Strengthening SSIP Evaluations with Qualitative Methods

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Strengthening SSIP Evaluations with Qualitative Methods

Evaluating large-scale improvement efforts in early intervention and early childhood special education settings as called for in the State Systemic Improvement Plan (SSIP) is challenging. No single method provides the full picture of the changes occurring at each level of the Part C or Part B 619 systems. Using quantitative and qualitative methods offers different perspectives for examining SSIP implementation and results and provides states with greater insight into how implementation is going and what needs to change to reach intended outcomes. Qualitative methods, when carried out well, can provide valuable information that complements quantitative findings in assessing progress, identifying successes and challenges, and making adjustments to improve implementation.

Purpose

The purpose of this resource is to support states in using qualitative methods for evaluating SSIP work. It provides a broad overview of what qualitative methods are, as well as examples and suggestions for collecting high-quality qualitative data.

Readers will

- learn the difference between quantitative and qualitative methods,
- acquire a basic understanding of three qualitative data collection methods suitable for SSIP evaluation and learn the advantages and limitations of each, and
- learn steps for collecting, analyzing, and using high-quality qualitative data.

Additionally, this brief offers examples of two states using qualitative methods for their SSIP evaluation.

Quantitative Versus Qualitative Methods: What is the Difference?

Quantitative methods allow for collecting and analyzing numerical data or data that can be quantified. Examples of quantitative data collection methods that may be useful for SSIP evaluation include

- attendance sheets (e.g., to capture number of participants),
- structured surveys (e.g., to gather practitioners' self-reports of their use of identified practices using multiple-choice questions), and
- structured observational measures (e.g., standardized fidelity assessments of practitioners' implementation of an evidence-based practice that yield numbers such as counts or a number on a rating scale).

Data from these sources are analyzed to yield numbers such as counts, averages, and ranges. A primary advantage of quantitative methods is the ability to efficiently collect and analyze information across a large number of cases (e.g., families, children, programs, staff).

Qualitative methods allow for collecting and analyzing information that cannot be easily understood through numbers. They can be used to explore, understand, and explain what is happening in improvement activities. Qualitative methods are useful for collecting in-depth information on the what, how, and why of implementation. The following data collection methods can provide valuable qualitative information to address important questions about how SSIP implementation is going:

- interviews (e.g., to assess the experiences of families receiving services in implementation sites),
- focus groups (e.g., to learn from local program staff about supports needed for implementing evidence-based practices), and
- document reviews (e.g., to examine changes over time in policies pertaining to interagency data sharing).

Qualitative methods allow for collecting and analyzing information that cannot be easily understood through numbers.

When to Use Qualitative Methods

- When you need a detailed understanding of a problem or issue
- When you want to collect information that isn't easily quantifiable
- When you want to further explore and better understand findings from quantitative data
- When your focus is exploratory—when you need to hear from participants to know what further questions to ask

Qualitative methods are often the best way to collect stories from individuals involved in SSIP work, which can provide invaluable contextual information for understanding evaluation results.

With qualitative methods, a state can collect detailed descriptive and explanatory information. Qualitative methods are often the best way to collect stories from individuals involved in SSIP work (such as service providers, families, administrators), which can provide invaluable contextual information for understanding evaluation results. For example, a state may have quantitative data showing that certain evidence-based practices are not being implemented very often in some of the programs. Using qualitative methods such as interviews and focus groups, a state can collect data to help learn why this is happening and what obstacles staff members are experiencing. A disadvantage of qualitative methods is that data collection and analysis can be time consuming. Because of the time and resources required, qualitative methods typically involve relatively small numbers of participants, which limits the application of findings beyond the participating individuals.

Qualitative and quantitative methods often complement one another, and results can be used in combination to examine evaluation topics. An interview, for example, can contain quantifiable items such as, “How many home visits did you conduct this week?” as well as open-ended questions like, “What barriers did you experience in scheduling home visits this week?” Qualitative methods can also be used to explore topics to aid in the development of a quantitative instrument. For instance, focus group data from service providers may uncover a set of obstacles to implementing an evidence-based practice. The state could then include a question on a statewide survey of providers that asks about these obstacles to collect statewide data on this issue.

