

Dillman's Principles for Conducting Surveys

Collaborative Programs Research & Evaluation

Adapted from the work of Don A. Dillman, Washington State University

Guide to Writing Questions

When designing a survey, put yourself in the mindset of those you plan to survey. Right from the start and then throughout the survey, you have got to motivate respondents to agree to take the survey, read every word, answer the questions and complete the entire survey. To keep them motivated (and avoid discouraging or turning them off), think about how the wording, sequencing and construction of the questionnaire will strike them:

1. Does the question really require an answer, or is it fairly obvious or already known? (This is a turn-off)
2. To what extent can survey recipients provide an accurate, ready-made answer? (If it is too hard or beyond their knowledge set, this can discourage them from continuing)
3. Can people accurately recall and report past behaviors? (Don't make them guess because they can't remember the facts well enough)
4. Will respondents be willing to reveal the requested information? (Frame sensitive issues in a way that seems less personal and indicates why you need to know)
5. Will respondents feel motivated to answer each question? (Make it easy for them to do so.)
Consider:
 - How hard will respondents be willing to work to comprehend the question?
 - How much will respondents be willing to do to retrieve needed information?
 - How hard will respondents be willing to work to make a judgment?
 - How much effort will respondents be willing to make to report (state) their answers?

Remember, people will only be willing to spend a finite amount of cognitive energy to complete the survey. Once their time and effort limit is expended, you are out of luck!

When it comes to survey design and construction, enable respondents to succeed by anticipating their questions:

Comprehension

(Cognitive)

- Where is the question on this page?
- Where are the answer choices?
- In what order do I read this information?

(Motivational)

- How hard is it to figure out what the question is asking?
- How many parts does it have?
- Do I have to go somewhere else to figure out exactly what is being asked?
- How much mental energy will it take for me to understand and answer this question?
- How important is it to me to answer this question?

Retrieval

- Once I understand the question, can I provide the answer from memory?
- Do I need to check some records?

Judging

- What constitutes a satisfactory answer?
- Can it be “close enough” or does it need to be exact?
- Do units of measurement have to be converted?
- Do the response choices make sense?
- Do the response choices fit what I want to answer?

Reporting

- Where do I provide the answer on this page?
- Is it clear where an answer is supposed to go?

Survey Construction

STEP 1: Define a desired navigation path for reading all information presented on each page of the questionnaire.

- Write each question in a way that minimizes the need to reread portions in order to comprehend the response task.
- Place the instructions exactly where that information is needed and not at the beginning of the questionnaire.
- Place items with the same response categories into an item-in-a-series format, but do it carefully.
- Ask one question at a time.
- Minimize the use of matrices.

STEP 2: Create visual navigation guides and use them in a consistent way to get respondents to follow the prescribed navigational path and correctly interpret the written information.

- Increase the size of written elements to attract attention.
- Increase the brightness or color (shading) of visual elements to attract attention and establish appropriate groupings.
- Use spacing to identify appropriate groupings of visual elements.
- Use similarity to identify appropriate groupings of visual elements.
- Maintain a consistent figure/group format to make the response task easier.
- Maintain simplicity, regularity, and symmetry to make the response task easier.
- Begin asking question in the upper left quadrant; place any information not needed by the respondent in the lower right quadrant.
- Use the largest or brightest symbols to identify the starting point on each page.
- Identify the beginning of each succeeding question in a consistent way.
- Number questions consecutively and simply from beginning to end.
- Use a consistent figure/background format to encourage the readings of all words.
- Limit the use of reverse print to section headings or question numbers.
- Place more blank space between questions than between subcomponents of questions.
- Use dark print for questions and light print for answer choices.
- Place special instructions inside of question numbers and not as freestanding entities.
- Optional or occasionally needed instruction should be separated from the question statement by font or symbol variations.
- Do not place instructions in a separate instruction book or in a separate section of the questionnaire.
- Use of lightly shaded colors as background fields on which to write all questions provides an effective navigational guide to respondents.
- When shaded background fields are used, identification of all answer spaces in white helps to reduce non-response.
- List answer categories vertically instead of horizontally.
- Place answer spaces consistently to either the left or right of category labels.
- Use numbers or simple answer boxes for recording of answers.
- Vertical alignment of question subcomponents among consecutive questions eases the response task.
- Avoid double or triple banking of answer choices.
- Maintain spaces between answer choices that are consistent with measurement intent.
- Maintain consistency throughout a questionnaire in the direction scales are displayed.
- Use shorter lines to prevent words from being skipped.


