Building Better Surveys
Data Use Resource

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Purpose

This document will help school staff clarify whether a survey is necessary, whether to use questions from an existing instrument or create new ones, how to administer the survey, and how to analyze the data that results from it.

Contact

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Content

There are several steps involved in building a survey, including:

1. Identifying the purpose and audience
2. Developing your questions
3. Choosing the scale
4. Administering the survey
5. Analyzing the survey results and sharing the data

Step 1: Identifying the Purpose and Audience

Before you decide who you want to survey, it is important to clarify the purpose of your survey. Think about your project goals and write a paragraph about what you want the survey to accomplish. Then write a list of the things you want to measure in the survey.

> What I want to accomplish with my survey: *My school wants to determine the feasibility of starting an afterschool reading program for English language learners (ELL) who are below the proficient range in reading.*
>
> What I want to measure in my survey: *I want to know how many parents are interested in the afterschool reading program; how likely it is that the parents will enroll their children in the program and what location(s) they prefer.*

Now that you have clarified the purpose of the survey and what you want to measure, consider the following questions:

- Can you get the data you need from another survey? *There are many surveys conducted on a regular basis, including the Dane County Youth Assessment (every 3 years), Youth Risk Behavior Survey (every 2 years), Cognitive Behavioral Intervention for Trauma in Schools (annually) and the School Climate Surveys (annually). Review existing surveys to see if those resources can provide the data you need.*
- Is some of the data you need collected anywhere else, such as Infinite Campus? *In this case, some of the data needed to survey is in Campus. Since the survey focuses on English language learners and their families, an ad hoc report will be used to identify parents of ELL students whose reading levels are below proficient, rather than sending the survey out to all families in the school.*

From your ad hoc report, you know which language is spoken in the home. Identify which languages the survey will need to be translated into and build extra days into your schedule for translation.

Step 2: Developing Your Questions

It is important to make sure the questions on your survey have reliability and validity. Simply put, do the questions measure what you intend to measure (validity) and to what extent will people in comparable situations answer questions in similar ways[1](reliability).

Errors in question development and scaling can undermine your survey's reliability and validity. Whenever possible, try to use questions from existing survey instruments rather than creating your own questions. There are many online resources for survey questions. A Google search by topic can yield lots of great survey instruments most of which already have reliability and validity.

Other resources for questions, include Survey Monkey's Surveys 101 and Qualtrics Survey Basics.

If after researching other survey instruments you decide you need to develop your own questions, keep the language as clear and simple as possible. Avoid jargon. There are two basic types of survey questions: 1) closed-ended questions where the respondent chooses an answer from a defined list, and 2) open-ended questions where the respondent writes his or her own answer.

Closed-ended questions have a number of advantages. They require less thought and time to answer on the part of the respondent. The responses are also easier to categorize and require less time for analysis. One disadvantage is that respondents are forced to select an answer that may not accurately reflect their opinions.

Unlike closed-ended questions, open-ended questions provide valuable information about people's thoughts and opinions. However, open-ended questions require more thought and time for the respondent to answer. They also require more time for analysis. Unless you have the experience and resources to analyze open-ended responses, it's best to use closed-ended questions whenever possible.

Regardless of what question format you choose, ask only one thing in each question to avoid "multi-barreled" questions. For example, if a single question asks parents to rate whether school events are scheduled on days **and** times that are convenient, they are limited to giving one response for both items. A better way of collecting that information would be to split the question into two separate items:

Are school events scheduled on days that are convenient for you?	Yes No
Are school events scheduled at times that are convenient for you?	Yes No

To get the most accurate response to those questions, parents could be asked *which* days and *which* times are most convenient. The scales for each question would then be changed from yes/no, to the days of the week and a range of times.

Another important consideration for question development involves how the data will be analyzed and reported. For the purposes of your project, does it matter how many females versus males responded? Will you need to know a respondent's income status, race/ethnicity or other demographic information? If so, make sure you include questions that capture those demographics, or export demographics along with the emails using the ad hoc report in Infinite Campus.

Lastly, it is important to know how the data from each question will be used. What decisions will be made as a result of the data? If you cannot clearly state the purpose of a question or how you will use the data from a specific question, then consider eliminating that question from the survey.

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[1] Fowler, Jr., Floyd J. Survey Research Methods, p. 86

Step 3: Choosing the Scale

There are many types of scales used in surveys. There are scales that use binary formats (yes/no or agree/disagree). There are ordinal scales that follow a continuum: No Pain at All (1) to Worst Pain I've Ever Experienced (10).

But perhaps the most commonly used scale in surveys is a Likert scale. A Likert scale is used to measure opinions, beliefs or attitudes. When a Likert scale is used, the item or thing you are measuring, must be worded as a statement. Likert scales give a range of responses measuring agreement, satisfaction, frequency or likelihood. A commonly used Likert scale is: strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree or strongly agree.

Regardless of the type of scale you choose, be sure to use a balanced scale, one that has an equal number of positive and negative response options. If you use an unbalanced scale, you may lead respondents toward a particular result (positive or negative). See the examples below:

Unbalanced Scale:

☐ Disagree
☐ Somewhat Agree
☐ Agree
☐ Strongly Agree

Balanced Scale:

☐ Strongly Disagree
☐ Somewhat Disagree
☐ Somewhat Agree
☐ Strongly Agree

Finally, label all points on the scale. Some survey software programs automatically display numeric response options, ex: 1 to 5. Using word descriptions or labels for each point on the scale will help people interpret the points similarly which will reduce measurement errors. If you have a neutral or do not know option, be sure to label that point on the scale as well.

