Questionnaire Design
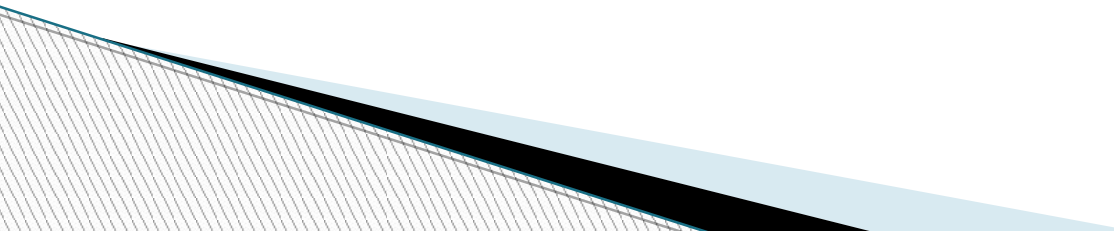
Developing a questionnaire so you get the information you want!

Questionnaires are...

- ▶ Data collection instruments used to collect standardized information
- ▶ Basic instruments of surveys and structured interviews
- ▶ Appropriate when...
  - ○ you want information from many people
  - ○ you have some understanding of the situation and can ask meaningful questions
  - ○ information is sensitive or private – people may be more willing to answer an anonymous questionnaire; may reduce bias

Questionnaires

Advantages

- can reach large numbers
- provides for anonymity
- relatively inexpensive
- easy to analyze

Disadvantages

- might not get careful or honest information
- wording can bias client's response
- might not be returned (low response rate)
- requires literacy skills

Think about whether a written questionnaire is culturally appropriate to use

Consider:
- Literacy level
- Tradition of reading, writing
- Setting
- Not best choice for people with oral t
- Translation (more than just literal translation)
- How cultural traits affect response – response sets
- How to sequence the questions
- Pretest questionnaire may be viewed as intrusive

Checking in…

What do you think is involved

in developing a good questionnaire?

(check all that apply)

1. Knowing what you want to find out

2. Not using jargon

3. Knowing your audience – who will complete the questionnaire

4. Writing succinct, clear questions

5. Pilot testing

If you checked

all the answers

in the previous slide,

you are RIGHT!

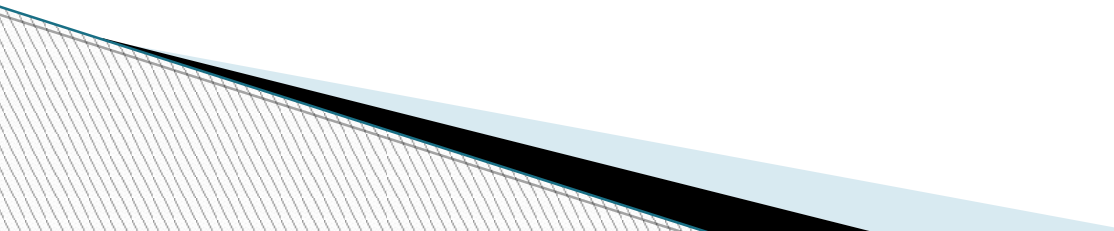These are just a few, of the many things, we need to consider when we develop a questionnaire.

Developing a good questionnaire is NOT EASY!

▶ It takes time, time, and more time.

▶ You may end up writing multiple drafts.

  (Even a dozen!)

▶ It helps to work with others when developing a questionnaire.

▶ And, ALWAYS pilot test your questionnaire.

Things to think about:

- Kind of information: What do you want to know? Is the information already available?

- What do you NEED to know vs. "would like to know"

- Who will complete the questionnaire – when? (think about readability, length, interest in the topic, etc)

  - Consider the respondent: his/her ability, willingness, culture

Identifying characteristics of the respondents is important because:

- Their educational backgrounds and reading levels determine the most effective wording

- Their ages and writing abilities will affect the type of question you use

- Their potential interest in the topic affects what you need to do to ensure they respond

- Physical and ability levels may dictate how the questionnaire is administered.