STEP 3: Develop additional visual navigational guides, the aim of which is to interrupt established navigation behavior and redirect respondents.

- Major visual changes are essential for gaining compliance with skip patterns.
- Words and phrases that introduce important, but easy to miss, change in respondent expectation should be visually emphasized consistently, but sparingly.
- Major visual changes are essential for gaining compliance with skip patterns.

Web Surveys

- Introduce the Web questionnaire with a welcome screen that is motivational, emphasizes the ease of responding, and instructs respondents about how to proceed to the next page.
- Provide a PIN number or individualized URL for limiting access only to those in the sample.
- Begin the Web questionnaire with a question that is fully visible on the first screen of the questionnaire, and will be easily comprehended and answered by all respondents.
- Present each question in a conventional format similar to that normally used on paper self-administered questionnaires.
- Restrain the use of color so that figure/ground consistency and readability are maintained, navigational flow is unimpeded, and measurement properties of questions are maintained.
- Avoid differences in the visual appearance of questions that result from different screen configurations, operating systems, browsers, partial screen displays, and wrap around text.
- Provide specific instructions on how to take each necessary computer action for responding to the questionnaire and give other necessary instructions at the point where they are needed.
- Use drop-down boxes sparingly, consider the mode implication, and identify each with a “click here” instruction.
- Do not require respondents to provide an answer to each question before being allowed to answer any subsequent ones.
- Provide skip directions in a way that encourages marking of answers and being able to click to the next applicable question.
- Construct Web questionnaires so they scroll from question to question unless order effects are a concern, or when telephone and Web survey results are being combined.
- When the number of answer choices exceeds the number that can be displayed in a single column on one screen, consider double-banking with an appropriate grouping device to link them together.
- Use graphical symbols or words that convey a sense of where the respondent is in the completion process, but avoid those that require significant increases in computer resources.
- Exercise restraint in the use of question structures that have known measurement problems on paper questionnaires, such as check all that apply and open ended questions.

Sample Cover Letter

Familiar and respected sponsorship →  WASHINGTON STATE UNIVERSITY
Social and Economic Sciences Research Center

Date → November 6, 2007

Inside address → Lewiston Area Resident
491 Winding Ridge Road
Lewiston, ID 83501

Salutation → Dear Lewiston Area Resident,

Appeal for help → I am writing to ask for your help in understanding the quality of life in the Lewiston/Clarkston area and how residents are being affected by a variety of things from the availability of jobs and healthcare to the use of cell phones. The best way we have of learning about these issues is by asking all different kinds of people who live in the area to share their thoughts and opinions.

Why you were selected → Your address is one of only a small number that have been randomly selected to help in this study.

Who should answer and why → To make sure we hear from all different types of people who live in the area, please have the adult (age 18 or over) in your household who has had **the most recent birthday** be the one to complete the enclosed questionnaire.

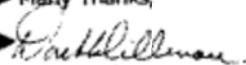
Confidential and voluntary → The questions should only take about 15 minutes to complete. Your responses are voluntary and will be kept confidential. Your names are not on our mailing list, and your answers will never be associated with your mailing address. If you have any questions about this survey of Lewiston/Clarkston area residents, please call Thom Allen, the study director, by telephone at 1-800-833-0867 or by email at sesrc@wsu.edu. This study has been reviewed and approved by the Washington State University Institutional Review Board, and if you have any questions about your rights as a participant in this study, you may contact them by telephone at 509-335-3668.


Contact information →

Token of appreciation → By taking a few minutes to share your thoughts and opinions about life in the Lewiston-Clarkston area you will be helping us out a great deal, and a small token of appreciation is enclosed as a way of saying thank you.

Personal touch → I hope you enjoy completing the questionnaire and look forward to receiving your responses.

Thank you → Many Thanks,

Real signature → 
Don A. Dillman
Regents Professor and Deputy Director



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