One of the four types of data that schools will want to gather, analyze, and use is Perceptions data, gathered through the use of questionnaires. Questionnaires are an excellent way to determine student, staff, parent, and alumni perceptions. The overall process for developing, administering, analyzing, and using the results is outlined in the graphic below. The attached activities show the processes for:

- **Designing Questionnaires**
- **Administering Questionnaires**
- **Analyzing Questionnaire Results**
- **Analyzing Open-Ended Responses**
- **Presenting and Using Questionnaire Results**

![Diagram of Questionnaire Process Overview]

**QUESTIONNAIRE PROCESS OVERVIEW**

- **DETERMINE PURPOSE:** What do you want to learn? How do you want to use the results in conjunction with your continuous school improvement plan?

- **DETERMINE CONTENT:** What content is desired and from whom?

- **DEVELOP INSTRUMENT AND PILOT:** Create instrument, pilot, and revise as necessary to the questionnaire working the way you want it to work!

- **COLLECT THE DATA:** How will the questionnaire be administered and when?

- **ANALYZE RESULTS:** How can the results be analyzed to show the information gained from the questionnaire?

- **REPORT RESULTS:** How can the data be graphed and reported to effectively show the results?

- **SHARE AND REVIEW RESULTS:** How and when are you going to share results with stakeholders?

- **USE RESULTS:** How can you use the results for continuous school improvement?
Purpose

The purpose of the *Perceptions Data Inventory* is for a school to take stock of the perceptions data being gathered across grade levels and subject areas, and to get agreement and consistency on gathering perceptions throughout the school.

Target Audience

Teachers, program directors.

Time

Completing the inventory can probably be done in less than an hour. Determining improvements will take longer.

Materials

Copies of data inventories.

Overview

Not every teacher knows what perceptions data are being collected from other teachers, administrators, and program directors, or how the data are being used. The perceptions data inventory helps all teachers know who is asking common students, parents, staff, and partners information as well as the variety of information available. Some efforts can be merged; some subjects might need additional perceptions data.

Process Protocol

Steps in establishing a *Perceptions Data Inventory* include:

**Step 1:** Determine how your school will complete the inventory. Perhaps, by grade-level teams.

**Step 2:** Have the inventory completers list the names of all the perceptions data they are currently using, the purpose of the survey, grade levels targeted, the number of people expected to be reached, dates of collection, and then comments about each perception result uses.

**Step 3:** In grade-level teams, and then ultimately cross-grade level teams, determine where there are overlaps in asking for perceptions, where the efforts can be streamlined, what other perceptions data would be helpful, and how the school will get consistency with its perceptions data.

Comments to the Facilitator

After the *Perceptions Data Inventory* is completed, make sure staff determine the appropriate administration and use perception data in each subject area and grade level. Some requests for perceptions responses might need to be discontinued because they are not fulfilling a need, or another request is fulfilling that need. Make sure the final list of perceptions data will help teachers know what it is they want and need to know. Integrate the findings into the data profile.
The purpose of this activity is to lay out the steps in designing a questionnaire. Committee, who will take the draft product to staff for review and approval. It will take at least a week of solid work for a committee to design questionnaires. The draft questionnaire will then need to be reviewed by staff, rewritten and reviewed again until the questionnaire contains all that staff want it to contain.

Good questionnaires have the following features:

- A strong purpose so participants will want to complete the questionnaire.
- Short and to the point (both questions and questionnaire).
- Questions that everyone can understand in the same way.
- Questions that proceed from general statements to more specific statements.
- Response options that make sense for the questions.

Whatever type of questionnaire you decide to use for data gathering, the questionnaire must be based upon the underlying assumption that the respondents will give truthful answers. To this end, you must ask questions that are—

- valid—ask the right questions.
- reliable—will result in the same answers if given more than once.
- understandable—respondents know what you are asking.
- quick to complete—brain-compatible, designed well, and short.
- able to get the first response from the respondent—quality administration and setup.
- justifiable—based on a solid foundation.
Process Protocol

**Step 1. Outline Content.** Begin by thinking about what you want to know and by pulling together concepts or key theories that you want to test through the questionnaire. For example, the *Education for the Future* student questionnaires were suggested by teachers who wanted this questionnaire to be about what they wanted their students to be able to say by the time they had implemented their vision—that they feel safe at school, have freedom, fun, and like school. Once you determine what you want to know, outline the key points and jot down ideas related to the key points. (See *Education for the Future* questionnaire resources: http://eff.csuchico.edu/html/questionnaire_resources.html)

**Step 2. Draft the Questions.** Look first for existing questionnaires. If there is no existing questionnaire to adapt, formulate questions that address issues based upon what you want to know. There are many different ways to ask questions. Figure C1-2, at the end of this activity, describes different types of questions, advantages and disadvantages for each type, and when it is appropriate to use each type of question. You can create forms that will allow you to use different types of questions; however, it is probably not wise to use more than two or three different types of questions in a form. The key to successful questionnaires is to make them interesting, easy, and quick to complete. Be sure to:

- Ask purposeful questions—don’t just ask questions for the sake of asking questions.
- Make sure the questions will be interpreted the same way by many different people.

Think about the impact of every question on your respondents. *Will it offend anyone?* Hints in developing the questions are summarized below.

Helpful hints include—

- Simple is best.
- Phrase all questions positively. Movement up the scale indicates a more positive result; respondents will not be required to constantly reorient themselves as to how the question relates to the scale, and results can be analyzed and graphed.
- Ask all questions in the same way (e.g., all positive so double negatives are not possible).
- Keep items and the questions short (definitely less than 20 words).
- Eliminate all jargon and bureaucratic wording.
- Spell out abbreviations and acronyms.
- Be sure that phrasing does not suggest a response.
- Use a logical sequence in asking questions (general to specific).
- Ask questions that everyone understands in the same way.
- Make sure that, if necessary, your questions will allow you to disaggregate responses in your analyses.
- List question first and response options second (left-to-right is brain-compatible for most of the world).
- List response options from left (least positive) to right (most positive).
Process Protocol (Continued)

Avoid—

- Trying to assess a little bit of everything.
- Conjunctions (and, or) in questions.
- Adverbs such as “sometimes,” “nearly,” and “always” in the questions—let the response options discriminate responses.
- Leading questions.
- Jumping around, content-wise.
- Showing response options first and then the question—you are asking respondents to skip a part of the process and then come back to it—not efficient.
- Asking the same question more than once.

Step 3. Determine the Scales. Questionnaires are collections of items or questions intended to reveal levels of information not readily observable. Scales are used with items so responses can describe phenomena more specifically. Most questionnaires that utilize scales have a question or statement and then a series of response options. Those response options are types of scales. If you want to notice subtle differences in your analyses, you will want to use some sort of scale.

Many types of scales can be used with questionnaires. What type is used depends on the purpose of the questionnaire item and how the results will be used. General terms related to scales include nominal, ordinal, interval, and ratio.

If you want to notice subtle differences in your analyses, your item options will need to discriminate among responses. Consider these questions about the items you put together:

- How many response options does it take to discriminate meaningfully?
- How many response options will confuse or bore respondents?
- Presented with many response options, will respondents use only those responses that are multiples of five, for instance, reducing the number of options anyway?

