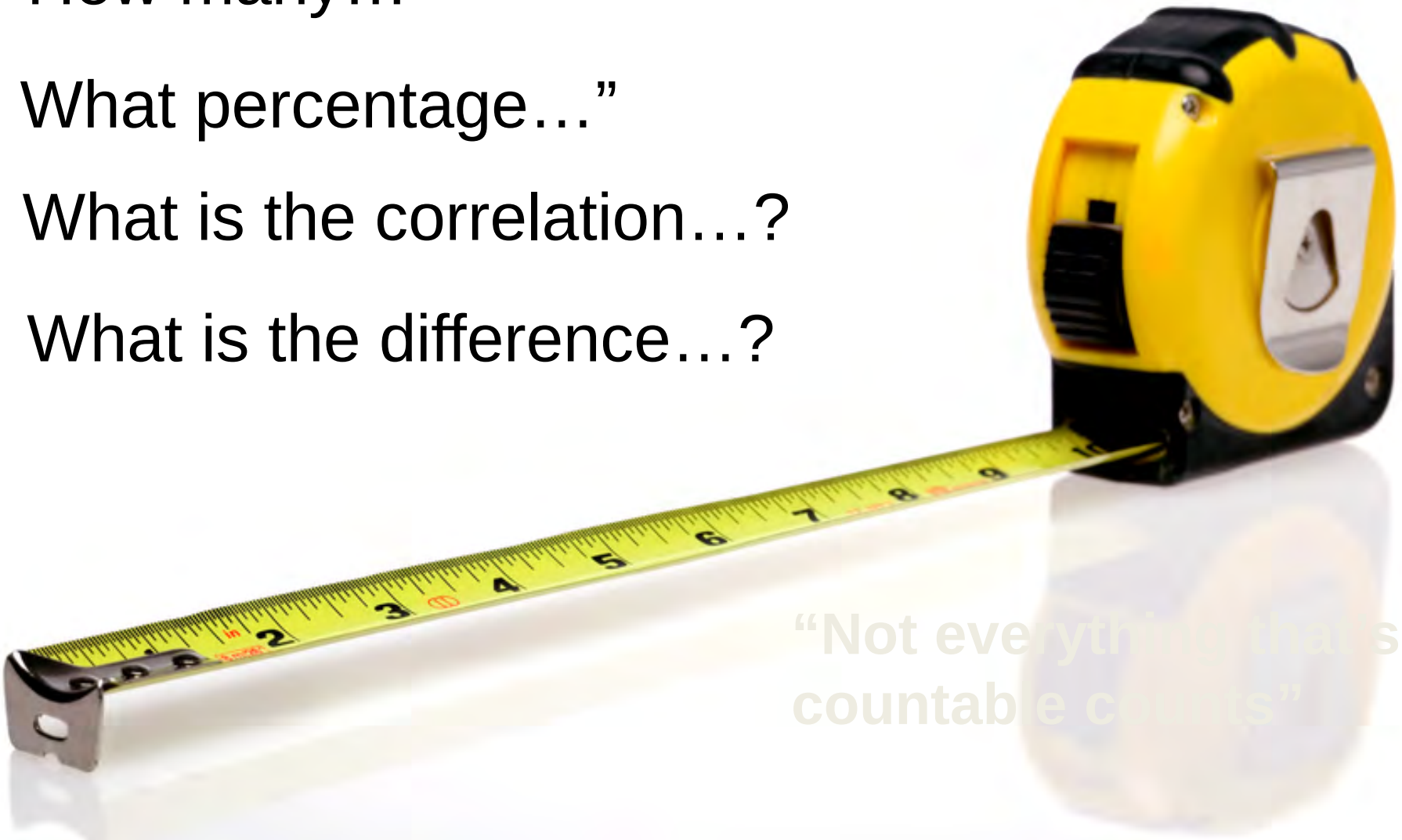
What is the average…”

How many…”

What percentage…”

What is the correlation…?

What is the difference…?



How close are we to our objective target?

Writing Items for Questionnaires

Organize by Topic

- Do questions flow logically?
- How can you organize questions to make them easier to answer?
- Will preceding questions introduce bias?