Things to think about …

1. The question
   - open or closed ended
   - wording of the question
   - include instructions for how to answer the questions (e.g., Circle one; Check all that apply)
2. The response
   - wording of the response option
3. Layout and design of the questionnaire
   - order of the questions
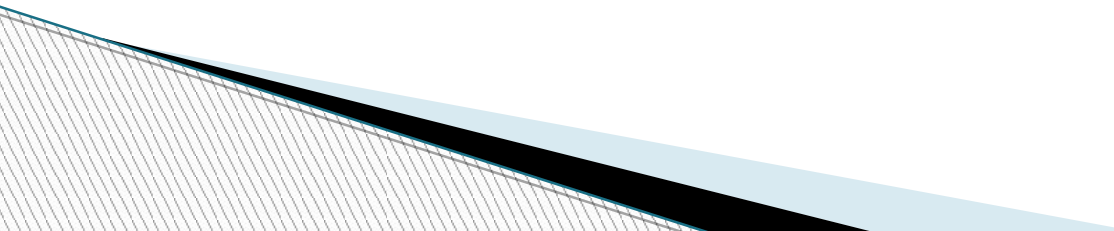   - visual presentation

Question wording

Types of questions

1. Open-ended questions– allow respondents to express their own ideas

    and opinions

e.g., What have your learned as a result of participating on the county board?

2. Closed-ended questions– list answers and respondents select either one

    or multiple responses

Examples follow

Examples: Open and closed-ended

Open-ended

What have you learned as a result of participating as a youth representative on the county board?

Closed-ended question

What have you learned as a result of participating as a youth representative on the county board?
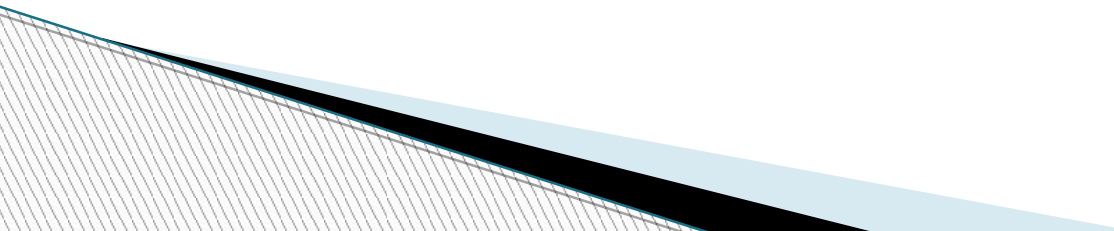(check all that apply)

☐ How decisions are made
☐ How a county board meeting runs
☐ What issues are facing the county
☐ How to share your perspective in a public meeting

Partially closed ended

What have you learned as a result of participating on the county board?

(check all that apply)

☐ How decisions are made

☐ How a county board meeting runs

☐ What issues are facing the county

☐ How to share your perspective in a public meeting

☐ Other:_____

Open-ended questions

Pros:

▸ Can get unintended or unanticipated results

▸ Wide variety of answers

▸ Answers in participants' "voices"

Cons:

▸ More difficult to answer

▸ May be harder to categorize for interpretation

▸ More difficult for people who don't write much

Closed-ended questions

Pros:

▶ Easy to analyze responses

▶ Stimulates recall

Cons:

▶ Chance of none of the choices being appropriate

▶ Biases response to what you're looking for

▶ Misses unintended outcomes

The goal of writing a good question…

is to develop a question that every potential respondent:

1. will interpret in the same way,

2. be able to respond to accurately, and

3. be willing to answer.

Common errors to avoid

The following slides cover a number of the common errors that occur when writing questions.

For additional help and many examples see:Dillman, D., Smyth, J., Christian, LM. 2009.<u>Internet, Mail and Mixed-Mode Surveys: The tailored design method</u>. John Wiley and Sons.

Also:*Qualities of a good question.Statpac, Inc. at*

http://www.statpac.com/surveys/question-qualities.htm

Avoid asking two questions at once (double-barreled question)

Double:

Do you feel that your skills in public speaking and
    leading new groups have increased as a result of this program?
Yes
No
Not sure

Ask each question separately:

Do you feel that your skills in public speaking have increased?
Yes
No
Not sure

Do you feel that your skills in leading new groups have increased?
Yes
No
Not sure

Avoid questions that some may not be able to answer – check assumptions!

