

End-use Strategizing for Creating Data Collection Instruments

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ABOUT END-USE STRATEGIZING

End-use strategizing is a term coined by the Tobacco Control Evaluation Center for the process of thinking strategically in reverse order when it comes to planning advocacy-related activities or developing data collection instruments. By thinking about where you want to end up and working your way backwards through all of the phases, you'll have a clearer sense of all of the elements that need to be in place in order to achieve desired results.

Although this document focuses on how to apply end-use strategizing to developing data collection instruments, this kind of strategizing is also useful for designing an entire workplan, an intervention or evaluation activity, or just a single component or tool to support those activities.

Here's how it works:

1 Define the purpose

Why are you conducting this evaluation activity? What do you want to find out or prove? Is the information you plan to collect meant to inform OR change perspectives OR prompt specific actions? Keep this in mind as you develop the instrument, collect data, and write up and report results so that you get what you need.

2 Specify the end-user

Who is the intended audience you want to inform, convince or move to action? Is it the project staff or is it a certain set of decisionmakers, interest groups, or communities? Determining the end users up front and thinking about what they need from the data will help shape the design and rigor of the evaluation activity.

3 Pinpoint how the data will be used

Is the data meant to be incorporated into a persuasive presentation, an educational fact sheet, an attention-seeking Facebook ad, a comprehensive policy brief OR shall it serve as a gauge to clue project staff in about the timing of next steps? The tone and format of the findings should be a good fit for the target audience.

4 Recognize likely critics

Who might be the toughest critics of your findings? If there are stakeholders who are opposed to your efforts, they may look for flaws in your results and procedures. Be sure to make that harder for them by building rigor into your data collection and analysis and being transparent about any limitations to your evaluation.

5 Ascertain the credibility threshold

What type, source, quantity, quality, data collection methods, evaluation design will convince critics that your findings represent an accurate picture of what you were investigating? This threshold can affect the method and format you choose to use and the number and type of questions you ask. For example, antagonistic council members may argue that focus group data from 2-3 sets of participants does not constitute enough evidence to base decisions on, whereas a public opinion survey of 280 randomly selected respondents is harder to discount.

6 Label the pieces of data

Looking at again at your activity purpose, what data will you need to inform, persuade or mobilize your key audience? Make a list of all of the pieces of information you'll need in order to make your case. Don't write any questions yet – just identify the specific topics you need to cover, e.g., exposure to secondhand smoke or level of support for smoke-free policies.

Think about the type of analysis you plan to perform. Would it be useful to be able to break down the data by subsets of the population (for example by age, ethnicity, where someone lives, if they smoke, etc.)? If so, then you'll need to include relevant demographic questions that will enable you to analyze data this way.

7 Specify data sources

Think about who/what will serve as the best sources of the information you're collecting. Which populations (or subsets thereof) will provide the most accurate picture? Whose views will be important to your end users and likely critics? Whose voices should be included/excluded from the sample (e.g., non-residents from outside the zip code)? What sample size will be sufficient to satisfy critics, yet within your project's capabilities to cover? List the composition and size of your sample.

Characterize any cultural factors associated with this population in terms of literacy levels, cultural contexts, language. How might the instrument need to be adapted for this population? Discover any parameters such as time, date, location, or mode of administration that should be taken into consideration when it comes to data collection. Ideally, work with people from the population of interest when preparing and conducting data collection so that things go smoothly.

8 Collection considerations

Given who/what constitutes your sample (and keeping your credibility threshold in mind), decide on the best way to collect the information. If you need to learn the breadth or depth of an issue, qualitative methods like key informant interviews or focus groups might be best; if you already know the range of perspectives on an issue and need to document the extent of a problem or level of support for a solution, a quantitative method like observation or survey can be best.

Which data collection administration (mode) is the best fit for the type of data you want? Depending on the parameters of the data collection activity and the habits of those in your sample, determine if data should be gathered via mobile device, online link, pen-to-paper, face-to-face, telephone call, etc. Factor in how much time respondents will be willing to spend on answering your questions in one mode versus another.

Think about when the data should be collected. When will it have its greatest impact for your program? Is it meant to serve as process or outcome data? Will a single round of data collection suffice, or do you need pre- and post- measures or even multiple rounds of data collection throughout the project period? What time of year, month, week, or day is the best time to collect it? [If it is important to know the time of month, day or week the data is collected, be sure to include space to record this on the data sheet.]

Lastly, ponder who should collect the data. Who will have the greatest success in getting the data sources to share information with them? Think in terms of experience, training, familiarity with data sources, acceptability to data sources re: language, culture, gender, age, position.

9 Ascertain question types

Finally you are ready to start developing questions that will get at the pieces of data you have determined are important to ask about! Start by deciding whether the question should be closed or open-ended—are you fairly certain you understand the topic well enough that you can provide a set of pre-determined choices (i.e., close-ended question) OR do you want to explore the range of possible feelings/answers on a topic (i.e., open-ended question)?

Once you've determined that, start matching each piece of data to possible question types—yes/no, multiple choice, ranking, Likert scale, etc. Based on what you want to know and the way you want to be able to analyze it, certain question formats may work better than others.