Yes-No questions

Have you ever taken a MedlinePlus training session offered by a regional medical library?

☐ Yes

☐ No

Yes-No questions

Have you ever taken a MedlinePlus training session offered by a regional medical library?

- ☐ Yes
- ☐ No
- ☐ Don’t know

“Check All (?)-That-Apply”

In the past year, have you used online health information resources to (check all that apply):

___Research a health concern?
___Find information for someone else?
___Look up something you heard in the news?
___Make a presentation?
___Find a health care professional?
___Other

Alternative to “Check All That Apply”

In the past year, have you used online health information resources to (circle yes or no)?

Y N Research a health concern?
Y N Find information for someone else?
Y N Look up something you heard in the news?
Y N Make a presentation?
Y N Find a health care professional?
Y N Other

“Best Options” should provide everyone’s best option

Which of the following sources are you most likely to go to *first* when you have a question about your health? (Choose one)

___ The Internet
___ Print materials
___ A health care professional
___ A family member
___ A friend

“Best Options” should provide everyone’s best option

Which of the following sources are you most likely to go to *first* when you have a question about your health? (Choose one)

___ The Internet
___ Print materials
___ Your doctor/health care provider
___ A family member
___ A friend
___ Other
___ I don’t look up health information

Use an equal number of positive and negative options

How would you rate the quality of the training you received today?

A=Excellent
B=Very Good
C=Good
D=Fair
E=Poor

A=Excellent
B=Good
C=Fair
D=Poor
E=Very Poor

Don’t “double bank”

“How would you rate the quality of education you are getting at Washington State U”

1

___ Excellent ___Good ___Poor
___ Very Good ___Fair

2

_____Excellent
_____Very Good
_____Good
_____Fair
_____Poor

Don’t “double bank”

“How would you rate the quality of education you are getting at Washington State U”

1

___ Excellent 40% ___Good ___Poor
42% ___ Very Good ___Fair

2

_____Excellent
49% _____Very Good
31% _____Good
_____Fair
_____Poor

Equal spacing and numbers indicate "intervals"

I am more likely to take workshops that offer continuing education credits.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Don't Know/ NA
1	2	3	4	5	

Polar-point scales had more noncommittal responses

I am more likely to take workshops that offer continuing education credits

Strongly Agree	1	2	3	4	5	Strongly Disagree

Polar-point scales had more noncommittal responses

I am more likely to take workshops that offer continuing education credits

Strongly Agree	1	2	3	4	5	Strongly Disagree

Put most positive responses at top

I am more likely to take workshops that offer continuing education credits

__ Strongly agree

__ Somewhat agree

__ Neither agree nor disagree

__ Somewhat disagree

__ Strongly disagree

Ask only one question at a time

How likely are you to run searches for the doctors and nurses at your hospital?

___ Very likely
___ Somewhat likely
___ Not sure
___ Somewhat unlikely
___ Very unlikely

Ask only one question at a time

How likely are you to run searches for the doctors and nurses at your hospital?

___ Very likely
___ Somewhat likely
___ Not sure
___ Somewhat unlikely
___ Very unlikely

Avoid rank-ordered questions

Please rank the following habits in terms of how difficult they are for you to follow, with 1 being the *least* difficult and 5 being the *most* difficult

___ Eating 5 servings of fruits and vegetables daily
___ Exercising at least 30 minutes on most days
___ Not smoking
___ Avoiding sweets
___ Maintaining a healthy weight
___ Drinking alcohol in moderation (1-2 servings a day)

How people may react to demographic questions

What is your annual income? What is your race/ethnic background

What is your gender, profession, zip code?

