Daemen College
Survey Development Guide
Summer 2021

Overview

This document provides a brief overview of some basic principles and practices in the design and deployment of institutional surveys at Daemen College. For more detailed information about survey construction, there are many online resources as well as books that provide a thorough description of best practices in survey development.

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Purpose of survey

A first step in developing a survey is to determine what the primary purpose of the survey is. Having a clearly defined purpose for the survey will help to guide the survey development process in an efficient and useful manner.

Broadly speaking, there can be many different purposes for developing a survey. A few possibilities are listed below. These categories may be overlapping, and the list is by no means exhaustive.

- Information Gathering: This is perhaps the most common purpose for deploying a survey. The person or group developing the survey is interested in learning more about the thoughts, attitudes, behaviors, etc. of a particular group of people (namely those who will constitute the survey respondents). Results of the survey may or may not be used to inform decision making.
- Action or policy formulation: Some surveys may be developed primarily for the purpose of determining a particular course of action or policy formulation. As a simple example, a company might survey their employees about desired working schedules (e.g. 8-to-4 versus 9-to-5) with the intent that the survey results will dictate the decision made.
- Persuasion: Certain surveys can be primarily persuasive in their intent, even though they may be conducted under the guise of information gathering. This is common with certain types of political surveys or advertising surveys. Typically, such surveys ask "loaded" questions that are designed to influence the respondents' opinions on a particular topic. Not all of these surveys are necessarily nefarious in their intent, however. For example, a health care provider may develop a survey that is primarily designed to encourage healthy behaviors on the part of respondents.
- Compliance: This is perhaps the most minimalistic purpose of a survey, but it is not infrequent. A person or group may be developing or deploying a survey simply or primarily because they are obligated to do so by some outside agency. For example, a student may be required to develop a survey as a class project, or a college may be required to conduct certain types of surveys as part of an accreditation process. Normally there is no primary expectation that survey results will be used to inform decision making, although that could happen as a side effect or afterthought.

Survey alternatives

Before going to the trouble and possible expense (and sometimes unexpected complications) of developing a survey, it might be helpful to determine if there are other ways to collect the information that the survey might provide. For example, if I am interested in knowing what food choices college students make, one option would be to survey the students themselves. However, it might be possible to obtain more specific and accurate data about food choices from the food service provider.

In some cases, of course, it may be desirable to combine survey data with similar data gleaned from other sources. This can provide multiple perspectives on the same question, and may also help to determine the validity of the survey results by having an outside point of reference.

Survey respondents

An obvious and very basic consideration in developing any survey is to determine who the target population is for the survey. If you are interested in students' satisfaction with residence hall life, then you would probably want to limit your survey population to students living on campus. Commuter

students would not be likely to provide useful feedback, and it would be a waste of their time (and perhaps yours) to include them in the survey sample.

However, determining the appropriate survey population can sometimes be trickier than in the obvious example above. Let's say you are interested in canvassing potential interest in a new graduate level nursing program that would be designed for working health care professionals. An obvious choice would be to distribute the survey to all actively employed nurses in your region. But there could be a significant age bias in the response pattern, e.g. older nurses who are close to retirement age probably have no interest in earning a master's degree. Including them in the survey sample could therefore bias the results.

Once the appropriate survey population has been identified, you will need to decide whether to survey the entire population or just a sample. This decision may depend in part on the size of the population, and in part on the availability of resources for conducting the survey. For example, if you work at a small college and are interested in the study habits of your freshmen students, it probably makes sense to survey all the freshmen at your institution. However, if you work at a very large university and are trying to gauge interest in a new campus fitness center, it may be sufficient to survey just a sample (e.g. 10%) of your overall student population.

If you are surveying a sample of your target population, it is critically important to select a random sample that is representative of the target population. A non-random sample may produce biased results. In the fitness center example above, if I survey student athletes simply because they are a convenient and captive population, I may find that respondents have very little interest in a new campus fitness center. (At most large universities, athletes have their own dedicated fitness facilities.)

When possible, it is helpful to include various types of demographic and screening questions on the survey to help ensure that the survey sample is in fact representative. For example, if I deploy a survey to help understand our campus diversity climate, but screening questions show that 90% of respondents are white males, the survey results may not be helpful.

Who is creating the survey?

Many companies and organizations offer pre-designed surveys for higher education. Typically, these surveys are focused on a particular area of concern, e.g. student satisfaction, student engagement, residence life, employee satisfaction, campus diversity, etc. Normally (though not always) there is a fee associated with using one of these proprietary surveys, as well as various guidelines, sometimes strict, regarding the deployment of the survey. A major advantage of using proprietary surveys is that typically they provide benchmarking data from other institutions which have also taken the survey, thereby allowing you to compare your institution against other institutions with reference to the survey results.