Best Practices for Using Qualitative Methods

Use the following best practices to produce meaningful qualitative data for SSIP improvement work.

1. Start with Evaluation Questions

Before planning to collect any data for your SSIP evaluation, it is important to first develop the evaluation questions. Evaluation questions should align with SSIP improvement activities and address implementation (process) and outcomes (impact). Data collection methods can then be matched to the nature of the evaluation question. Review your evaluation questions and ask yourself the following:

- Do your state's SSIP evaluation questions suggest a need to explore or better understand a process or capture detailed information that is not easily quantifiable?
- Would gathering in-depth information from individuals involved in or affected by the SSIP help answer the questions or better understand the answer to some questions?
- Are documents available that contain information that could be used to answer the evaluation questions?

If you answered yes to any of these questions, consider incorporating qualitative methods into your evaluation plan. Two states, New Mexico and Tennessee, used qualitative methods to address evaluation questions (see state example pages).

State Spotlight: New Mexico

New Mexico's Family Infant Toddler Program (Part C) conducted interviews of local agency directors as part of an evaluation of its IFSP Quality Rating Scale (IFSP QRS) tool, intended to improve IFSP development practices of Family Service Coordinators (FSCs). Improved functional IFSPs is one strategy the state is implementing to improve children's social emotional skills, acquisition and use of knowledge and skills, and taking actions to meet needs.

Evaluation Questions:

- How have the IFSP quality reviews affected how programs support FSCs?
- How have the IFSP quality reviews affected FSC practices?
- What are the barriers to implementing the IFSP quality reviews?
- What supports do programs and FSCs need to implement the IFSP QRS and improve IFSP development practices?

Methods:

- Interviews with local agency directors at all implementation sites
- Interview protocol developed with 8 questions (e.g., Are FSCs finding the IFSP quality reviews to be helpful? What effect, if any, are they having on FSC practices? What support do you need to support the continued use of the IFSP QRS within your agency? Have the IFSP quality reviews helped your agency understand the training needs of FSCs?)
- Interviewers participated in a training session and were given written instructions for conducting the interviews, including prompts for follow-up questions.

Analysis/Use of data:

New Mexico SSIP staff used the interview results, along with data collected from FSCs and analysis of the IFSP QRS data, to learn how the tool was affecting practices at the agency and practitioner levels (as perceived by local staff) and how implementation could be better supported. Quotes and examples were used to illustrate to stakeholders how the tool was being used and staff members' perceptions of its usefulness in improving practices. To improve implementation, results also helped inform revisions to the rating tool manual and training materials to include additional examples and clearer guidance on how to score the IFSP QRS.

NEW MEXICO
Family Infant Toddler Program

2. Select the Data Collection Method

Interviews, focus groups, and document reviews are three common methods for collecting qualitative data that are feasible for states to implement in their SSIP evaluations.

- Interviews and focus groups can yield rich in-depth stories, explanations, and perspectives from individuals who have knowledge and experiences relevant to SSIP work (e.g., service providers, family members, state personnel).
- Reviewing documents such as program records (e.g., meeting minutes, records of contacts with families) and public policy documents (e.g., state policies related to how children eligible for early intervention are served) can be helpful for gathering contextual and historical information.

Table 1 provides further information on these methods, including their advantages and disadvantages.

Questions to help you select a qualitative data collection method include the following:

- **What is the purpose of the data collection?** Clarify the purpose and how a particular qualitative method can provide the data to address evaluation questions. A clear purpose will aid in determining the most appropriate data collection method.
- **Do you have people with the skills and availability required?** What are the skills needed for the method (e.g., good communication, facilitation, and documentation skills and familiarity with the topic)? Do you have personnel with the necessary skills? Do they have time? What training will they need?
- **Do you have the resources needed?** What facilities, equipment, and materials are needed (e.g., accessible meeting space, transportation to in-person sessions, software and hardware for virtual sessions)? Are resources needed for participants (e.g., transportation, childcare, translation services, other incentives) to encourage participation?
- **How much burden will data collection place on participants?** Do service providers have time to participate in interviews or focus groups? Is their time billable? How can you minimize burden on participants? How easy will it be for program staff to locate and obtain relevant documents for review?