There are several kinds of response options. The response option chosen depends upon the purpose for using the questionnaire and the types of questions desired. For the majority of questionnaires, five-point options are adequate. Possible labels include—

- **Endorsement:** strongly disagree, disagree, neutral, agree, strongly agree.
- **Frequency:** never, almost never, sometimes, very often, always.
- **Intensity:** really apprehensive, somewhat apprehensive, mixed feelings, somewhat excited, really excited.
- **Influence:** big problem, moderate problem, small problem, very small problem, no problem.
- **Comparison:** much less than others, less than others, about the same as others, more than others, much more than others; much worse than others, worse than others, no difference, better than others, much better than others.
Each scale implies how it can be analyzed. Equal interval scales can be averaged. The others must be displayed as frequency distributions or summed in bar graphs. Please note that if more than one scale is used in a questionnaire, the results will need to be analyzed separately—in other words, questions with different scales will probably need to be graphed separately. An often-neglected, but very important, factor that must be taken into consideration when establishing a scale and format for a questionnaire is the age and attention span of the respondent. Young children do best with two or three response options—smiling faces versus frowning faces. Adults will not finish a questionnaire that requires over thirty minutes of their time.

The *Education for the Future* questionnaires utilize a five-point endorsement scale. Each item is presented as a declarative sentence, followed by response options that indicate varying degrees of agreement with the statement—from *strongly disagree* to *strongly agree*. The questionnaires go from *strongly disagree* to *strongly agree* because it is our opinion that this direction is left-to-right—the way our western brains work. That is also why our response options are to the right of the questions.

People often ask about the center option. They worry that most individuals will use the middle response option if it is made available. *Education for the Future’s* experience with thousands of questionnaires shows that people do not automatically choose the middle response. If participants commit to responding to a questionnaire, they will typically respond with precision. When responses on a questionnaire do appear in the middle, the questionnaire constructor needs to examine the questions to determine if it is causing indecision, if the response option and the statement do not go well together, or if, indeed, the respondent does not have a definite response to the question. One of the first things to check is whether there is a conjunction or an adverb in the statement that would cause people to say: *Well, I agree with this part of the question, and I disagree with that part of the question.* Researchers often add the middle response to give respondents a legitimate response option for opinions that are divided or neutral, and to make the scale an equal interval scale. If you prefer to force your respondents to make a decision, you can always use an even-point scale that has no middle point. You will not be able to average the responses if you do this because you will no longer have an equal interval scale. We add that middle-response option because we think it is a reasonable response option, and because it creates an interval scale giving us the ability to average. We want to graph all the item averages together to show relationships.

*Education for the Future* has piloted many different scales, including 100, 10, 7, 6, 5, 4, and 3-point scales. We ultimately and easily chose a 5-point scale. Any scale that had more than 5 points upset the respondents—it was too fine a distinction, too hard for participants to respond. Respondents give us less information and do not complete the questionnaire when they do not like the response options. The even-numbered scales did not allow us to average the responses. Averaging provides the easiest understanding of the relationship of the responses to each other. The even-numbered scales did not allow respondents to give a response that indicated half the time “yes” and half the time “no,” or “just do not have an opinion at this time.” The 3-point scale did not discriminate enough.

What about offering “don’t know” or “not applicable” as a response option? Some researchers say that “don’t know” does not affect the proportion of responses. Depending upon the question, a “not applicable” response might give you more information than getting no response. We tend to stay away from both these response options.
Process Protocol (Continued)

Step 4. Create the Form. Appearance and arrangement of the questionnaire frequently determine whether respondents will complete it. In fact, research shows that individuals determine within five seconds whether or not they will respond to a questionnaire. Think about what would get you to psychologically commit to completing a questionnaire, and build in those same considerations for your respondents. The good news is that once respondents take the effort to read a questionnaire, they make a psychological commitment to complete it.

Upon first glance, we definitely want the questionnaire to be appealing to the eye. We want to have white space. We want to keep the questionnaire consistent. Never split questions, instructions, or the responses from the questions between pages. Use an easy-to-read, equally spaced font for the questions themselves. Avoid italics. Make the questionnaire look professional. We typically want to end the questionnaire by giving each respondent a chance to comment on the topic as a paper questionnaire. Figure C1-3 offers tips to consider when creating the paper form (as a paper questionnaire). Figure C1-4 offers tips to consider when writing and placing open-ended questions in a questionnaire. Take the time to make the appearance pleasing and the instructions clear to the respondent. Also, take the time to make the questionnaire brain-compatible. Written in a common sense, logical fashion like our western brains work, i.e., left-to-right, top-to-bottom.

Step 5. Review and Revise Your Instrument. Examine the content in relation to the other steps in the process: type of questions, scaling, respondents, the potential data analysis and presentation of results. Revise to the best of your abilities. Figure C1-5 describes design considerations for online questionnaires.

Step 6. Pilot the Questionnaire. No matter how many times you review the questionnaire after your construct it, you won’t know how the questions will actually be interpreted until you administer them to a small number of respondents in your target group as a pilot test. We highly recommend piloting the questionnaire and analyzing the data to understand if you are asking questions that respondents understand and questions that provide responses that lead to your purpose. We also recommend piloting an already developed questionnaire that you might decide to use to make sure it is doing what you want it to do.

To pilot the questionnaire, you can use one of two approaches. One, organize a small group of respondents who are similar to the larger target group. Administer the questionnaire and analyze the results. Include questions on the pilot questionnaire to help you know if the pilot group understood everything on the questionnaire, if they thought the questions were relevant, if there are other questions they feel you should be asking, if they feel the questionnaire was easy to respond to, and to solicit their general overall comments. Another approach would be to administer the questionnaire individually to two or three people from each major demographic subgroup. Have each person read the items aloud, offer responses, and tell you orally what she/he thinks the question is asking, and what her/his responses mean. This is a very powerful information gatherer and quicker than traditional pilot tests. If you are going to use open-ended responses on your questionnaire, be sure to include them as part of the pilot.

Step 7. Analyze Pilot Results. After you have piloted the questionnaire, look at each of the questions with responses to see if each item was understandable. Look at the open-ended responses for clues to responses that may not seem logical. If respondents are available, ask them to tell you why particular questions were hard to understand.
Step 8. Revise, Review Again, and Finalize. After you study the responses from the pilot group, revise the questionnaire to reflect what you have learned. If you feel that the questions need to be piloted again, do so. It is much better to try out a questionnaire on a different, small group again than to administer a poor questionnaire to a large group. Have several people review the final version of the questionnaire to ensure there are no typographical errors and to ensure that the content flow is as you intend. When you feel that all of the bases have been covered, print the forms and post them online for the “real” questionnaire administration.