However, there are also some obvious limitations to using proprietary surveys. One is the cost, which in some cases may be several thousand dollars. Another is the lack of flexibility in survey scheduling or deployment. A third, and perhaps the most important, is that the survey questions may not be directly relevant to a particular area of interest for your institution. For these reasons, it is commonplace for institutions to develop their own surveys for at least some research and policy purposes.

Some of the sections below provide a brief outline of some common issues to consider when creating your own survey. Some of these issues may also apply when using certain proprietary surveys.

Survey creation tools

In order to create your own survey, you will first need to decide what tool or software system you are going to use to create the survey, send it to the survey population, and collect the results. There are free tools available for survey creation, as well as proprietary tools which typically are more powerful and more flexible than the free tools.

A very simple survey could be created in an email, with the survey questions included in the body of the email itself. The email could then be sent to the appropriate recipients. Results (in the form of email responses) could then be copied to an Excel spreadsheet. Obviously, however, this approach quickly becomes inefficient for a longer survey, or for a large number of respondents. Additionally, this type of survey does not allow for anonymity, since you will know the identity of the people who send an email response.

Another free option, with more power and control, is to create a survey using Google forms. Here at Daemen College, we are a Google shop, so anyone with a Daemen email can use Google forms to create a survey. The process is relatively simple, but still provides considerable power and flexibility.
- First, create the survey itself in Google forms, using tools that Google provides to streamline survey creation.
- Second, create a Google sheet to store the data responses.
- Third, send out the survey via email (Gmail of course) to the appropriate recipients.

There are lots of online tools that explain in more detail how to create a survey using Google. Overall, Google provides a good survey creation system at no cost.

There are also various proprietary survey tools available, for example Survey Monkey or Qualtrics. These products do have an associated cost, which is typically picked up at the institutional level. However, they also provide a high level of control and flexibility in all stages of the survey process, and are therefore very effective for the management of large and/or complex survey projects. At Daemen College, we have a limited license for Survey Monkey. Normally it is only used for large-scale institutional surveys. For smaller survey projects, we recommend using Google forms.

Types of survey questions

There are many types of questions that can be used in a survey. One of the keys to developing an effective survey is ensuring that the right type of question is used to elicit the desired information. The list below outlines a few of the most common types.

Multiple choice: A very common survey item is the multiple choice question, in which a respondent simply selects one or more answers from a set of possible responses. For example, the question "What is your favorite major campus event?" might offer respondents a list of five events to choose from. In some cases it may be advisable to include a response for "Other" and then let respondents fill in a response that is not included in the list. As another example, the question "Which of the following academic resources have you used this past year?" might allow students to check multiple responses.

Scaled questions: Many survey questions lend themselves to a scaled response. (sometimes referred to as a Likert scale). For example, the question "How satisfied are you with campus dining services" might use a response scale from "Very dissatisfied" to "Very satisfied". Typically, responses are assigned a numeric value, e.g. 1 for "Very dissatisfied" to 5 (or 7, or 10) for "Very satisfied", with respondents having the option to select any value along the scale. Having five or seven response values is fairly typical for a scaled question. The qualitative values associated with the scale can vary depending on the type of question being asked, e.g. satisfied, interested, happy, etc. As a practical matter, make sure that the direction of the scale is consistent across questions: if 1 corresponds to a "low" or "bad" value on one question, then it should be the same for all questions.

Multiple choice and scaled questions have the advantage of being relatively easy to analyze, as well as being easy to summarize and report. A disadvantage of these types of questions is that they sometimes simplify complex realities. For example, simply responding to the question "How satisfied are you with residence hall life?" on a scale of 1 to 5 may not provide useful or actionable information.

Open-ended questions: Another common type of question on surveys is the open-ended question, in which respondents can write in whatever response they want. In some cases, the response may be a very short, e.g. "Name one campus activity that you really enjoyed this past year." In other cases, a longer response may be possible or encouraged, e.g. "What are some ways that campus life can be improved?" The advantage of open-ended questions is that they allow respondents more breadth and detail that what is possible with multiple choice or scaled questions. A disadvantage of open-ended questions is that they can be difficult to analyze or summarize.

A common approach on longer surveys is to use a combination of multiple choice and scaled questions, on the one hand, and also a set of open-ended questions that may provide more insight into the responses on the first group of questions. Careful wording and selection of survey questions can help to provide a good balance of different types of information.