Put most demographic questions at the end

Use progress bars

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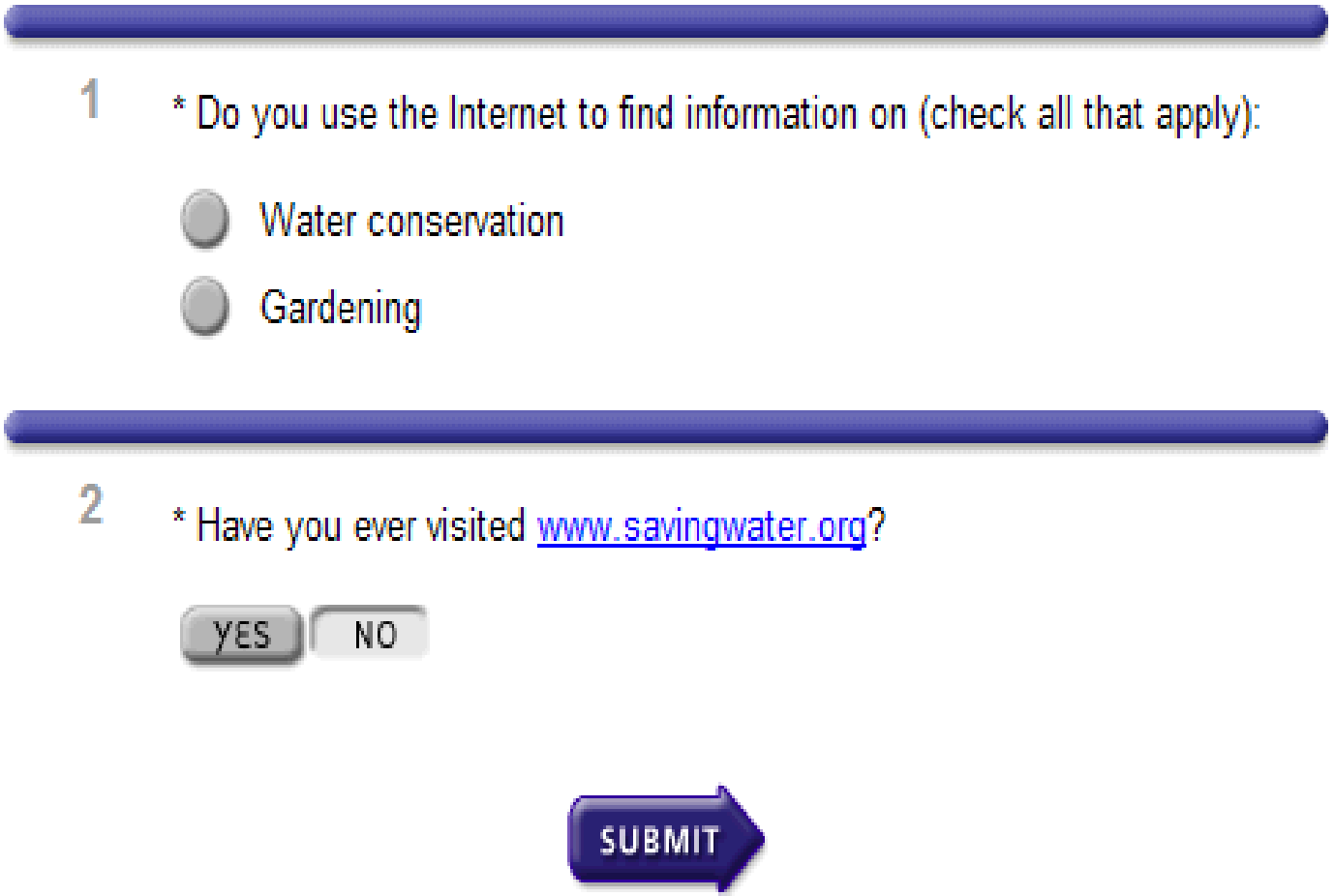
Avoid forced response questions



Pilot-testing the Questions

- Is the question consistently understood?
- Do people have the information they need to answer the question?
- Are people willing to answer the question?