Comments to the Facilitator
Creating a questionnaire can be an arduous task. Many people who want to design questionnaires often stop when it comes to writing the questions. It is definitely one of those tasks that looks much easier than it actually is. However, questionnaires provide us with valuable information that is well worth the effort.
## Types of Questions

<table>
<thead>
<tr>
<th>Types of Questions</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Appropriate When—</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written</strong>&lt;br&gt;(Open-ended)</td>
<td>• Spontaneity of the response.&lt;br&gt;• Can understand what the respondent thinks.&lt;br&gt;• Can get deep into the topic.&lt;br&gt;• Can use to build multiple choice items.&lt;br&gt;• Sometimes respondents provide quotable material.&lt;br&gt;• Can ask all types of individuals, regardless of language differences.</td>
<td>• Must pay for someone’s time to transcribe and synthesize.&lt;br&gt;• Takes time—on everyone’s part.&lt;br&gt;• Coding can be unreliable.&lt;br&gt;• Cannot always read the response.&lt;br&gt;• Some handicapped people might have difficulty responding.&lt;br&gt;• Language translations are expensive.&lt;br&gt;• Difficult to interpret.&lt;br&gt;• Many people might have said the same thing with prompting.&lt;br&gt;• Difficult to categorize when taking frequencies of types of responses.</td>
<td>• Not sure about what respondents are thinking and feeling about a topic.&lt;br&gt;• Want to gain insight into the respondents’ thinking.&lt;br&gt;• Are in the process of designing closed-ended questions.&lt;br&gt;• Want to supplement or better understand closed-ended responses.</td>
</tr>
<tr>
<td><strong>Multiple Choice</strong>&lt;br&gt;(Nominal, Closed-ended)</td>
<td>• Fast to complete.&lt;br&gt;• Respondents do not need to write.&lt;br&gt;• Relatively inexpensive.&lt;br&gt;• Easy to administer.&lt;br&gt;• Easy to score.&lt;br&gt;• Can compare groups and disaggregate easily.&lt;br&gt;• Responses can be scanned and interpreted easily.</td>
<td>• Unless one has thought through how the items will be scored and has the capabilities of scoring items mechanically before sending out the questionnaires, it can be expensive to do, time-consuming, and easy to make mistakes.&lt;br&gt;• Lose spontaneity.&lt;br&gt;• Don’t always know what you have as results.&lt;br&gt;• Respondents are not always fond of these questions.&lt;br&gt;• Some respondents may resent the questioner’s pre-selected choices.&lt;br&gt;• Multiple-choice questions are more difficult to write than open-ended.&lt;br&gt;• Can make the wrong assumption in analyzing the results when response options are not the same as what respondents are thinking.</td>
<td>• Want to make group comparisons.&lt;br&gt;• Know some of the responses that the sample is considering, and want to know which option they are leaning toward.&lt;br&gt;• Have large samples.&lt;br&gt;• Want to give respondents finite response choices.</td>
</tr>
<tr>
<td><strong>Ranking</strong>&lt;br&gt;(Ordinal, Closed-ended)</td>
<td>• Allows understanding of all reasons in priority order.</td>
<td>• More than seven response options will confuse respondents.&lt;br&gt;• May leave out important item response options.&lt;br&gt;• Relatively hard to analyze—you will know the number of respondents who rated item one as 1, etc.</td>
<td>• Want to know all responses in an order.&lt;br&gt;• Are clear on common response options.&lt;br&gt;• Do not want people to add to list.</td>
</tr>
</tbody>
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**Example:**

**Written**

What do you like about this school? (Write your response in the space provided below.)

**Multiple Choice**

Suppose you are a school board member. What is the most important concept you think the school should focus on to ensure well-prepared students?

(Circle the one response option below that best represents your position.)
1. Basic skills
2. Technology
3. Problem-solving skills
4. Lifelong learning
5. Collaborating with others

**Ranking**

Why did you choose to enroll your child in this school? (Mark a 1 by the most important reason, 2 by the second most important reason, etc.)

- It is our neighborhood school
- Reputation as a quality school
- Know someone else who attends
- I went there when I was in elementary school
- My child needs more challenge
- My child needs more personal help
### Types of Questions (Continued)

<table>
<thead>
<tr>
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<th>Disadvantages</th>
<th>Appropriate When—</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rating</strong>&lt;br&gt;(Interval, Closed-ended)</td>
<td>• Allows you to see the passion behind respondents’ feelings, i.e., <em>Strongly Agree/Strongly Disagree.</em>&lt;br&gt;• Easy to administer.&lt;br&gt;• Easy to score.&lt;br&gt;• Can compare group responses.&lt;br&gt;• If an ordinal scale is created similar to the 5-point example, one can average the results.&lt;br&gt;• There are many ways one can analyze the results.&lt;br&gt;• Since there are usually only five options, frequencies of each response can be taken, along with the mode to determine most popular responses.</td>
<td>• Do not know if every respondent is reading the question and response options in the same way.&lt;br&gt;• Do not know what you have when neutral is circled—might be a bad question or the respondent doesn’t care, or it might be a viable option.&lt;br&gt;• Unless one has thought through how the items will be scored and has the capability of scoring items mechanically before sending out the questionnaires, it can be expensive to do, time-consuming, and easy to make mistakes.&lt;br&gt;• Questions are more difficult to write than open-ended.&lt;br&gt;• If charted together, questions must be written so the desired responses fall in the same direction (in other words—all written positively).</td>
<td>• Want respondents to rate or order choices, such as: <em>strongly disagree to strongly agree,</em> or show passion.&lt;br&gt;• Want to make group comparisons.&lt;br&gt;• Have large samples.&lt;br&gt;• Want to understand where problems are in the organization.</td>
</tr>
</tbody>
</table>

| **Yes – No**<br>(Closed-ended) | • Very young children can answer questions with these response options.<br>• Very easy to score, analyze, and chart. | • Not sure how meaningful the data are.<br>• Responses do not give enough information. | • Want all or nothing responses.<br>• Have a sample that would have difficulty responding to more options. |

| **Nominal**<br>(Categorical) | • Factual: no value judgment.<br>• Useful for disaggregating other question responses.<br>• Lets you know if sample is representative of the total population. | • Some people will not respond to these types of questions.<br>• Some people respond falsely to these questions.<br>• With small groups, one might be able to identify the respondent on an anonymous questionnaire because of the demographic information given. | • Want to disaggregate data by male/female, ethnicity, program.<br>• Want to know the impact of a program on different types of individuals.<br>• Want to know if respondents resemble the population. |

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**Figure C1–2 (Continued)**

- **Example:**<br>
  - *I feel like I belong at this school.*
  - **Strongly Disagree** 1<br>  - **Disagree** 2<br>  - **Neutral** 3<br>  - **Agree** 4<br>  - **Strongly Agree** 5

  **Strongly Disagree**

  **Disagree**

  **Neutral**

  **Agree**

  **Strongly Agree**
Design Considerations for Multiple Choice Paper Questionnaires

The appearance and arrangement of the questionnaire frequently determine whether or not the respondents will complete it. Try to fit the questions and answers onto one page, if possible. You want the questionnaire to be quick to complete so that the respondent will answer all of the questions.

The majority of western respondents read from left to right. If the layout of the questions and responses is consistent with this pattern, it will increase the accuracy, and will be easier and faster for respondents to complete.

A clear label shows respondents for whom the questionnaire is intended.

Begin with more general questions and lead up to the more specific.

Write instructions that tell your respondents what you would like them to do.

Leaving white space makes the questionnaire easier to read.

Do not use questions that have conjunctions. Use two separate questions instead.

Ask questions to address the issues that are based on what you want to know, and that cannot be gathered from other sources.

For evidence of school improvement, ask questions that you want to ask over time to see growth.

Think about the impact of every question on your respondent. Make sure the questions will not offend anyone.

Make the questions simple, short, and free of jargon/bureaucratic words.

Avoid:

- trying to assess a little of everything
- leading questions
- jumping around content-wise
- double negatives

Placing response options close to the questions decreases the chance of error due to respondents mismatching lines.

If the questions are worded so that the answers fit into one scale, it will be easier for the respondent to complete and for you to analyze and graph later.

Make it obvious where respondents should make their mark.