A clear purpose will aid in determining the most appropriate data collection method.

Table 1. Three Methods for Collecting Qualitative Data

	Description	Advantages	Disadvantages
Interviews	• Interviews are one-on-one conversations with individuals involved in or affected by the improvement efforts. • They are guided by a written protocol containing questions to be asked of all interviewees and follow-up prompts. • The format can be in person, virtual face-to-face (via Skype or other web-based program), or by phone. • Responses can be captured by handwritten notes, on a laptop/tablet, or recorded for later transcription.	• Respondents can express in their own words what is important and how they feel and why. • Interviewers can clarify questions with the interviewee in the moment and probe for detailed explanations. • Interviewers can observe nonverbal cues in in-person (and to some extent virtual) interviews. • The one-on-one interview is conducive for eliciting responses on sensitive or controversial topics.	• Conducting multiple individual interviews can be time consuming and costly. • Skilled interviewers are required to ask appropriate follow-up questions. • In-person interviews require time and resources for travel, and virtual face-to-face interviews require software, hardware, and Internet connectivity.
Focus Group	• In focus groups, several people (6-10) respond to the same questions (guided by a protocol) in a group. • Group participants typically have similar roles (e.g., separate groups for family members, administrators, and service providers). • The format is often in person, but virtual sessions are possible through web programs (e.g., Zoom), depending on participants' comfort and experience. • Responses can be captured by handwritten notes, on a laptop/tablet, or recorded for later transcription. • Ideally, two people run the group, a facilitator and a note-taker.	• Group interactions can generate ideas that would not have arisen without participants listening and reacting to each other. • Focus groups can be more time/cost efficient than multiple individual interviews—many people's perspectives are collected at one time. • In-person focus groups allow for observation of nonverbal cues.	• Participants' responses and participation are influenced by group dynamics. • Focus groups may not be appropriate for collecting sensitive information that participants do not want to share publicly. • Focus groups can be difficult to plan logistically (e.g., finding a common time and location for multiple people to meet). • The quality of the discussion and richness of information obtained depend greatly on the facilitator's skills and effectiveness.
Document Review	• Document reviews entail collecting data from existing documents. • A document review is helpful for gaining a sense of what was happening in a program before and in the early stages of implementation. • A standardized protocol helps ensure that document reviews are consistent across reviewers and documents. • Gathering information on how and why documents were produced is important.	• A document review can provide insight into a setting and/or group that cannot be obtained easily through observation. • It can provide information on a system or organization's priorities, resources, or policies. • It can provide information on historical trends (e.g., information of changes over time). • It typically requires less staff time to collect the information than interviews or focus groups.	• The accuracy of the information in the documents may be unknown. • Determining the most useful and appropriate documents to review may be challenging. • Certain documents and records may be difficult to access. • A lack of availability of similar documents across multiple programs makes it difficult to draw conclusions across programs.

3. Plan Ahead for Data Collection

Preparation is key to collecting high-quality data. Use these tips to prepare for data collection:

- **Develop and use written data collection protocols.** A protocol is a written guide for data collectors. For example, an interview protocol would include general instructions (e.g., how to conduct the interview), information to give participants (e.g., individuals' identities will not be shared), the interview questions (including possible prompts for follow-up questions), and steps after the interview (e.g., cleaning up notes, submitting data). A document review protocol includes information on the documents to be reviewed (e.g., document types/titles, date range), instructions for the review and submission process, and prompts for the specific information to be collected.
- **Develop a plan for identifying and recruiting participants.** Be purposeful when selecting potential participants. Try to gather as many perspectives and experiences as possible (e.g., service providers from different regions, families from different linguistic backgrounds) to examine what works for whom and in what context. Encourage participation by telling potential participants how the data collection effort will help the program.
- **Train data collectors.** Trained data collectors are essential for obtaining high-quality qualitative data. Training should cover the purpose of the data collection activity (i.e., the evaluation questions addressed), data collection procedures, how to use protocols, techniques for high-quality data collection (e.g., not reacting to responses), how to keep personally identifiable information secure, what to do with raw data, and who to contact about challenges and concerns.
- **Leverage existing mechanisms for collecting data.** Events such as stakeholder meetings, professional development sessions, site visits, and scheduled one-on-one meetings can be used as opportunities to gather data from participants.