Getting responses

Social exchange theory predicts response

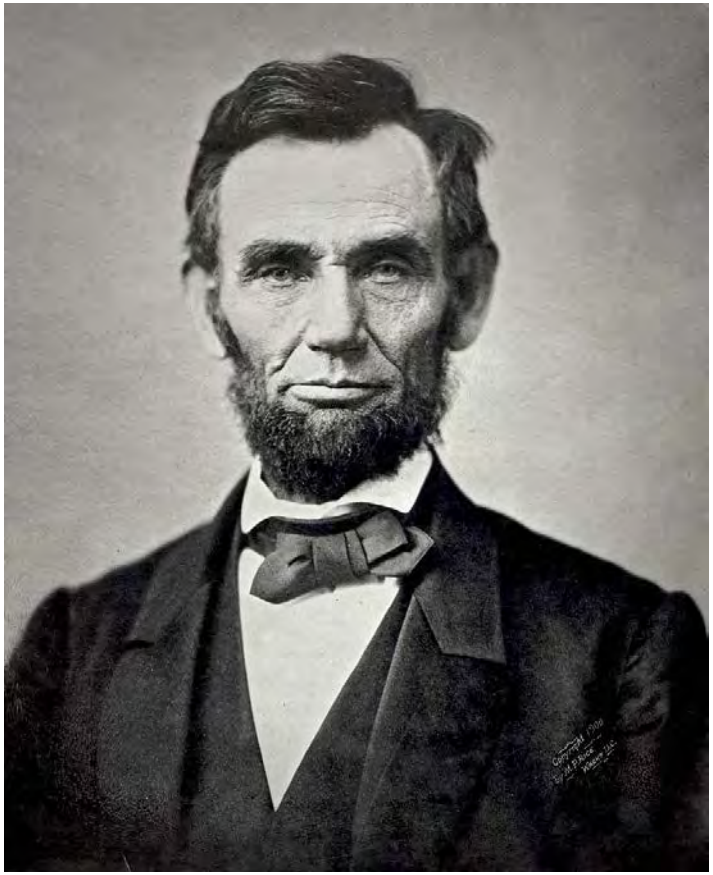
Perceived cost + **Perceived reward** + **Trust** = **Response rate**

Dillman, et al., *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method, Third Edition.* Hoboken: Wiley, 2009.

Polling agency response rates for 2008 presidential polls

- Gallup – 14%
- Zogby – 28%
- Rasmussen – N/A
- George Washington U – N/A

Increase trust



Credit: Library of Congress, Washington, D.C

Participants respond to requests from people they know and like

Do gifts increase reward?

How incentives affect response rate

Incentive in preliminary letter	Response Rate
None	20.7%
$1 Cash	40.7%
$5 Cash	48.7%
$5 Check	52.0%
$10 Check	44.0%
$20 Check	54.0%
$40 Check	54.0%
Promise of $50	23.3%

Obligation works better than enticement

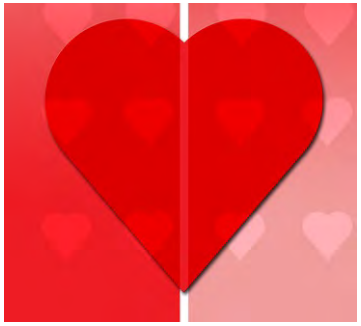
Cost of Obligation

Cost of Motivation

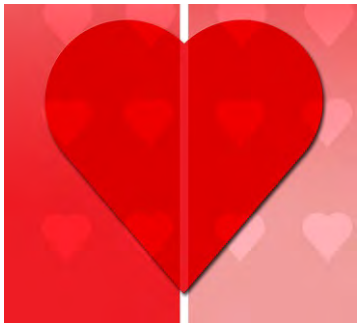
One researcher reported a 79% response rate using this approach

Activity	Response rate
One week prior: Pre-notification letter	--
Day 1: Email questionnaire	25%
Day 7: Email reminder	46%
Day 11: [Emailed and Mailed questionnaire]	68%
Day 15: Email reminder	--
Day 25: 71% response rate	71%
Day 32: 79% response rate	79%

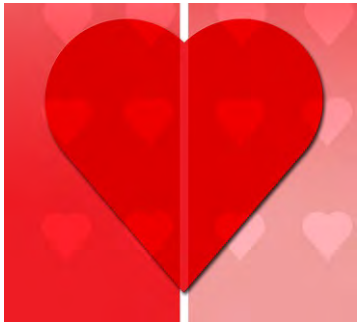
Show them you care



First class postage



Preliminary request



Special follow-ups

Use some key tools to assess response rates

Strategy 1	Compare sample profile to population
Strategy 2	Compare early and late responses
Strategy 3	Contact a small percentage of non-respondents with key questions for comparison

QUALITATIVE DATA FILLS IN THE DETAILS

Not everything that counts can be counted"

Qualitative data answers these questions

What worked best?