**Figure C1–3

Parents**

*Please complete this form using a No. 2 pencil. Be sure to completely fill in the circle that describes best what you think or how you feel. Thank you!*

- I feel welcome at my child’s school
- I am informed about my child’s progress
- I know what my child’s teacher expects of my child
- My child is safe at school
- My child is on track to be successful
- There is adequate supervision during school
- There is adequate supervision before and after school
- Teachers show respect for the students
- Students show respect for other students
- The school meets the social needs of the students
- The school meets the academic needs of the students
- The school experts quality work of its students
- The school has a safe and healthy environment
- I know how well my child is progressing in school
- I like the school’s report cards/progress report
- I respect the school’s teachers
- I respect the school’s principal
- Overall, the school performs well academically
- The school succeeds at preparing children for future work
- The school has a good public image
- The school’s assessment practices are fair
- My child’s teacher helps me to help my child learn at home
- I support my child’s learning at home
- I feel good about myself as a parent

**Children’s grades:**

- Kindergarten
- First Grade
- Second Grade
- Third Grade
- Fourth Grade
- Fifth Grade
- Sixth Grade
- Seventh Grade
- Eighth Grade
- Ninth Grade
- Tenth Grade
- Eleventh Grade
- Twelfth Grade

**Number of children in this school:**

**Number of children in the household:**

**Ethnic background:**

- Black
- Hispanic
- Other

**Responding:**

- Mother
- Father
- Guardian
- Other

Make sure that, however you wish to disaggregate the data later, the information is captured on the form.

In other words, if you want to know the difference between males and females on their responses to particular questions, ask your respondents their gender on the questionnaire.
Figure C1–4

Design Considerations for Open-ended Questions

Ask only two to three open-ended questions because of the length of time it takes respondents to reply and because of the difficulty of analyzing the responses. Open-ended questions usually appear at the end of the questionnaire. If all scannable items can be put on one page, place the open-ended on the back.

Place open-ended section at the end of the questionnaire.

Leave enough space for respondents to comment.

Do not use lines. Lines limit feedback. Do provide sufficient space for comments.

What are the strengths of your child’s school?

What needs to be strengthened at your child’s school?
Figure C1–5

Design Considerations for Online Questionnaires

In addition to the same considerations regarding the content of paper questionnaires, you will also want online questionnaires to be quick to complete and easy to navigate so that respondents will answer all of the questions.

- Customize for the school and type of respondent.
- Write a purpose for the questionnaire.
- Write instructions that tell the respondents what you would like them to do.
- Always thank respondents for taking the questionnaire.

When there is a stem, group few items together. When scrolling, respondents will forget the stem if more than 5 items are in a group.

Set up the questions so respondents read left-to-right. It is brain-compatible.

Do not use questions that have conjunctions. Use two separate questions instead.

If the questions are worded so that the answers fit into one scale, it will be easier for the respondents to complete and for you to analyze and graph later.

Make it obvious where respondents should make their mark.

Example: Staff Questionnaire

- This questionnaire is designed to gather general information about what staff members think and feel about the school and their relationship with the school.
- In response to the questions asked below, please click on the button next to the answer that is closest to what you think or feel.

Thank you!
Design Considerations for Online Questionnaires

If you want, you may add two to three open-ended questions to the questionnaire after the multiple-choice questions and before the demographic options.

Do not use certain demographics if individuals can be identified (i.e., some demographic groups might be so small they would identify individuals).

Make sure that, however you wish to disaggregate the data later, the information is captured on the form.

In other words, if you want to know the differences among grade levels on their responses to particular questions, ask your respondents the grade level they teach on the questionnaire.

ADMINISTERING QUESTIONNAIRES

Purpose
The purpose of this activity is to guide staff members in setting up the administration of questionnaires.

Target Audience
School staff are the target audience. However, a Leadership Team or Data Team can make the plans and take them back to the full staff for approval and implementation.

Time
Approximately two hours.

Materials
Computer and projector.

Overview
The most efficient and effective method of administering questionnaires is online through an Internet server. With online questionnaires, respondents visit a website that uses form submission web pages that funnel response data to a database or other container for data housed on a server. With online questionnaires, the data collection process is streamlined for a variety of reasons:

- Paper is eliminated, as are the administrative oversight and other costs associated with the use of paper.
- Most schools and districts already have the hardware and software necessary to administer online questionnaires.
- A district can administer questionnaires and monitor the entire process for all of its schools from a single location.
- Administrative oversight is minimal. Communication can take place through e-mail.
- Duplication of effort is minimized. Files set up for administering questionnaires can be used as templates for data collection and analysis, requiring minimal setup time especially when used with multiple schools.
- The costs associated with administering questionnaires depend less on the number of responses, as opposed to using scannable forms, hand-entry, or online methods. Receiving 50 or 500 responses online does not significantly impact time spent in analysis.
- Responses are converted to numeric data at the same time that they are submitted to the server. Results can be turned around as soon as the last respondent completes her/his submission.
- Questionnaires are administered within a controlled environment, such as a computer lab, to ensure that responses are valid.
- Checking the reliability of submissions is streamlined as responses are collected within a structured database environment. The responses are visually easy to check.
- Open-ended responses are collected in the server database and are easily exported to text documents. With paper, you must type each open-ended response to analyze and report the results.
- The technology and files used for online questionnaire administration can be retasked and used for other data collection projects.
Process Protocol
Steps in Setting Up a Data Collection Process

Step 1. Communicate the purpose, procedures, and content to stakeholders well in advance. In order for any data work to be successful, the purpose, procedures, and content must be clearly communicated to stakeholders well before data collection begins. Anticipating and answering all of the what, why, when, where, and how questions will go a long way toward helping you obtain a high response rate with honest responses.

When collecting data online, the easiest way to communicate about your questionnaire project is to set up a demonstration site on your server. The demonstration site can consist of a general information page that contains links to demo versions of each of the questionnaires that you will be administering. The general information page can contain information to satisfy the why and when, and the links to demonstration questionnaires can help satisfy the what, where, and how questions. The demonstration sites allow staff members to experience the online method to decrease anxiety about the use of technology, to review the content for each of the questionnaires that will be administered, and to visualize how the respondent groups will submit their responses.

Step 2. Select the best time to administer questionnaires. There is really no “best” time of year to administer questionnaires (when administering questionnaires that truly measure environmental perceptions). Significant differences are rarely seen in student and parent perception data that are collected in the Fall versus the Spring. It is more important that questionnaires be administered at generally the same time each year, every year.

If you choose to administer your questionnaires in the Fall, allow enough of the school calendar to pass so that respondents will have adequate experience with the school to inform their responses. If the school year starts in late August, you should not administer your questionnaires before mid October. If you choose to administer your questionnaires in the Spring, be careful not to overwhelm respondents during a time that is heavy with testing.

A key consideration in scheduling your parent questionnaire administration is determining when you are most likely to have parents onsite in large enough numbers that collecting their responses online becomes a viable option. For elementary schools, Fall parent-teacher conferences provide a great opportunity to collect parent responses because these conferences are usually the most highly attended parent-onsite activity of the year. We like to put the students in charge of ushering parents to the computer lab, getting them comfortable with the questionnaire process, and then escorting the parents to their conferences when finished with the questionnaire. For middle or high schools, parent-teacher conferences, curriculum nights, or even athletic/music/drama events might be considered as times to collect parent responses if the opportunity is well publicized.

