Saint Paul Public Schools Survey Handbook

This document (10/2009) is an introduction to survey design and has been compiled from a variety of sources. This is not intended to replace a course on survey development but to remind the survey developer of the various steps and complexities of survey development.

Characteristics of Effective Surveys

- **Specific Objectives**

The first step in any survey is deciding what you want to learn. The goals of the project determine whom you will survey and what you will ask. If your goals are unclear, the results will probably be unclear. Each survey item must align with one or more of the survey objectives.

- **Straightforward Questions**

The best survey items are ones that respondents can understand and respond to immediately. Keep the questions clear and concise and avoid overly complex language and structure. (See section on "Writing Good Questions.")

- **Proper Sample**

In order to understand the perspectives of an entire population, it is necessary to gather responses from a representative sample of that population. It is not necessary to survey the entire population; bigger is not always better. Actively pursuing the selected random sample through follow-up phone calls and other forms of communication will have a greater impact on the accuracy and generalizability of your findings than simply expanding your sampling pool. Sample size calculators are available on the Internet (for example, see www.surveysystem.com/sscalc.htm). Remember that these calculators provide the number of completed surveys you will need to secure from qualified respondents – not the number of surveys to send out. If the total population being surveyed is 50 or fewer, survey everyone.

Reliable and Valid

Reliable surveys generate data that can be reproduced. Valid surveys measure the construct that they are intended to measure.

Accurate Reporting of Results

Survey results must be carefully analyzed and reported in order to accurately represent the perspectives of the target population. In order for a report to be accepted by its target audience(s) (stakeholder groups such as district department staff, school staff, parents, students, and/or the community at large), it must be transparent that researcher/surveyor bias had no role in the interpretation and reporting of results. Credible reports include both positive and negative findings; reports that only share the most positive survey results risk being disregarded as public relations material and having minimal impact. Often it is the negative or unexpected report findings that offer the most guidance for program improvement.

Checklist of Typical Survey Steps

- √ Identify survey objectives
- √ Decide who will be included and how and when the survey will be administered
- √ Write survey items
- √ Prepare survey instrument
- √ Pilot test the survey and make adjustments as indicated
- √ Administer survey
- √ Organize data
- √ Analyze data
- √ Report results

Writing Good Questions

Identify the need for each question.

Each question should align with your objectives. Make sure the results from each question are necessary either for reporting (summative evaluation) or for continued program development (formative evaluation). Consider the following:

1. Do you need to ask the question?
2. Does the question require an answer?
3. Do survey respondents have an accurate, ready-made answer?
4. Can respondents accurately recall past behavior?
5. Will respondents be willing to reveal information?
6. Will respondents be motivated to answer each question?

Consider the demographic information you will need depending on the purpose of your survey.

Consider how you will use this information for program-planning and decision-making. For example, if the implications of the findings may be different for men than for women, make sure that you collect gender information. On the flip side, if a demographic characteristic has no bearing on the interpretation of findings, it is better not to collect it. (A good rule of thumb is to only gather information that you plan to report and use for decision-making.)

Demographic information should also be gathered in order to assess how closely the demographics of the study population match those of the larger population from which the survey sample was drawn. The closer the match between the sample and the population, the more support you have to generalize your findings to the larger population.

Be as brief as possible.

Questions should consist of no more than 20 words and 3 commas. Keep multi-syllable words to a minimum.

Avoid double-barreled questions (asking two or more questions in one survey item).

Edit your questions for the following words: and, or, but, with, except, if, and when. These are words that usually mean you have multiple questions in the same statement. For example:

Instead of:
1. I have used the information I received from coaching and professional development this year in my classroom practice.

Use:
1. I have used the information I received from coaching this year in my classroom practice.
2. I have used the information I received from professional development this year in my classroom practice.

Provide a time frame if it will clarify the question(s) or assist the reader in responding.

Choose a time period that is appropriate when considering the importance of the question(s) and the respondents' ability to recall the information. For example, for most school-based surveys, you would ask respondents to recall information from the most recent school year. If this time frame applies to the entire survey or to a group of questions, it should be described in the survey introduction or in the instructions immediately preceding the series of questions to which it pertains.