What did not work well?

What barriers were encountered?

How was the program useful?

What do the quantitative findings mean?

Qualitative data answers these questions

What do the quantitative findings mean?

Comments and feedback allow you to assess quality of your program

The instructor made it easy to find health information

The brochures are popular. Do you have any in Spanish?

Where do you find qualitative data?

Interviews

First decision: How many interviewees per session?

One-to-one

Focus group

Town Hall

Second decision: How much structure in the interview guide?

Unstructured	Semi-Structured	Standardized
•No guide •Conversational •Informal	•Checklist of topics to cover •Interviewer adjusts to conversation	• Question guide carefully worded • Interviewers stick to guide
•More details •Exploratory •Requires more skill		• Fewer details • Confirming • Requires less skill

Conducting the Interview

"Do you have anything to say before I find you guilty?"

How to develop the interview guide

It is the responsibility of the interviewer to provide a framework within which people can respond comfortably, accurately, and honestly to open-ended questions

-- Michael Q. Patton

Make your questions open-ended

How satisfied are you with the program?

Make your questions open-ended

How satisfied are you with the program?

Better: *How do you feel about the program?*

Be clear about the information you want

- *Why do you use online consumer health databases or portals you mentioned earlier?*

Be clear about the information you want

- *Why do you use online consumer health databases or portals you mentioned earlier?*
- Better: *Give me some examples of health topics you researched online.*

Be clear about the information you want

- *Why do you use online consumer health databases or portals you mentioned earlier?*
- Better: *Give me some examples of health topics you researched online.*
- Better: *You said you use WebMD to get health information. What things about the site appeal to you?*

Ask neutral questions

- *We know that most people have had problems with using our Web site. What is your experience?*

Ask neutral questions

- *We know that most people have had problems with using our Web site. What is your experience?*
- Better: *Some people find our Web site easy to use while others have trouble. What is your experience?*

Be sensitive about sensitive issues

- *Give an example of a time you did not do what your doctor told you to*?

Be sensitive about sensitive issues

- *Give an example of a time you did not do what your doctor told you to*?
- Better: *Suppose your doctor told you to take a drug or have a procedure or get a treatment. What are some reasons you might not do it?*

Use a “social exchange” question sequence

Small talk

Experience

Attitudes

Sensitive information

Social Exchange	Interview with school nurse
Small talk	“How long have you been the nurse here at ____?
Experiences	“Describe a time when you needed health info on the job”
Attitudes, feelings, beliefs	Do you have adequate access to health information…?
Personal Info	How would you rate your online search skills?

Learn to listen

RASA	
Receive	Pay attention
Appreciate	Show appreciation verbally
Summarize	Repeat what you heard
Ask	Increase your understanding with follow-up questions

How to choose interviewees (Purposeful Sample)

Convenience sampling is least credible

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PLAY VIDEO

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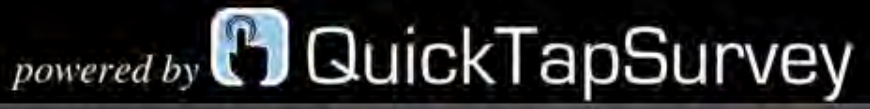
START

Thank you for providing us with feedback about our resources

START



Did you learn about a new resource that you plan to use?