Step 3. Select the environment for administration. A carefully selected environment for completing questionnaires can help facilitate a good return, honest responses, and can also provide facilitators to provide administrative oversight and assistance.

Staff members can submit their responses in a computer lab setting during a staff meeting; in short order, you have a 100% response rate. An e-mail link can be used for convenience, but then you won’t know who did not respond and cannot follow-up with individuals to give them the opportunity to respond. Students and parents can submit their responses in a computer lab as well where large numbers can respond simultaneously, and facilitators can provide oversight and assistance as needed.
Process Protocol *(Continued)*

Schedule staff questionnaire administration first. In submitting their responses, staff members will become familiar with the process of submitting responses and will be better able to organize and lead students through the process. When students submit their responses, they become equally familiar, and they are then available to help parents with the technology and language. If using scannable forms for parents, students are more likely to take parent questionnaires home and return the completed forms to staff in a timely manner after they have completed their own online submissions.

**Step 4. Establish a manageable schedule for administration.** With the impact of administration order in mind, use the school calendar to identify a target date for parents (during conferences); schedule students at least a week before parent conferences and staff at least a week before the student administration.

For school districts facilitating questionnaires for a large number of schools, the timeline for data collection should depend largely upon the amount of oversight and troubleshooting that can be provided by those facilitating data collection. Scheduling questionnaires for every school in a large district for the same week could seriously impact the ability to provide schools with needed oversight and assistance. If facilitators at the district level can effectively communicate with only five schools per week about their student questionnaires, and there are 20 schools in the district, schedule the administration of student questionnaires over a four-week period. Figure C2-2 on the next page is a sample questionnaire administration planning sheet.

**Step 5. Provide a narrow window of administration for each questionnaire.** Selecting a narrow window of administration will help focus your administrative and support efforts and allow you to respond to low response rates or other issues quickly. Opening questionnaire administration to a broad timeline usually decreases the ability to identify exactly who has responded and how to provide additional access or resources.

The window for administration depends largely upon the respondent pool. For students responding online, for instance, it is realistic to allocate a week for the collection of submissions, even at the high school level. Staff and parents may be isolated to a specific event, such as a staff meeting or a parent-teacher conference.

**Step 6. Provide additional language access.** Providing access to questionnaires in multiple languages can be facilitated online by providing respondents with the opportunity to select from a variety of pages that contain the same questionnaire in different languages. Each questionnaire page can be submitted to the same database or another resource on the server where the responses are converted to numeric data. For scannable forms, multiple versions of the same form can be produced for each language and, when scanned, can be combined into a single data file for analysis.

Producing the translated content should not be taken lightly. If care and consideration are not taken to acknowledge the colloquial or regional use of the language, the result may be that the process is more exclusive than inclusive.

A larger issue than translation can be access to the technology for data collection for second language groups. Respondents who require assistance with language may be more likely to require assistance in using the technology to submit their responses. A solution is to ask students or staffs who are able to address both the language and technology issues to facilitate questionnaires for respondents.
### Figure C2-2

**QUESTIONNAIRE INFORMATION PROJECT PLANNING AND TRACKING FORM**

<table>
<thead>
<tr>
<th>District Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelly River County School District</td>
<td>Jane Smith</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>District Name</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th><strong>Elementary</strong></th>
<th><strong>Students (5-point Q)</strong></th>
<th><strong>Students (5-point Q)</strong></th>
<th><strong>Staff</strong></th>
<th><strong>Parents</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grades</td>
<td>Desired No.</td>
<td>Date(s)</td>
<td>Online</td>
</tr>
<tr>
<td>Belle Aire</td>
<td>1st - 5th</td>
<td>95</td>
<td>10/20 - 10/24</td>
<td>x</td>
</tr>
<tr>
<td>Cherry Hill</td>
<td>1st - 5th</td>
<td>470</td>
<td>11/3 - 11/7</td>
<td>x</td>
</tr>
<tr>
<td>Eastside</td>
<td>1st - 5th</td>
<td>70</td>
<td>10/27 - 10/31</td>
<td>x</td>
</tr>
<tr>
<td>Rose Avenue</td>
<td>1st - 5th</td>
<td>650</td>
<td>11/3 - 11/7</td>
<td>x</td>
</tr>
<tr>
<td>Sunnyside</td>
<td>K</td>
<td>680</td>
<td>11/3 - 11/14</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Middle</strong></th>
<th><strong>Students (5-point Q)</strong></th>
<th><strong>Staff</strong></th>
<th><strong>Parents</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grades</td>
<td>Desired No.</td>
<td>Date(s)</td>
</tr>
<tr>
<td>Eastside Middle</td>
<td>6th - 8th</td>
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<td>1,322</td>
</tr>
<tr>
<td>Kelly River Middle</td>
<td>6th - 8th</td>
<td>N/A</td>
<td>1,600</td>
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<tr>
<td>King Middle</td>
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<table>
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<th><strong>High</strong></th>
<th><strong>Students (5-point Q)</strong></th>
<th><strong>Staff</strong></th>
<th><strong>Parents</strong></th>
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<tbody>
<tr>
<td></td>
<td>Grades</td>
<td>Desired No.</td>
<td>Date(s)</td>
</tr>
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<td>9th - 12th</td>
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<td>Kelly River High</td>
<td>9th - 12th</td>
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<td>1,907</td>
</tr>
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</table>
Process Protocol (Continued)

Step 7. Test the data collection tools prior to administration. A critical part of effectively collecting questionnaire data involves thoroughly testing the tools to be used before releasing them to respondents. For collecting data online, testing involves submitting responses to each of the questionnaire sites. If using scannable forms, pull forms from various points within the print run, fill them out, and run them through the OMR scanner to make sure data are recorded accurately. Any work associated with the testing that is completed before actually collecting data will pale in comparison to the efforts required if you experience problems with online data submission or form scanning.

Step 8. Verify the data. In verifying the data, consider the number of people who were given the questionnaire and the number of responses received. If the number of responses is low, follow-up with those who received the questionnaire originally to get more responses. If your parent questionnaire was given at parent–teacher conferences and only 60% of your parents attended (identified through a guest book or sign-in sheets in each classroom), you could use another format to get additional responses from the parents who did not attend. Only with in-person administration procedures can you know exactly who responded to an anonymous questionnaire. You could send scannable questionnaires to those who did not attend. Figure C2-3 shows Figure C2-2 completed to document response numbers to ensure the best possible sample.

For each of the approaches to gathering questionnaire data, you will need to verify the accuracy of the data collection. For online data collection, remove any duplicates, tests, or otherwise errant responses from your sample. For scannable forms, recheck the reliability of your scanning process by checking responses from a few of the scannable forms against the data file produced by the scanner.
## Figure C2-3
### QUESTIONNAIRE INFORMATION RESPONSE DETAIL REPORT

<table>
<thead>
<tr>
<th>District Name</th>
<th>Kelly River County School District</th>
<th>Fall 2008</th>
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### ELEMENTARY

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<td>16</td>
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<td>30</td>
<td>8</td>
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<td>9</td>
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### MIDDLE

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<tbody>
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<td>1,146</td>
<td>1,688</td>
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### HIGH

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Eastside High</td>
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<td>106</td>
<td>0</td>
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<td>34</td>
<td>68</td>
<td>74</td>
<td>1,642</td>
<td>33</td>
<td>1,249</td>
<td>1,608</td>
<td>114</td>
<td>34</td>
<td>1,205</td>
</tr>
</tbody>
</table>

**Note:** Numbers above do not account for test or duplicate submissions to be removed prior to analysis.
Comments to the Facilitator

A secure environment for collecting questionnaire data online can be achieved either through technology or by setting up an effective process.

