# **SURVEYS AND QUESTIONNAIRES**

## **OVERVIEW**

Surveys and questionnaires are a relatively easy and inexpensive way to collect data from a large number of participants in a short period of time. In education research and evaluation, surveys and questionnaires are typically used to explore attitudes, behaviours, and/or confidence levels. They are also used to explore respondents' perceptions of certain experiences or topics. Surveys are not intended to provide a direct measurement of student content knowledge or learning.

Surveys can be standardized instruments (i.e., developed, tested, and validated elsewhere and used widely in comparable contexts), or they can be locally developed. In both cases, surveys can be validated if measures have been taken to ensure that the instruments measure what they are designed to measure. For instance, surveys can be validated for clarity/appropriate use of language when piloted with a few participants.

## DEVELOPMENT

There are many different types of survey questions and each has strengths and weaknesses. Survey question choice should be driven by the nature and depth of the information needed, with consideration given to the amount of time participants have to respond and the resources in place to analyse the responses obtained. Generally speaking, yes/no, multiple choice, Likert-scales, and other closed-ended question forms call for a relatively simple quantitative data analysis approach due to the limited and pre-established response options. These types of questions are frequently useful for collecting responses from large pools of participants. In some cases, they can be used for advanced statistical analysis that can be more time consuming and require specialized skillsets.

Short answer and other open-ended question types, on the other hand, allow participants to provide deeper and broader feedback and comments. Because a qualitative approach is needed to examine open-ended responses, they can be time consuming to analyse.

## **IMPLEMENTATION**

Surveys typically capture written responses from participants, either in hard copy form or online. However, surveys can also be used to elicit oral responses (including over the phone conversations) or applied through participatory techniques such as show of hands/cards or clicker responses.

Surveys can be used as part of a wide range of research and evaluation designs. They are commonly used as part of a summative evaluation effort in which participants are asked to reflect on experiences, but they may also be used to solicit formative feedback. Surveys can also be used to study change over time when used as part of a research and evaluation plan that involves a pre/post approach, a/b testing, before-and-after questions, and longitudinal inquiry.

#### **ADVANTAGES**

- Can reach large participant numbers in short periods of time.
- One survey can cover a broad range of topics.
- Can reach different stakeholders, including those difficult to access such as alumni, employers, etc.
- Relatively inexpensive to administer.
- Can be easily integrated into regular class activities or added to existing homework/ assignments.
- Question choice can lead to easy data analysis requirements (e.g., descriptive statistics).
- Data can be aggregated for long-term projects and compared for iterative implementation.
- Free online administration tools are available at UBC, which comply with the Freedom of Information and Protection of Privacy Act.

#### **DISADVANTAGES**

- Planning and development may be timeconsuming because it may be difficult to construct surveys and questionnaires that measure what they are designed to measure.
- Can be challenging to find a good balance between length and coverage.
- Results tend to be highly dependent on wording of items. Using existing surveys may not lead to collecting the "right" data.
- Relying on volunteer samples may lead to biased responses.
- Potential for low response rates.
- Set response choices may not allow respondents to express their true opinions and/or in-depth insights about the topics under examination.
- Collected data exclusively reflects participants' perceptions.
- Expertise is needed to deal with complex statistical and qualitative data analysis.

## **STRATEGIES TO MITIGATE DISADVANTAGES**

- Construct instruments carefully with support from experts. Centre for Teaching, Learning and Technology staff can help. We support survey item development, survey validation, and piloting (i.e., formative feedback for content clarity, meaning, and instrument format).
  - Increase response rates through: offering incentives to participate (e.g., participation marks); preserving participant anonymity; administering the survey during class-time if working with students; or coordinating with others interested in surveying the same target groups in order to reduce survey fatigue.
  - Mitigate the possibility of subjects not honestly reporting attitudes, behaviors, and perceptions by: ensuring participant anonymity; obtaining random samples; surveying the entire target population or obtaining the maximum sample size possible; cross-validating results with other sources of data; and interpreting results cautiously.

## **UBC RESOURCES**

For more information about interview and focus group design, project evaluation, or educational research, contact:

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