4. Monitor Data Collection

To ensure high-quality data, develop and implement a plan for monitoring data collection. This includes:

- checking in with data collectors to ensure they are following specified procedures and
- periodically reviewing data collected (e.g., completed interviews to assess and provide feedback on the use of follow-up prompts, the completeness of documentation).

Expect to make adjustments early in your data collection to improve data quality.

Preparation is key to collecting high-quality data.

State Spotlight: Tennessee

The Tennessee's Early Intervention System's (TEIS) State Systemic Improvement Plan (SSIP) includes family-centered early intervention as one strategy for improving infant and toddlers' acquisition and use of knowledge and skills. As part of its evaluation of this SSIP strategy, staff convened regional family focus groups to gain insight from parents who have children currently or recently enrolled in TEIS about the type of assessment reports they would like to receive. Specific reports discussed were the eligibility evaluation report, ongoing assessment reports, early childhood outcomes data, and family survey data.

Evaluation Questions:

- Are current assessment reports understandable and useful to parents? What modifications could be made to make them more understandable and useful?
- Do parents have a preference for how assessment information is presented?
- Are practitioners sharing/using assessment information effectively in their delivery of IFSP services to the child and family?

Methods:

- Evolved with each subsequent regional focus group.
- Began with the large group and then moved to small group discussions.
- Initially established a set meeting time and then moved to providing a time window for parents to drop in, allowing for more flexibility in parents' participation based on their time available.
- Shifted from two primary facilitators to having multiple staff members available to speak to parents in small groups as they arrived, which provided the opportunity for individualization.
- Provided copies of sample assessments for the parents to review.

Analysis/Use of data:

- The interviewer took notes during the conversation and typed up the results.
- The analyzer pulled together the notes from every conversation, removed identifying information, and began grouping responses into common themes. Themes emerged from the data analysis beyond the original scope of the inquiry, which then became topics for additional family focus groups and further improvement planning.
- Results were shared with stakeholders, including Tennessee's State Interagency Coordinating Council, in SSIP planning meetings, and in leadership meetings. Quotes were used in staff training on the revised operations manual. The evaluation report and the child outcomes assessment reports were modified based on parent feedback. A family survey pilot was initiated and plans for additional focus groups on child development resources were planned.

TN Department of Education | Tennessee Early Intervention System

5. Analyze Data for Meaningful Results

Systematic and transparent data analysis procedures, based on a written plan, can increase the likelihood of producing high-quality information from the data. The plan should address the following:

- **Prepare the data.** Decisions need to be made about how to prepare the data for analysis after collection. Analysis will be easier if recordings and notes are transcribed or transferred to electronic files. Although there are software programs to facilitate qualitative analyses (e.g., Nvivo, Atlas.ti; see http://www.sosciso.de/en/software/datenanalyse/qualitativ/ for a list of open source and commercial programs), Excel and Word or other basic word processing and database programs can be sufficient. These programs allow for the search of key words or phrases, which can save time.
- **Determine how to approach the analysis.** There are many ways to analyze qualitative data. See Appendix A for a description of one approach that may be useful and feasible for those involved in SSIP evaluations. Prepare by selecting the analysis approach, documenting analysis procedures to be followed, and training the individuals who will be coding the data.
- **Analyze the data.** Follow the selected analysis procedures to systematically examine qualitative data.

6. Summarize and Use Data for Improvement

Qualitative data can be a valuable source of information for determining how implementation is going, identifying successes, addressing challenges, and helping stakeholders engage in the work. The data can be especially helpful for making decisions about needed changes in SSIP implementation. Tips for making the most of the qualitative data are the following:

Systematic and transparent data analysis procedures, based on a written plan, can increase the likelihood of producing high-quality information from the data.