Example
What type of internet connection do you have in your home?
(This question assumes that everyone has internet connection)

Better
Do you have internet connection in your home?
☐ Yes
☐ No

If Yes, what type of internet connection do you have in your home?
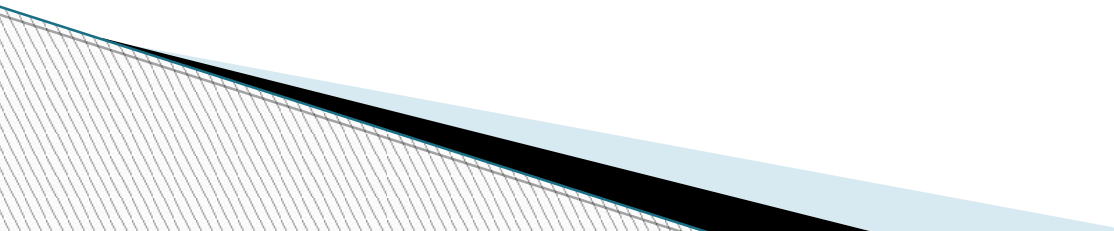(list of all possible internet types as answer choices)

Avoid jargon and technical language

What kind of SET experience would you prefer for your child?

(Use simple and familiar words)

"What kind of Science, Engineering and Technology experience would you prefer for your child?"
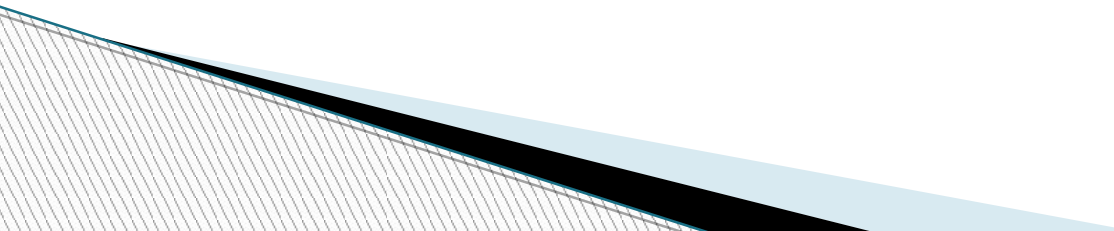
Avoid imprecise questions

Imprecise

How would you describe your experience as a 4-H Ambassador?

Better:

How would you describe your leadership experience while being a 4-H Ambassador?

(The more specific you are about what you want to know, the more useful the answer will be)

Avoid vague or ambiguous words and concepts

Vague:
How many times did you eat together as a family last week?
___ # of times

Better:
How many meals did you eat together as a family at home last week?
___# of meals

More specific:
   How many meals did you sit down to eat at home as a family last week?
___# of meals

Avoid specificity that limits the potential for reliable recall

Too specific:

How may hours did you contribute to community service last year?

_____ number of hours

(This question is also ambiguous since "community service" is not defined and may mean different things to different people. Also, always include dates to specify any time frame, in 2008; January-June 2009, school year 2008.etc. And, 'may' is a typographical error!

Avoid incomplete sentences (often done to save space)

Avoid

Your club

___ name of club

Your city or town

___ city or town

Better

What is the name of the 4-H club you currently attend?

_____Name of current 4-H club

In what city or town do you currently live?

_____Name of city or town

Response – wording the answer

Wording the response is as important as clear wording in the question.

Make the answer options clear, logical, comparable and mutually exclusive

How many times have you participated in the county fair?

Poor spacing and logic

0−1

1−3

3−6

7−12

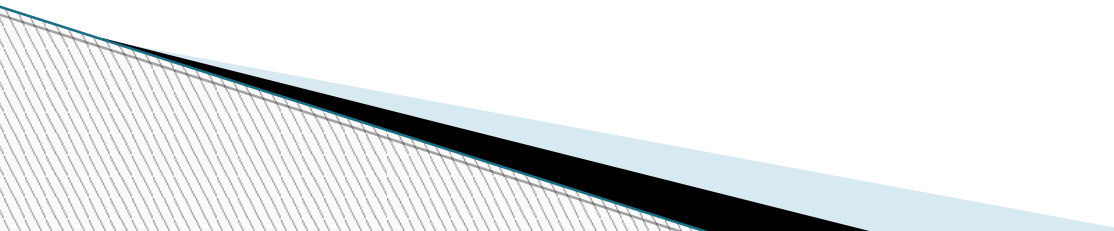More than 12 times

Better

0 times (never)