Keep the questions clear and specific, yet do not ask for more detail than what can be easily recalled. For example:

Instead of:
How much did you spend on school supplies last year?
- $0 - $10
- $11 - $20
- $21 - $30
- over $30

Use:
How much do you estimate you spent on school supplies in the last year?
- $0 - $10
- $11 - $20
- $21 - $30
- over $30

Most respondents would not be able to remember exactly how much they spent on school supplies. Responses would likewise be guesses rather than actual numbers, and many respondents could become frustrated trying to calculate in their heads how much they spent. If an approximate answer is all that is needed, simply rephrasing the question by adding the word "estimate" will make it much easier for the respondent.

Clearly define potentially ambiguous words and phrases to ensure common understanding.

Avoid terms that have several possible meanings or that may be interpreted differently by different respondents; this includes words like "recently" and "frequently" and other time-related terms, as well as terms like "family" and "household," which may mean different things to different people. Even asking people "when" they did something (assuming an open-ended format) could result in different responses depending on each reader's interpretation of the question. Try to use language that is as precise and specific as possible. For example:

Instead of:
How frequently do you communicate with your child's teacher?

Use:
On average, how many times a week do you communicate with your child's teacher?

Do not assume too much knowledge or use jargon or acronyms that respondents may not understand.

For example:

Instead of:
Which of the following types of courses has your child taken? (check all that apply)

- o AP
- o IB
- o PSEO
- o CIS

Use:

- o Advanced Placement (AP)
- o International Baccalaureate (IB)
- o Post-Secondary Education Options (PSEO)
- o College in the Schools (CIS)

- **Make sure that questions are not too complex or difficult to understand or answer.**

For example:

Instead of:
Please rank the following factors from 1 to 15 as to their importance in selecting a school for your child:

___ Transportation
___ School start/end times
___ School's general reputation
___ Quality of teaching staff
___ School building/facilities
___ Availability and use of technology
___ Existence of Discovery Club in the building
___ Existence of early childhood programs in the building
___ Familiarity with other families who send their children to the school
___ Test scores
___ School leadership/principal
___ Athletic offerings
___ Arts programs
___ Proximity to home
___ Programs serving children with special needs (i.e., special education, ELL)

Use:
Please check the three most important factors in selecting a school for your child.

Most respondents would have considerable difficulty answering a question as complex as the original one and/or would not be able to answer it with any degree of accuracy or precision. Analyzing the data from ranking questions is equally complex. A preferred method is to ask respondents to check the top factors or items on the list; the analysis will provide a ranking based on the number of votes each factor receives.

- **Avoid double negatives.**

For example:

Instead of:
Are teachers in your school never unfair?

Use:
Are teachers in your school fair?

Avoid biased or leading questions.

Do not word questions in a way that suggests a preferred, correct, or expected answer. For example:

Instead of:
Do you limit your children's television viewing to two hours a day?

Use:
On average, how many hours of television do your children watch in a day?

Use language and wording that is culturally sensitive and inoffensive.

Ensure that the language/wording you use is not offensive to anyone and that it has the same basic semantic content for all respondents regardless of race, age, gender, ethnicity, sexual orientation, or religion. Independent representatives from diverse groups should examine the survey and identify items and procedures that may yield differential responses for one group relative to another. Consider a sensitivity review of the survey (for further information, see http://mfaa.msde.state.md.us/source/PDF/Bias_Sensitivity_Checklist.pdf).

Write items on sensitive topics in ways that respect the privacy of your respondents and increase their comfort level with taking the survey.

Only ask for information that you actually need. For example, if you only need to know if a respondent's income is above or below the poverty line, do not list many categories of income level or require them to report their exact income. For example:

Instead of:
How much was your total family income in 2008? $_________

Use:
Which of the following categories best describes your total family income in 2008?