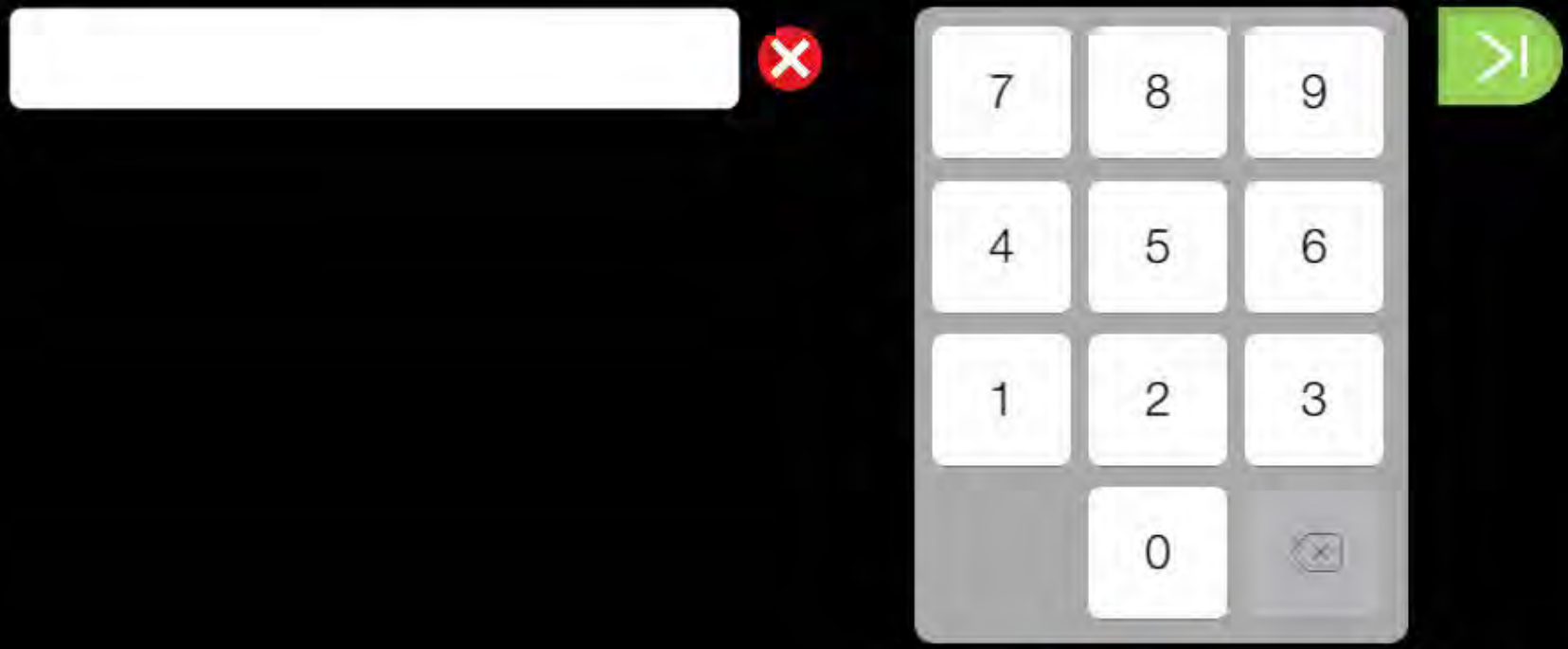
powered by QuickTapSurvey

Which resources are you likely to use?

- MedlinePlus
- ToxNet
- Household Products
- Clinical Trials

powered by QuickTapSurvey

What is your zip code?



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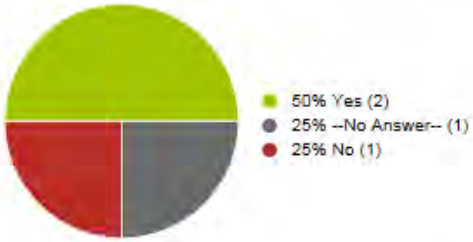
Surveys » Survey Responses » Analytics

Analytics: Exhibit Questionnaire

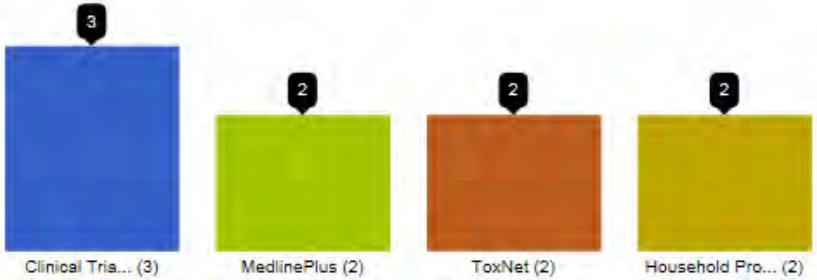
2. Did you learn about a new resource that you plan to use?