1−3 times
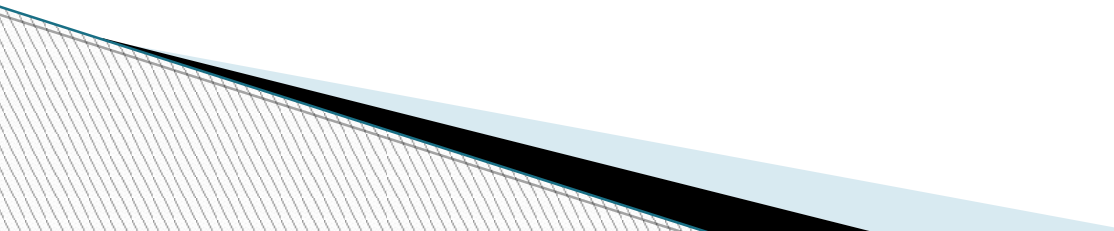
4−6 times

7− 9 times

10 or more times

Vague quantifier

Vague: How often did you attend a club meeting during the past 6 months, January – June 2009?

    a. Never

    b. Rarely

    c. Several times

    d. Many times

Better: How often did you attend a club meeting during January – June 2009?

    a. Not at all

    b. One to two times

    c. Three to five times

    d. More than five times

Exhaustive and mutually exclusive response options

From which one of these sources did you first learn about 4-H?

☐ A friend

☐ A neighbor

☐ A relative

☐ An advertisement

☐ At school

Exhaustive: make sure the options include all possible, important answers

Mutually exclusive: In the above example, I might have first learned about 4-H through a friend who is also a neighbor – which would I check? Also, the choices include both sources and location (school)

Include both positive and negative sides in the question stem and all possible answer options

Poor: Do you agree that our 4-H club needs to meet once per month?
- ☐ Agree
- ☐ Disagree

Better: Do you agree or disagree that our 4-H club needs to meet once per month?
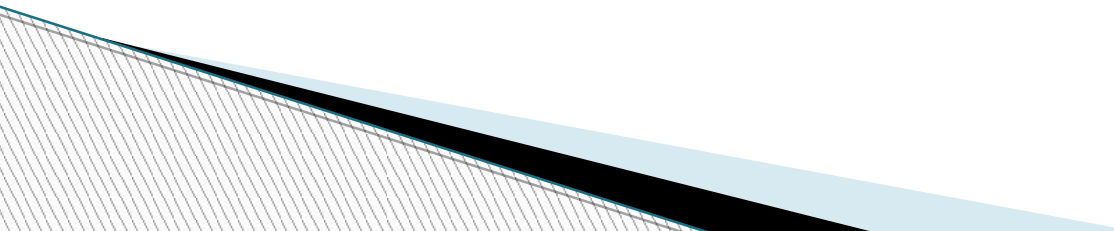- ☐ Agree
- ☐ Disagree
- ☐ No opinion

Another option: How often do you think our club should meet?
- ☐ More than once a month
- ☐ Once a month
- ☐ Less than once a month

Rating scales

- Always include a label for each scale category

- Keep the order of your scale the same throughout the questionnaire.

- Odd number of options allows people to select a middle option.

- Even number forces respondents to take sides.

- The number of points on your scale depend upon the amount of differentiation

  - Three, four, or five categories are most common.

Rating scales

- Balance the scale with an equal number of positive and negative options.

- "No opinion" or "uncertain" are not part of a scale. They are placed off to the side or in a separate column.

- All choices should refer to the same thing/concept.

Provide balanced scales with categories that are evenly spaced conceptually

Poor

Overall, how would you rate your experience as a youth mentor?

☐ Excellent
☐ Very good
☐ Good
☐ Fair
☐ Poor

Better

Overall, how would you rate your experience as a youth mentor?

☐ Very good
☐ Good
☐ Fair
☐ Poor
☐ Very poor

Make sure the response scale matches the question

Poor

To what extent do you think the teen leadership project helped you develop your leadership skills?
- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Better

To what extent do you think the teen leadership project helped you develop your leadership skills?
- ☐ Very great extent
- ☐ Great extent
- ☐ Some extent
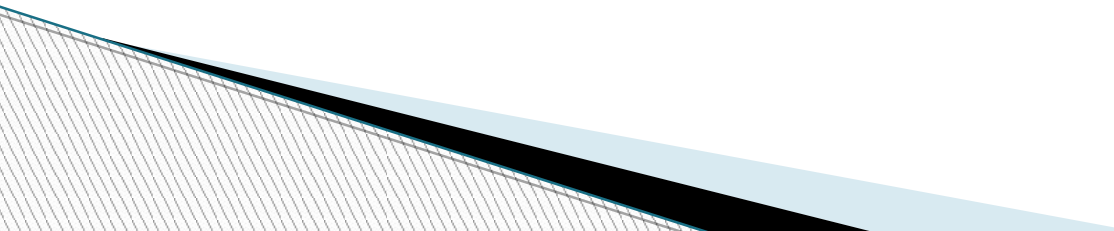- ☐ Little extent
- ☐ Very little extent

Keep the scale consistent

Poor:

__Not worth my time

__Very little interest

__Somewhat interested

__Very interested

Better:
__Not at all interested
__Very little interest
__Somewhat interested
__Very interested

The left column includes two concepts –

"worth" and "interest level."