10 Question formation & sequence

To start writing, take your list of data points and potential question formats and weigh the best way to get at each piece of desired information. Try out several different ways to word and/or format the question (and response choices). How could different wording change the meaning of the question or response? Imagine how the question and response choices might be understood or interpreted by the participant. (It's always good to have a member of your target population

work with you on this, especially to advise on cultural relevance and understanding.) Try to anticipate the likely responses you'll get to this question. Test this with a few people. For open-ended questions, will you need to probe with follow-up questions? For closed-ended questions, are all of the choices necessary, relevant, and discrete (not overlapping with others)?

Also think about any comparisons you will want to make in the analysis. What are the categories that will be most meaningful? (E.g., when creating age ranges, do you need to distinguish between young people in their 20's vs. people more likely to be settled with families in their 30's and 40's OR do you want to know everyone's actual age? It all depends on what you're asking). Build those distinctions into the response choices.

Next, check the objectivity of the questions? Are they each balanced? Do they seem to indicate a particular slant or preferred position on an issue, or is it hard to tell what the hoped-for answers might be? You want the latter.

What sequence of questions makes the most sense? Sometimes you don't want to give any hints before you ask a question; you just want to see what the respondent comes up with. Other times it can be helpful to ask a general question first and follow it up with a more specific question once the survey-taker has already been focused on the topic.

Once you have a first draft of your data collection instrument, take another look at it before it's ready to go. Examine each question: How will the answers inform what you want to know? Make sure the questions and response choices will capture what you want to investigate. Ask colleagues, coalition members or individuals from your target population or end users to see if the questions and response choices make sense and are easy to answer. You can also ask the evaluation associates at TCEC to review your tools and give you feedback!

After adding an introduction that explains the survey purpose, sponsoring organization, and how the data will be used, the last step of creating a quality data collection instrument is to field test it with a segment of your target population which will not be part of your intended sample. Ask them to consider if the meaning of the questions and responses are clearly understood, if any wording or examples are culturally insensitive or irrelevant, or if there are other questions you should be asking. This should help identify any problematic issues with your data collection tool before you use it to gather actual data from your sample population.

End-use Strategizing Recap

- What do we want to achieve? How can data help us do that?
- What do we need to know? How will each piece of data help inform your project's next steps?
- Who/what is the best source of info on this topic? What cultural considerations should we be aware of?
- What is the best way to get at each piece of data? (How to collect it, how to measure it?)
- What question type will allow us to analyze the data in the most meaningful way?
- What answers are we likely to get if we ask the question this way vs. that way?

END-USE STRATEGIZING WORKSHEET

Project Objective:

Evaluation Activity:

Purpose of Activity	Who Data to Inform	How Info to Be Used	Likely Critics	Credibility Threshold
1	2	3	4	5
Pieces of Data		Data Sources	Methods & Modes	Types of Questions
6		7 <i>Sources (sample population):</i> <i>Amount of Time They'll Spend:</i>	8	9 <i>Question Types:</i> <i>Analysis:</i>

END-USE STRATEGIZING WORKSHEET EXAMPLE

Project Objective: By June 30, 2013, at least three community college or trade/vocational/technical schools in the Northern California region will adopt a policy that prohibits smoking on campus property

Evaluation Activity: college campus smoking policy public opinion survey

Purpose of Activity	Who Data to Inform	How Info to Be Used	Likely Critics	Credibility Threshold
<p>To document that exposure to secondhand smoke is a problem on campus</p> <p>Show level of support on campus</p> <p>Identify preferred policy options</p> <p>To corroborate observation data</p>	<p>Shared governance board members which include: administrators plus faculty, staff and student representatives</p>	<p>In persuasive fact sheets to be used in meetings with key stakeholders and decisionmakers</p> <p>In press releases to generate public discourse and support in campus and local media</p>	<p>Smokers on campus (staff and students)</p> <p>Campus police force concerned with enforcement</p> <p>Campus administrators concerned with enforcement and cost of signage</p>	<p>Persuasive sample size for each campus = 350</p> <p>Need to follow and document data collection processes</p> <p>Acceptable formats: online, pen-to-paper, social media?</p>
Pieces of Data		Data Sources	Methods & Modes	Types of Questions
<p>Exposure to secondhand smoke: y/n or frequency?</p> <p>Awareness of harm</p> <p>Aware of existing campus smoke-free policies</p> <p>Level of support for smoke-free policies</p> <p>Preferred policy options</p>	<p>Smoking status</p> <p>Quit attempts</p> <p>Awareness of quit help services</p> <p>Demographic identifiers:</p> <p> Ethnic background</p> <p> Campus subgroup ID</p> <p> Age?</p>	<p>Students</p> <p>Faculty</p> <p>Staff</p> <p>Administrators</p>	<p><i>Methods:</i></p> <p>Campus knowledge, attitudes and practices survey</p> <p><i>Formats:</i></p> <p>Online link and mobile device</p>	<p>Knowledge</p> <p>Attitudes</p> <p>Frequency</p> <p>Demographic</p> <p>Likert scale</p> <p>Multiple choice</p> <p>Yes/no</p> <p>Closed- and open-ended</p>