With technology, we can build elaborate systems to validate users with checks such as unique user names and passwords. This technology requires a greater degree of knowledge and experience with technology, and it often results in the transition from a static (simple) data model to a dynamic (complex) model.

In designing an effective process for collecting responses, however, we can achieve a comparable level of security. A few guiding ideas can help facilitate a secure process:

- Set up data collection websites for each school, each with its own separate staff, student, and parent questionnaire sites. Respondents can only submit responses for their particular questionnaire for their school. Their responses are more readily trackable on the server.
- Provide web addresses for access to each questionnaire for each school, and only just before data collection is to take place. Do not provide links to the questionnaires anywhere on the web. By asking respondents to enter a web address into a browser, you are facilitating a degree of validation without having to oversee the distribution of user names and passwords.
- Add auto-entering date and time fields to your data collection databases so you can track exactly when submissions were received. Any responses received outside of the agreed administration time period may be suspect.
- For students and parents, administer questionnaires within a computer lab or other environment where participation can be supervised and support provided as needed. Set the time frame so it is difficult, or impossible, for someone to submit more than one form.

In the end, simple form submission to a database provides us with the greatest amount of security as databases used for collection (hence the raw data) need not be broadcast directly to the web.

As with other data projects, all data collected must be validated prior to analysis regardless of the safeguards in place prior to collection. The databases used on the server provide a great environment for reviewing and validating our data, which ultimately reduces the need to put technology in place to secure data collection. In the end, a secure process will help us more than focusing on technological solutions that may add complex layers to the work.

ANALYZING QUESTIONNAIRE RESULTS

Purpose
The purpose of this activity is to guide staff in analyzing questionnaire data.

Target Audience
Leadership Team or Data Team can analyze the questionnaires, aggregate the open-ended responses, and take them to the full staff for analysis.

Time
Approximately one hour.

Materials
Copies of the questionnaire results and questionnaire study questions. Chart pad paper and markers.

Overview
When creating a questionnaire, one needs to make sure the content and design facilitate effective data analysis and effective use of the results. The structure of the questions dictates how the responses will be analyzed and how the results will be presented.

If we want to be able to see all items in relation to each other, all items need to use the same scale and be phrased in the same way (e.g., stated positively). A single scale for all items allows us to analyze responses to all questions along a single point of orientation (scale) and to place the results together in the same graph.

If different scales are used, and if positively and negatively phrased questions are combined in the body of the questionnaire, different methods are required to analyze and present the results. Like-scaled and/or phrased items need to be grouped into separate files for analysis of results and into separate graphs for presentation.

Sometimes items are different enough that they warrant using different scales and phrasing, but most often phrasing can be adjusted to the use of a single scale. Figure C3-2, shown on the following page, breaks down the steps for analyzing the results of the questionnaire.

Process Protocol
Establish analysis points that can consistently provide useful and valuable information for each school or building. Disaggregate or sort results by demographics, by year, and by other specific characteristics of the group being surveyed to lead deeper and deeper into issues.

Typical analysis descriptions follow:

Analysis of total survey respondents provides a general overview of questionnaire results. This information plots general differences among items and illustrates some general thematic ties among items.
Analysis by demographic variables allows schools to isolate differences in responses by subgroups within the school population. Looking into general demographic subgroups, such as gender, ethnicity, and grade level, provides valuable information about the perceptions of questionnaire respondents. By selecting demographic variables carefully, schools can tie perceptions data to demographic, student learning, and school process data to acquire a clearer picture of how perceptions/climate/environment influence learning.

Analysis by year is perhaps the most powerful level of analysis. Looking at changes over time validates the work a school has done and helps staff members realign their actions. It should be noted that strategies for change should not focus on questionnaire results on their own; perceptions data, along with demographics, student learning, and school process data, can tell the whole story.

When disaggregating or sorting any data for analysis, one needs to take care not to provide analyses where individuals can be identified. Providing any analysis of perceptions data with subgroups fewer than eight can impact the interpretation of the analysis. Potential risks include alienating questionnaire respondent groups by creating a feeling of negative accountability by identifying individuals, or by having readers put undeserved emphasis on results during interpretation.

Complex Analysis or Simple Statistics?

Descriptive statistics, simple summaries used to explain the basic characteristics of the data, are very powerful for analyzing school perceptions. We want to see items in relationship to each other, and to know if different groups are responding to processes in the same or different ways. In addition, producing average statistics for each item, and then eyeballing the relationship of items to each other, can reveal differences and highlight themes. Schools want to know what they are doing well, what they can do better for students, and to know what actions to take. Descriptive statistics can help schools do all of these.
Process Protocol (Continued)

“Significant differences” determined through complex statistical analyses often cement the differences rather than provide information on which to change. For example, if questionnaire results were “significantly different” for classified staff versus certificated classroom teachers on an item related to the school having a shared vision, it would not inspire all staff to work together to revisit and make the vision shared or even to look at other items. It might be perceived that one group should “get on board.”

If descriptive statistics showed that items related to working closely together, sharing decisions, and planning were low, in addition to a shared vision, the whole staff would be more likely to work together to revisit the vision and redefine the major parts, such as sharing decisions, planning, collaboration, and analyzing the results of the questionnaire.

Comments to the Facilitator

At times it seems that unending streams of analyses can be created. The key is to determine what small percentage of these analyses are actionable, and then decide what can be avoided as redundant. Avoid burying users with analyses that do not prompt them to see their results easily, uncover new interpretations of the results, or provide further clarification of the results through disaggregations. We want to focus on analyses that get to the point and relay the results effectively. Perceptions data, unlike other forms of data, may not need to be disaggregated down to multiple subgroups in order to take effective action.

When creating analyses, ask yourself if the analysis is telling you anything beyond what has already been created, or if it is helping you see the data in a new way. Instead of focusing on presenting analyses that are redundant, it would be better to focus energy into other areas of data, tying the perceptions data to other measures. After summarizing the data, integrate into the data profile.

ANALYZING OPEN-ENDED RESPONSES

Purpose
The purpose of this activity is to share and demonstrate how to analyze open-ended responses from administered questionnaires.

Target Audience
Committee of teachers.

Time
One hour.

Materials
Hard copies of the open-ended questionnaire responses, or computer files; computer on which to record and aggregate responses.

Overview
Open-ended questions should not be overlooked when assessing perceptions of the learning environment. While open-ended responses to questions are very time-consuming to compile or aggregate, one can get a complete sense of the learning environment by asking students, for instance, two questions:

- What do you like about this school?
- What do you wish was different?

Or, asking students, staff, and parents, these two questions—

- What are the strengths of this school?
- What would make the school better?

Staff need to be clear on the most common responses; so instead of guessing, they need to aggregate the responses to know how many respondents said the same thing.