Poor:	1 Strongly Disagree	2	3	4	5 Strongly Agree

Better:	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree

Step 4: Administering the Survey

There are three common methods of collecting survey data: paper surveys, electronic surveys, or face-to-face interviews. For most schools, face-to-face interviews are not a practical way to collect information from staff, families or students.

Instead, most school surveys are conducted electronically or on paper. Nearly all MMSD staff and students as well as the majority of MMSD families have email accounts, making electronic surveys a quick and easy way to collect data. Two good programs for creating your own electronic surveys are Google Forms and Survey Monkey. Both are free and offer users step-by-step instructions for creating surveys. For districtwide surveys that require advanced features, RPEO uses Qualtrics.

Once your survey is created electronically, you will be able to share the link to the survey through an email. For parents and students, distribution by email can be done automatically through School Messenger. Every school has access to School Messenger. To learn who can assist you with survey deployment through School Messenger, check with your school's office staff. To distribute the survey to the appropriate families via School Messenger, you will need to use the ad hoc report you created originally to identify parents of ELL children who are below proficient in reading.

If you are unable to send the survey link through School Messenger, the link can also be distributed through Gmail or Survey Monkey, though each requires the sender to create the email list using an ad hoc report in Infinite Campus. *Please note that any distribution through the Gmail system must be done using the Blind Copy or Bcc: feature which prevents recipients from seeing or capturing other people's email addresses.* Unlike Gmail, Survey Monkey automatically hides the email addresses from other recipients

Set a limited window for people to complete the survey. Two weeks is typically long enough. The majority of responses will be received in the first 24 hours after the survey is sent out and then responses will decrease dramatically. To improve response rates, plan to send a reminder message to survey recipients halfway through the window. Messenger and Survey Monkey have a feature that only sends reminders to those who haven't yet completed the survey.
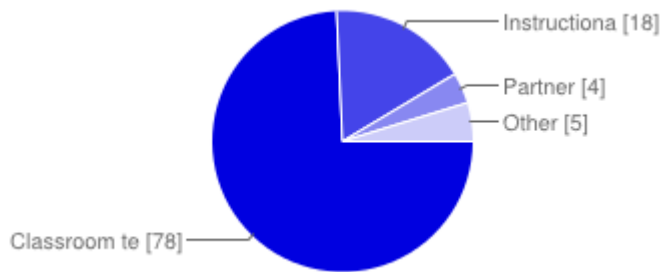
For families who do not have access to electronics at home, paper surveys are a good option. Though, with a paper survey, it is important to plan for who is going to enter those responses into the Google Forms database or Survey Monkey when the surveys are returned.

Step 5: Analyzing the Survey Results and Sharing the Data
Once the survey closes, Survey Monkey and Google Forms allow users to generate graphs showing the responses to each question. Google Forms offers a very simple graphic presentation of results (shown below), while Survey Monkey allows users to look at responses in a variety of ways: question summaries, data trends and individual responses. Survey Monkey also gives users the ability to filter responses by specific questions in the survey. For instance, if the survey asked which school a student attended, results can be filtered by selecting a single school or multiple schools.

What is your position?
If your survey contained open-ended questions, Survey Monkey automatically generates a word cloud graphic displaying the most frequently used words in responses. Additionally, Survey Monkey offers users the ability to export their summarized survey data in a variety of formats (pdf, Excel, Power Point and csv) which makes sharing the data quick and easy.

However, if you want to analyze data using a program such as Microsoft Excel, both Google Forms and Survey Monkey allow users to export a file containing responses. While moving data into Excel can allow users to combine survey data with other data sets or run more complicated analyses of responses, it does require a higher level of skill with the software. For most users' needs, the tools available through Survey Monkey or Google Forms will work well.

When sharing your results with others, it's a good practice to include an introductory paragraph that briefly describes your methods (*purpose of the survey, who was surveyed, how the survey was deployed*).

Following your introduction, summarize the results of the survey. It is helpful to provide the response rate, ex: if you sent out 100 surveys and 20 people responded, your response rate is 20%. If your survey included demographic questions, a graph showing the composition of survey respondents is a good way to demonstrate whose opinions are represented in the sample.

You may also want to note your key findings: what, if anything, stood out in the results? Were there differences in how various demographic groups replied to certain questions? These are important things to highlight in your text.

In addition to the written text, include some of the graphs from Google Forms or Survey Monkey to illustrate responses to key questions. This will help people understand the distribution of responses to each question. If your survey had open-ended questions, you may want to briefly summarize themes that are common in the responses. Avoid using direct quotes from participants in your written summary as doing so might compromise their confidentiality or anonymity. If you don't have experience analyzing open-ended comments, we recommend omitting open-ended questions from your survey or contacting the qualitative analysis team in Research and Program Evaluation for assistance prior to the start of your project.

Finally, closing the loop with the audience who participated in the survey is a great way to keep them engaged and to affirm that their opinions are valued. A short article or post highlighting the key findings of the survey could be shared with the school's parent-teacher organization, or published in newsletters, on the school's webpage or social media venues such as Facebook or Twitter.