Results based on 4 responses to this question



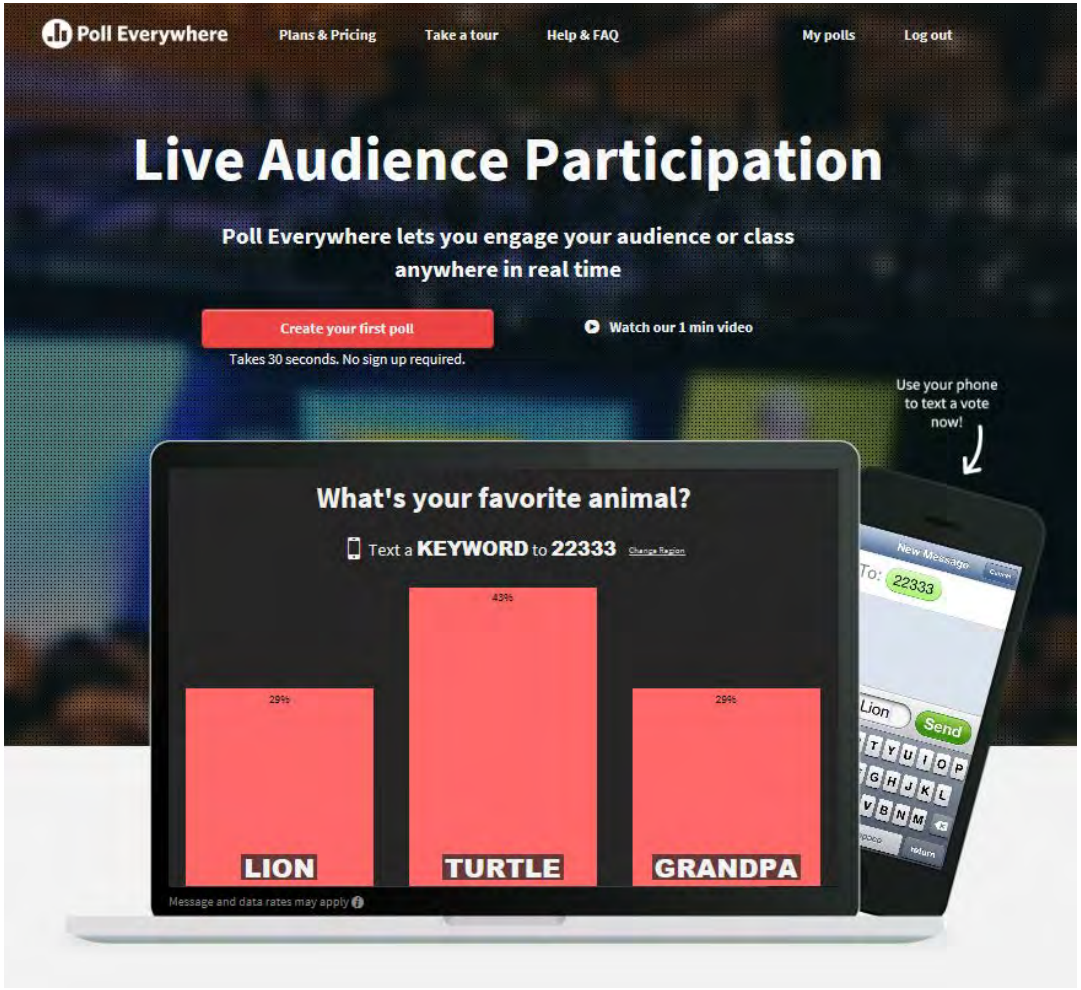
3. Which resources are you likely to use?