Always include labels for your numbered scale categories to avoid misinterpretation

Incomplete labels:

To what extent have you increased your English literacy skills as a result of this program?

A great deal   Not at all

1   2   3   4

Fully labeled:

To what extent have you increased your English literacy skills as a result of this program?
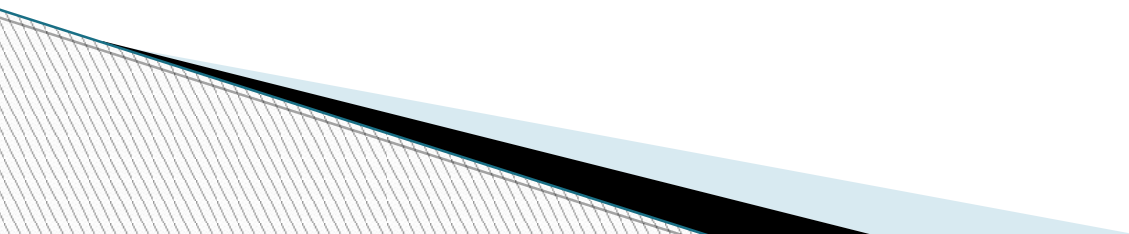
A great deal   Somewhat   Not much   Not at all

1   2   3   4

Formatting the questionnaire –
"Looks are everything"

▶ Title the questionnaire clearly and make sponsorship obvious

▶ Start with a brief introduction – or if longer than one page include an attractive cover page

▶ Make it look appealing and easy to complete

- Use an easy-to-read typeface.

- Leave plenty of white space

- Use wide, uniform margins

Formatting continued…

- Clearly distinguish question from response choices – may be put the question in boldface and responses in regular type
- Arrange questions so they flow logically; group questions of similar format or content
- Put important questions at beginning.
- Place demographic questions at the end.

Formatting continued…

▶ Include directions about how to answer each question, e.g., (Check one)

▶ Use arrows to show respondents where to go.

▶ Separate different parts of a questionnaire by using different type styles; use transitional statements

▶ Be consistent with numbers, format, and scales.

▶ Try a booklet format

(folded 8 ½ x 11 or 8 ½ x 14)

Pilot test the questionnaire

ALWAYS

ALWAYS

ALWAYS

By experts – your colleagues, others who are knowledgeable about writing questions or your program
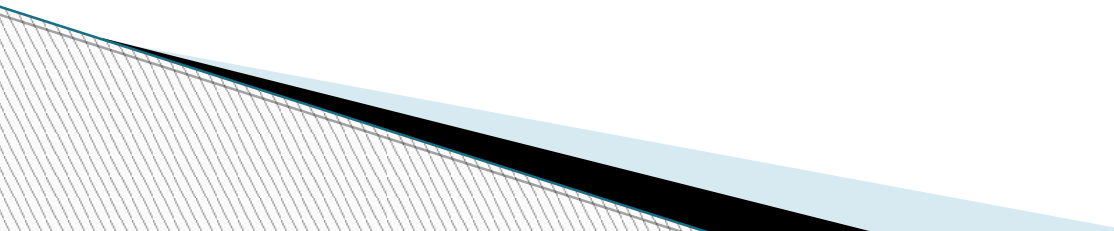
By potential respondents – or, people as similar to respondents as possible:

Do they understand the questions? The instructions?

Do questions mean the same thing to all?

Do questions elicit the information you want?

How long does it take?

Checking back in..

Spend a few minutes reflecting on

what we covered in these slides…

1. What, if anything, did you learn

   that you didn't know before?

2. What is one thing you will do

   when you develop a questionnaire?

3. What additional reading/learning

   might you want to think about?

"Judge a man by his questions

rather than his answers"

- Voltaire

"Pay attention to the questions you need to ask, not the answers you want to

hear."

- Leonard Hirsch, American Consultant