Process Protocol
There is no fast or automated way to analyze open-ended responses. The best way to analyze open-ended responses is to take the list of open-ended responses, review the responses, and tally the number of times students said the same thing. Place the number in parentheses after the statement, eliminate the duplicates, and revise your list. You will need to make judgment calls about how to collapse the items when parts of the responses are different. The table on the next page, Aggregating Open-ended Responses, shows the open-ended response list in the left-hand column. The other column shows how the list can be condensed. The right-hand column, labeled “Add Descriptors,” shows the number of times teachers were mentioned and in parentheses indicates the descriptions and the number of times the descriptors were mentioned. For example:

- Teachers (6) (caring, 3; nice, 2; good, 1)

An example of what the aggregated open-ended responses would look like is shown in Figure C4-2.
Figure C4-2
AGGREGATED OPEN-ENDED RESPONSES

Comments to the Facilitator

Open-ended responses are very helpful in painting the picture of the school. It is important to capture the feelings of the respondents as the responses are aggregated. Make sure responses are aggregated before staff members review the questionnaire results.

The purpose of this activity is to guide staff in presenting questionnaire data so that is will be used by staff.

Full staff. Leadership Team or Data Team can create the presentation of results and share results with full staff for analysis.

Approximately 1 hour.

Copies of the questionnaire results and questionnaire study questions.

We want to present questionnaire results in a way that facilitates easy interpretation, provides contextual understanding, and creates a “Wow!” moment with data. We know that teachers do not have the time to analyze or use complex questionnaire results. It behooves the preparers of the results to forego complex analyses and to reduce large amounts of information to a single or a small number of graphs that provide powerful information, and to provide a report summarizing the information. The power of graphs comes from their ability to convey data directly to the viewer. Viewers use spatial intelligence to retrieve data from a graph—a source different from the language-based intelligence of prose and verbal presentations.

Questionnaires are designed to ask multiple questions to understand the “Big Picture” while defining what needs to improve to get better results. Figure C5-2 shows the steps in reporting questionnaire results.
Figure C5-2
REPORTING QUESTIONNAIRE RESULTS PROCESS

REPORT RESULTS:
How can the data be graphed and reported to effectively show the results?

Scaled-item responses
- Tables
- Which illustration(s) will convey my results most effectively?
  - Bar graphs

Open-ended responses
- Line graphs
- Graphing application
  - Which tool will allow the most effective presentation of results?
  - Spreadsheet application
  - Develop illustration template files
  - Insert results
  - Verify
  - Produce the report
  - Interpret results
  - Disseminate the findings

Organize/format responses in word processing application
- Aggregate responses
We are all used to seeing questionnaire results as presented in Figure C5-3. When results are presented in this manner, it is very hard to know which items are most important, highest, or lowest. We don’t even think about how the items might work together. It is just too confusing. When using results from this type of presentation, most people pick just one or two items to work on. Even worse, people might ignore them all, especially if they don’t understand the “Big Picture.”

Results could be provided in individual bar graphs that show the percentage of responses for each response option. Figure C5-4 consists of bar graphs for the first four items listed in Figure C5-3. Again, noting the relationship among items becomes very difficult, each item would have a separate bar graph, which results in many pages; and comparing items to each other would require physically comparing each graph to the others to determine any potential relationship. Therefore, it is difficult to determine what actions to take to eliminate undesirable results or to continuously improve desirable results. Alone, individual bar graphs

<table>
<thead>
<tr>
<th>ITEM—When I am at school, I feel:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I belong</td>
<td>2%</td>
<td>4%</td>
<td>22%</td>
<td>47%</td>
<td>25%</td>
</tr>
<tr>
<td>I am safe</td>
<td>2%</td>
<td>5%</td>
<td>10%</td>
<td>42%</td>
<td>41%</td>
</tr>
<tr>
<td>I have fun learning</td>
<td>4%</td>
<td>10%</td>
<td>37%</td>
<td>32%</td>
<td>17%</td>
</tr>
<tr>
<td>I like this school</td>
<td>2%</td>
<td>6%</td>
<td>21%</td>
<td>27%</td>
<td>43%</td>
</tr>
<tr>
<td>This school is good</td>
<td>1%</td>
<td>4%</td>
<td>21%</td>
<td>38%</td>
<td>37%</td>
</tr>
<tr>
<td>I have freedom at school</td>
<td>7%</td>
<td>14%</td>
<td>31%</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>I have choices in what I learn</td>
<td>9%</td>
<td>20%</td>
<td>42%</td>
<td>22%</td>
<td>8%</td>
</tr>
<tr>
<td>My teacher treats me with respect</td>
<td>2%</td>
<td>3%</td>
<td>12%</td>
<td>29%</td>
<td>55%</td>
</tr>
<tr>
<td>My teacher cares about me</td>
<td>3%</td>
<td>2%</td>
<td>13%</td>
<td>29%</td>
<td>53%</td>
</tr>
<tr>
<td>My teacher thinks I will be successful</td>
<td>2%</td>
<td>3%</td>
<td>14%</td>
<td>36%</td>
<td>44%</td>
</tr>
<tr>
<td>My teacher listens to my ideas</td>
<td>2%</td>
<td>3%</td>
<td>26%</td>
<td>44%</td>
<td>25%</td>
</tr>
<tr>
<td>My principal cares about me</td>
<td>2%</td>
<td>2%</td>
<td>17%</td>
<td>31%</td>
<td>48%</td>
</tr>
<tr>
<td>My teacher is a good teacher</td>
<td>2%</td>
<td>2%</td>
<td>8%</td>
<td>26%</td>
<td>62%</td>
</tr>
<tr>
<td>My teacher believes I can learn</td>
<td>1%</td>
<td>1%</td>
<td>10%</td>
<td>29%</td>
<td>59%</td>
</tr>
<tr>
<td>I am challenged by the work my teacher asks me to do</td>
<td>8%</td>
<td>8%</td>
<td>42%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>The work I do in class makes me think</td>
<td>3%</td>
<td>4%</td>
<td>25%</td>
<td>43%</td>
<td>24%</td>
</tr>
<tr>
<td>I know what I am supposed to be learning in my classes</td>
<td>2%</td>
<td>1%</td>
<td>12%</td>
<td>44%</td>
<td>40%</td>
</tr>
<tr>
<td>I am a good student</td>
<td>1%</td>
<td>2%</td>
<td>11%</td>
<td>39%</td>
<td>47%</td>
</tr>
<tr>
<td>I can be a better student</td>
<td>5%</td>
<td>5%</td>
<td>23%</td>
<td>37%</td>
<td>30%</td>
</tr>
<tr>
<td>Quality work is expected at my school</td>
<td>2%</td>
<td>4%</td>
<td>20%</td>
<td>39%</td>
<td>35%</td>
</tr>
<tr>
<td>I behave well at school</td>
<td>2%</td>
<td>2%</td>
<td>17%</td>
<td>35%</td>
<td>44%</td>
</tr>
<tr>
<td>Students are treated fairly by teachers</td>
<td>7%</td>
<td>7%</td>
<td>19%</td>
<td>28%</td>
<td>38%</td>
</tr>
<tr>
<td>Students are treated fairly by the principal</td>
<td>2%</td>
<td>2%</td>
<td>11%</td>
<td>27%</td>
<td>58%</td>
</tr>
<tr>
<td>Students are treated fairly by the people on recess duty</td>
<td>10%</td>
<td>13%</td>
<td>22%</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Students at my school treat me with respect</td>
<td>8%</td>
<td>7%</td>
<td>38%</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>Students at my school are friendly</td>
<td>5%</td>
<td>7%</td>
<td>34%</td>
<td>35%</td>
<td>18%</td>
</tr>
<tr>
<td>I have lots of friends</td>
<td>3%</td>
<td>4%</td>
<td>18%</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td>I have support for learning at home</td>
<td>2%</td>
<td>3%</td>
<td>15%</td>
<td>35%</td>
<td>44%</td>
</tr>
<tr>
<td>My family believes I can do well in school</td>
<td>2%</td>
<td>1%</td>
<td>4%</td>
<td>19%</td>
<td>74%</td>
</tr>
<tr>
<td>My family wants me to do well in school</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>12%</td>
<td>84%</td>
</tr>
</tbody>
</table>
fail to provide a reference point to take action based on the results because the multi-point scale is not summary enough to quickly see the relationship of items to other items. We want to see what we are doing well in relation to what we could be doing better in order to improve.