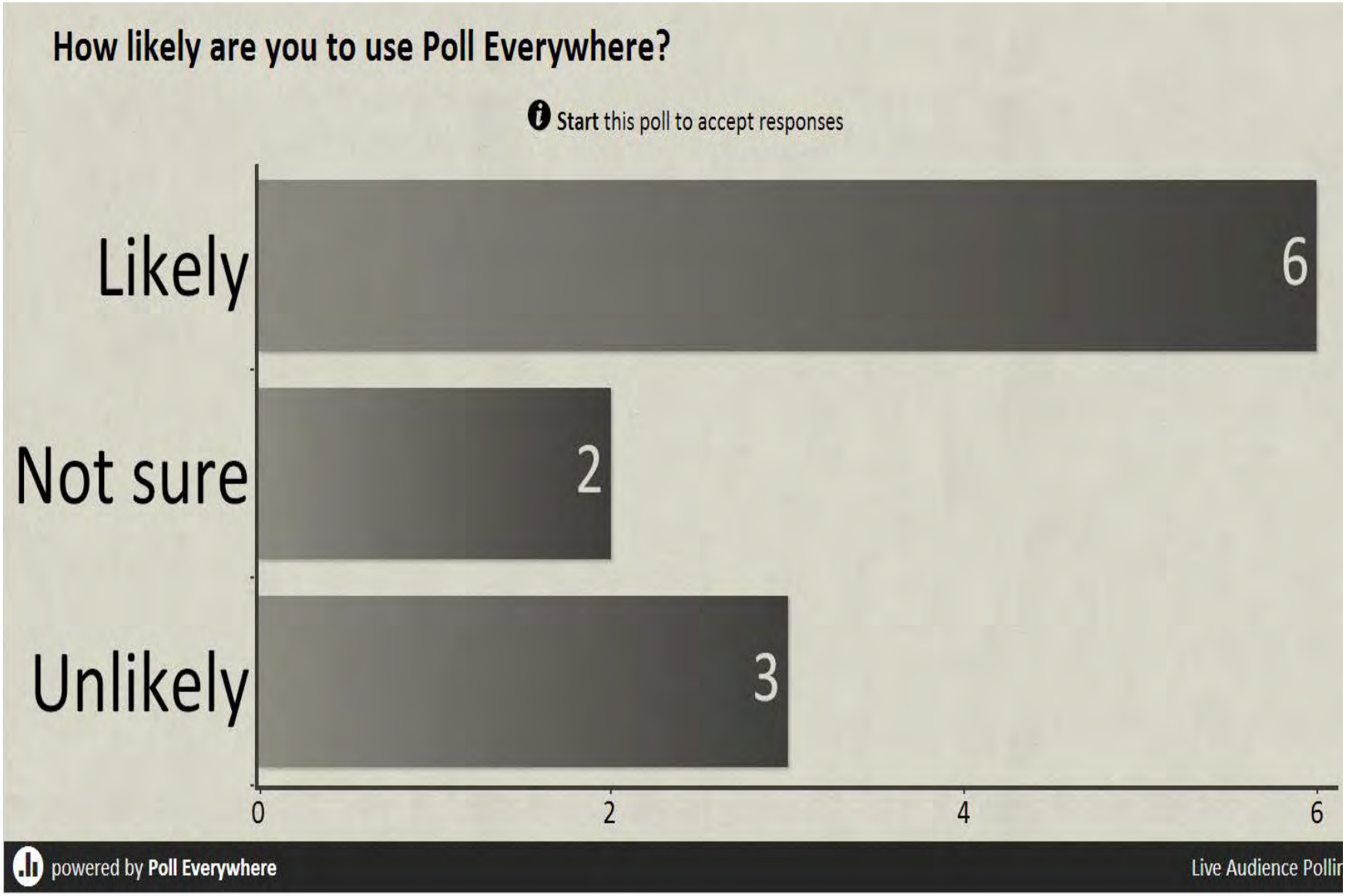
Results based on 4 responses to this question



Poll Everywhere

http://www.polleverywhere.com/

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Unlikely
3
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Now you try it

NN/LM Outreach Evaluation Resource Center

Web Address:
http://nnlm.gov/evaluation/

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