- LESS THAN $5,000
- $5,000 to $9,999
- $10,000 to $19,999
- $20,000 OR MORE

Getting Good Responses

- **Choose rating scales over dichotomous (e.g., yes/no) items whenever possible to elicit more information and to increase reliability.**

Knowing the degree to which respondents agree or disagree with a statement provides more information to guide decision-making and program improvement than simply knowing the percent of respondents who agree or disagree with it. More often than not, respondents hold views that fall somewhere on a continuum rather than into distinct categories.

- **When a numerical (i.e., Likert) scale is used, provide an adjective to describe each point on the scale so that every respondent assigns the same definition to each number.**

For example:

To what degree to you agree with the following statement?
(Circle the response that best applies.):

My child's school is safe.

Instead of:

1	2	3	4	5
Strongly Disagree				Strongly Agree

Use:

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree

Balance the response categories.

Keep in mind that if there is a 'strongly disagree' option, there needs to be a 'strongly agree' option, too. For example:

How would you rate the class overall?

Instead of:
- Outstanding
- Excellent
- Very good
- Good
- Poor

Use:
- Very good
- Good
- Average
- Bad
- Very bad

Offer response options that are clearly defined and are mutually exclusive (non-overlapping).

As with double-barreled questions, it is best to avoid words like and, or, but, with, except, if, and when in the list of response options. To minimize any confusion, do not list the same response option in more than one category. Make sure that there are clear distinctions among each of the response options. When offering response options that represent ranges, make sure that no one number appears on the list multiple times. Here are two examples:

Which leadership style best describes your building administrator or principal?

Instead of:
- Charismatic and Cooperative
- Contemplative and Collaborative
- Collaborative and Charismatic
- Contemplative and Charismatic
- Controlling and Critical

Use:
- Charismatic
- Critical
- Contemplative
- Collaborative
- Controlling

Which of the following categories best describes your total family income in 2008?

Instead of:

- $0 to $5,000
- $5,000 to $10,000
- $10,000 to $20,000
- $20,000 OR MORE

Use:

- LESS THAN $5,000
- $5,000 to $9,999
- $10,000 to $19,999
- $20,000 OR MORE

On attitude or opinion questions, limit use of the "N/A" (not applicable or not available), "no opinion," or "other" option. However, make sure to provide one of these options when a question is legitimately not applicable to all respondents.

Do not make it too easy for respondents to opt out of answering the questions. You will get very limited information from surveys that are returned with "no opinion" marked throughout. On the other hand, if a question is truly not applicable to a segment of the surveyed population, it is important that respondents are able to indicate this on the survey or they will be forced to guess or provide a less than truthful response. For example, if you ask parents to rate their site council meetings, those parents who have never attended a meeting should be able to check "N/A" rather than rate something with which they have had no direct experience.

On factual or behavior questions, include an "other (please specify): _____" choice unless you are certain that you have provided a comprehensive list of response options.

Survey results are much easier to summarize when "other" is not used, but there are times when it is necessary to provide it as an option. Fill-in-the-blank options are especially useful during the pilot testing phase of survey development in order to identify all possible categories of responses.

Keep open-ended questions to a minimum.

Open-ended questions are burdensome for the respondent and over-using them will decrease the response rate. They are also difficult to code and analyze; consider the time and effort to analyze even one open-ended question from 500 respondents! At the same time, always include at least one open-ended question at the end of the survey to allow respondents to provide information that they were not given an opportunity to share in the closed-response portion of the survey.

Formatting the Survey

- **Keep it as short as possible.**

Writing a survey requires finding the ideal balance between being concise and comprehensive. Each survey must be long enough to capture all of the content to be measured, but not so long that respondents are intimidated or frustrated by the length and complete it with reduced accuracy or not at all. Short surveys are more likely to be returned as they place less of a demand on the respondents. Consider the value of the survey information against the time the respondent must spend on the survey. Ideally, aim for no more than two sides of one sheet of paper when printed (using a readable font).