The line graph is a very effective tool for presenting all item responses in relation to each other so that those interpreting the graph have a clear idea of the relationship of the low items to each other, and the high items to each other, and how the lows and the highs are related. Figure C5-5 shows a line graph for the same student questionnaire results shown in Figures C5-3 and C5-4.

Seeing the relationship of items to each other allows us to leverage what we are doing well and what it might take for us to do better. Also, the disaggregation can quickly show if there are subgroups with specific issues.
Figure C5-5
QUESTIONNAIRE RESULTS SHOWN IN A LINE GRAPH

When representing subgroups in a series of graphs or in graphs from year to year, be consistent with color and with symbols. If Asian students in the school are blue diamonds in one graph, make sure they are presented as blue diamonds in subsequent graphs, so that comparisons can be made easily.

Use symbols that will show up either in color or when the graph is printed or copied in black and white. Each of the subgroups are represented here with different colors and different symbols.

Scale item orientation should be "brain compatible" (left-to-right) to improve readability.

When graphing large numbers of subgroups (usually eight or more) with very similar responses, a graph may become difficult or even impossible to read. Be nice to your audience—if you think the chart is hard to read, it is! Consider breaking the analysis into two graphs, or even turning the graph. However, if a graph such as this one follows less congested graphs that allow readers to become familiar with the items in the graph, this graph would be great for spotting subgroup differences.

Be sure to include the number of people who make up each of the subgroups being graphed. (Subgroups with fewer than 8 respondents are generally considered to be too small to be considered in the graph.)

Note: When disaggregating by subgroups, numbers do not always add up to the total number of respondents because some respondents do not identify themselves by the demographic, or they may have the option of indicating more than one subgroup in the demographic.
Process Protocol (Continued)

Sharing Results with Staff

To be used, the results must be shared with staff. Figure C5-6 breaks down the steps in sharing/reviewing results. Nothing can undermine the staff member’s acceptance of data results quicker than reading or hearing about them before the results have been shared with all the staff. There are several ways to share and review questionnaire results with staff. These approaches can be done with just the questionnaire results or with all the data in a data profile. All approaches start with each faculty member having her/his own copy of the questionnaire results. Some effective approaches include the following, which are briefly described below. You and your staff will need to determine which approaches will work the best.

- Committee review meetings
- Fish bowl
- Gallery walk
- Small groups with protocol
- Data party
- Review as a part of overall data profile

Committee Review Meetings

Staff members could serve on committees assigned to review the student, staff, or parent questionnaire results. The committees’ charges would be to thoroughly review the results of the questionnaire to look for the strengths, challenges, and implications for the continuous school improvement plan. Each committee would report its findings to the entire staff. Staff members not on a specific committee could add what they saw. Implications across the three questionnaires will be melded into one set of overall implications/recommendations for improvement.

Fish Bowl

Fishbowls are used for dynamic group involvement. The most common configuration is an “inner ring,” consisting of four to five chairs arranged in an inner circle, which is the discussion group, surrounded by concentric circle “outer rings,” which is the observation group. Just as people observe the fish in the fishbowl, the outer rings observe the inner ring. The people in the inner ring (volunteers) discuss what they see in a graph (five minutes each), while the outer rings listen. The individuals in the outer rings are not allowed to speak until they join the inner circle. When an individual in the inner ring is finished speaking or finished with her/his observations, she/he moves to the empty outer ring chair, and someone from the outer ring wanting to say something moves to the empty chair in the inner ring. A questionnaire could be reviewed and discussed in 30 minutes. The facilitator could make variations to the rules to get input from all observers.
Process Protocol (Continued)

Gallery Walk

With the questionnaire graphs grouped by respondent and posted on the wall, along with sheets of chart paper with strengths, challenges, and implications for the continuous school improvement plan written on them, a gallery walk gives staff members an opportunity to look over the data—individually and interdependently—and to write the first things that come to mind when they see the graphs. A facilitator directs staff members to form groups and take turns looking at the student, staff, and parent graphs. The facilitator leads the discussions of findings after everyone has viewed all the graphs.

Small Faculty Groups with Protocol

Each faculty member could be assigned to a small group of five to seven (with grade level and subject area mixings) to review either the student, staff, or parent questionnaire results. With a protocol for reviewing the results, the conversation can be fun and respectful. A protocol could be something like this: One person speaks for three minutes about what she/he sees in a graph, without questions. Another person takes three minutes to add what she/he observed, and so forth, until the questionnaire has been analyzed. The group is given 15 minutes to discuss what it wants to report to the entire faculty. A recorder documents and reports the highlights to other small groups reviewing the same questionnaire. In 10 minutes they merge their findings and present to the entire staff.

Data Party

All the disaggregated and total graphs of the student, staff, and parent questionnaires results can be handed out to staff members who would review a graph for highlights and then seek out another disaggregated graph from the other respondents and compare notes. For example, if I got the student graph disaggregated by ethnicity, I would review that data and then seek out the parent questionnaire disaggregated by ethnicity. (There probably will not be a staff questionnaire disaggregated by ethnicity, as the subgroups would be too small.) A facilitator could provide a posted list of different graphs to compare, or use stickers, or draw names to get the faculty talking to each other about the results. This activity could be accompanied with refreshments if staffs would not feel that this trivializes the importance of sharing the data results.

Review as a Part of the Data Profile

If the timing is right, all data can be a part of the processes described above. The difference is that the implications for demographics, student learning, school processes, and perceptions can then be merged to find the big elements or concepts that must be a part of the continuous improvement plan. (See Questions to Guide the Study of Questionnaire Results, Figure C5-7, on the following page.)

Besides looking at the strengths, challenges, and implications for the continuous school improvement plan, staff might choose to use a questionnaire table, such as the one shown in Figure C5-8, on the next page, to analyze the results across the different respondents.
When using questionnaire results to drive continuous school improvement, staff members often want to tackle the most negative item or items first, and sometimes, only. It is important to understand the big picture that the results are showing, and to understand the true meaning behind the responses, so that the results can be dealt with efficiently and effectively.

Consider the relationship of the items to each other. Let’s say we have five low items. If we take the items literally and separately, we would be looking at five different things to do, which we probably will not get to. In actuality, the five are most probably related, and a serious consequence to making progress.

In short, to really use the items, staff have to understand the big picture, and determine solutions that can effectively work across the items.

Figure C5-8
ANALYSIS OF QUESTIONNAIRE DATA

<table>
<thead>
<tr>
<th>General Feel of Questionnaire (positive, neutral, negative)</th>
<th>Student Questionnaire</th>
<th>Staff Questionnaire</th>
<th>Parent Questionnaire</th>
<th>Agreements Across Questionnaires</th>
<th>Disagreements Across Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Positive Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On which items are there differences in subgroups? (i.e., disaggregated responses)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>