Skip logic

On a longer or more complex survey, especially if created with a proprietary tool like Survey Monkey or Qualtrics, it is common to use "skip logic" to customize the survey questions for particular groups of respondents. For example, let's say you are preparing a survey about campus life that will be distributed to all students. You may want to ask some questions about residence hall life, but clearly such questions do not apply to commuter students. So the survey could include a "screening" question that asks the respondent if they live on campus. If they answer yes, they are directed to a set of questions concerning residence hall life. If they answer no, they are directed to a set of questions concerning commuter experiences. Skip logic helps to ensure that respondents are only answering questions that are relevant to them.

Skip logic also helps to dig deeper into certain types of responses. For example, if a student responds "Very dissatisfied" to a question about student life, skip logic can be used to direct them to another question(s) to try to determine what aspects of student life are unsatisfactory.

Survey length

A key question in survey construction is, how long should the survey be? Ideally speaking, you want to include as many questions as are necessary to address the underlying purpose of the survey, without having redundant or irrelevant questions that unnecessarily lengthen the survey.

As a general rule, the longer the survey, the less likely it is that respondents will take the survey (or complete it, assuming they have started it). Therefore, you should try to be as economical and efficient as possible in designing your survey questions.

On the flip side, a very short survey (e.g. 5 questions) may generate a high response rate, but may provide very limited information.

Timing of survey

Once you have decided to deploy a survey, a basic issue concerns the timing of the survey, i.e. when is the optimal time to deploy the survey. If the survey involves a response to a particular event (e.g. a training session), then obviously it is best to distribute the survey as soon after the event as possible.

For surveys that are not tied to a particular event, timing may be more flexible and should be optimized to the extent possible. For example, let's say you want to send out a survey to gauge students' satisfaction with residence life. Sending the survey out at the very beginning of the semester is probably not a good time, as students have not yet had an opportunity to fully experience residence life conditions. Sending the survey out at the end of the semester might be poor timing as well, as students are busy with final exams or may have already left the campus.

You might also want to make sure that the survey timing does not conflict with other major campus events that could distract students from taking the survey, e.g. homecoming, major holidays, or even another survey that is being deployed at the same time.

Additionally, you may want to avoid sending out the survey after an unusual event that could bias survey responses, e.g. right after a mold abatement operation has taken place in the residence halls. Careful planning of survey timing will increase the quality of survey responses as well as the response rate.

Incentives

It is common practice to offer some type of incentive to survey respondents in order to improve the response rate. However, several precautions should be noted in the use of incentives. Broadly speaking, there are two ways to offer incentives: 1) every respondent receives the same incentive, e.g. a gift card to Starbucks, or 2) only a small number of randomly selected students receive a larger incentive, e.g. an I-Pad.

In order to offer incentives, it is obviously necessary to know who took the survey. This may be problematic for surveys in which privacy or confidentiality issues are important. Large incentives may also entail certain legal or ethical complications that have to be addressed.

Incentives can produce a bias in survey responses. In some cases, respondents may consciously or unconsciously believe that their chances of "winning" an incentive will be greater if they respond positively. In other cases, respondents may complete the survey as quickly as possible simply to gain access to an incentive.

Anonymity and confidentiality

In terms of controlling access to survey responses, a survey can be anonymous, confidential, or neither. An anonymous survey is one in which it is not possible to connect survey responses to an individual respondent. A confidential survey is one in which it possible to connect responses and respondents, but in which the survey author can safely and reasonably assure that respondent identity will not be exposed. In a non-anonymous and non-confidential survey, individual responses may be disseminated in some way. There are ethical, legal, and practical considerations to take into account in weighing various privacy concerns.

Merging survey results with other data

A particular survey, by design, only provides a certain amount of information about respondents. In some cases, it may be useful to merge survey responses with other data about respondents. This is of course only possible if the survey is non-anonymous (see section on "Anonymity and confidentiality").

For example, a survey on student engagement may reveal certain facets of student behaviors that are linked to student success. Merging survey responses with, say grade data may help to provide further insight about which specific behaviors, as probed in the survey, are associated with academic success.

As another example, merging survey data with demographic data can help to disaggregate survey responses by various subgroups of students, e.g. by gender or ethnicity or residence status. If the survey is anonymous, it is of course possible to include demographic questions on the survey.

It is critically important to ensure that respondent confidentiality is protected when merging survey results with other data sources, especially if those other data sources may contain potentially compromising information (e.g. grade data).