- **Give the survey a title which concisely reflects the content of the survey instrument and who is conducting it.**

- **Write an introduction to the survey.**

The introduction should include the following information:

✓ the purpose of the survey
✓ whether or not participation is voluntary
✓ the confidentiality and/or anonymity of survey responses (see below)
✓ how survey findings will be used (including with whom they will be shared and when)
✓ the approximate time it will take to complete the survey
✓ the name and phone number or e-mail address of a contact person for those who have questions or concerns regarding the survey

- **Explain the anonymity and/or confidentiality of survey responses in the survey's introduction.**

<u>Anonymous</u> data do not include names, addresses, or any personal information that would make it possible to associate a response with any given individual. Data that are <u>confidential</u> contain information that may identify an individual respondent, however only a limited number of people (i.e., the researchers) have access to individual responses. Results of confidential surveys are reported in aggregate in order to respect the privacy of the respondents. Files containing individual identifiers must be stored with considerable attention to data security and access. There are significant advantages to collecting identifiers, including the ability to do "pre and post" studies through linked data files and to follow-up on non-responders to increase response rate.

- **Provide directions that describe exactly what respondents are to do.**

- **Organize questions in the survey according to topic area.**

When possible, use headings to label each different category of questions. However, with shorter surveys, use of headings should be limited so as not to clutter the page and detract from the survey content.

- **Group items with the same response scale together.**

Introduce the scale once for a group of items (immediately before the items). In addition, for electronic surveys, ensure that the scale can always be seen by the respondent.

- **Do not break questions between pages.**

- **Position questions for a high probability of completion.**

Start with an easy-to-answer question that is clearly related to the subject matter in order to increase comfort and confidence with the survey. Put sensitive or challenging questions at the end of the survey. Respondents are more likely to answer more personal and/or difficult questions once they have already made an investment in filling out the survey. In general, "behavior" questions are more sensitive and personal than "knowledge" questions. Similarly, demographic items should be placed at the end of the survey, especially when asking for potentially sensitive information.

- **Provide an open-ended question at the very end of the survey so respondents can comment on anything you did or did not ask them.**

This space allows respondents an opportunity to share their comments freely and without restrictions. While many respondents will not take the time to write additional comments, those who do usually have strong opinions that they feel compelled to share.

- **Thank respondents for their participation at the end of the survey.**

- **Proofread for spelling and grammar.**

Pilot Testing the Survey

√ Pilot the survey on individuals who are similar to the intended respondents, making sure that the piloted sample is representative of the actual survey sample in terms of demographic characteristics.

√ Include the appropriate number of individuals in the pilot. 10 - 20 completed surveys is usually adequate, depending on the size and composition of the total population being sampled.

√ Mimic the actual survey administration plan as much as possible.

√ Time how long it takes individuals to complete the survey.

√ Gather feedback and reactions to the survey and to the survey process.

√ In reviewing survey responses, look for the following signs that some editing is needed:
- little variance in responses
- too many “other” responses
- too many “I don’t know” responses
- misinterpretation of open-ended items
- skipped items
- directions not being followed (e.g., more than one answer checked when instructed to “check one”)

Evaluation Resources

Iowa State University description of how to conduct focus groups:
www.extension.iastate.edu/communities/tools/assess/focus.html

Bias/sensitivity review checklist:
http://mfaa.msde.state.md.us/source/PDF/Bias_Sensitivity_Checklist.pdf

Survey Says: The Role of Surveys in Your Evaluation:
Tips from Wilder Research Program Evaluation Workshop Series
(A brief report that can be used as a checklist for planning a survey):
www.wilder.org/reportsummary.0.html?&no_cache=1&tx_ttnews[tt_news]=2135&tx_ttnews[backPid]=111&cHash=443ee2b621

W.K. Kellogg Foundation Evaluation Handbook
(A lengthy document that gives a clear review of many topics in the field of program evaluation; useful for looking up guidance on how to develop an evaluation plan, hire an evaluator, etc.):
www.wkkf.org/Pubs/Tools/Evaluation/Pub770.pdf

Sample size calculator
(A tool used to calculate the number of survey respondents needed to achieve the confidence level you want for your survey results):
www.surveysystem.com/sscalc.htm