- **Summarize key findings.** Often, qualitative data are summarized through key overarching themes. For instance, family members' comments about the intake process might fall into such themes as (1) interactions with staff, (2) awareness of services available, and (3) satisfaction with information provided. Sometimes numbers are the best way to summarize data (e.g., the percentage of interviewees who gave a particular response). Presentation of themes and numbers can be followed up with more detailed findings and relevant quotations or examples.
- **Use visuals to engage stakeholders.** Visual depictions of findings such as charts, graphs, and infographics can help you communicate key findings and engage your audience (see the DaSy Center's data visualization toolkit: http://dasycenter.org/data-visualization-toolkit/). Figure 1 is an example word cloud that depicts words used in this resource to describe various qualitative methods, based on a document review of the text (created at https://worditout.com/word-cloud/create).
- **Ask questions about the findings.** Are the results what you were expecting? What is surprising? What are the implications for further evaluation and improvement work?
- **Use qualitative data to better understand the quantitative findings.** Qualitative data can provide a context for understanding what the numbers mean. Look to qualitative data to detect the why's of implementation that may help explain

the quantitative results (e.g., why practitioners are having trouble reaching fidelity on evidence-based practices).

- **Use stories, quotations, and case examples to illustrate findings.** Use representative stories of those involved in or affected by the work to convey key findings from the data. An in-depth documentation of a family's experiences with the early intervention system or a day in the life of a home visitor implementing the evidence-based practices, for example, could provide valuable contextual and explanatory information on SSIP implementation. Hearing the stories of those who have been affected by the work can also help stakeholders relate to the findings.

Figure 1. Example Word Cloud to Communicate Findings: An Analysis of Descriptors of Qualitative Methods Used by the Authors of *Strengthening SSIP Evaluations with Qualitative Methods*

Note: The words in the figure are those used in this resource to describe various qualitative methods. The larger the font, the more frequently the word was used. These results are based on a document review of the text.

Summary

Qualitative data can provide important information on how SSIP implementation is going—what is working well, what is not working, and why.

- Several qualitative data collection methods, including interviews, focus groups, and document reviews, are especially relevant for evaluating SSIP improvement work.
- When used with best data collection practices, qualitative methods can provide critical descriptive and explanatory information for evaluating SSIP activities, information that can complement and enrich findings from quantitative methods.
- Although qualitative methods can be time-consuming, they can provide the rich detail and insights that are often difficult to obtain from quantitative methods.

This brief provides an overview of qualitative methods and how they can help states evaluate their SSIP. Appendix B is a list of resources that may be useful for developing and implementing qualitative methods.

Appendix A: Example Method for Analyzing Qualitative Data

The following steps offer a systematic method for analyzing qualitative data:

- **Review raw data** (the notes or transcripts). Become familiar with the content to identify what is relevant to the evaluation questions. It may be helpful to eliminate irrelevant data or reorganize data so that responses pertaining to a specific evaluation question are all together. Use this preliminary review to confirm the questions to be addressed by the data and identify recurring themes (e.g., categories of responses and language). Begin creating a list of themes for coding.
- **Develop codes and coding procedures.** From the evaluation questions and the preliminary review of the data, develop codes for common themes or categories for each topic (see the focus group example in Figure A-1). Review several cases (e.g., individual interviews) to refine the codes and attain agreement between coders on how to apply them (if there are multiple coders). Revise the codes and document coding criteria to facilitate agreement among coders. Codes do not need to address all the content—just that which relates to the evaluation questions.
- **Train coders.** Having two people code the data independently and reconcile differences increases data quality. Train coders in how to apply the codes and run checks on a sample of the data to make sure they are using them the same way before beginning the actual coding.
- **Code the data.** Write the codes in the margins of the notes or

Figure A-1: Example Coding For Focus Groups Of Practitioners

Question A: What challenges have you had with implementing the team based approach for serving children and families?	
Response Themes/Categories	Code
Communication issues	A1
Unclear team assignments	A2
Scheduling/time to meet	A3
Billing for time in team meetings	A4
Understanding roles	A5
Conflicts between team members	A6
Other challenge	A7

transcripts where the topic is mentioned. During the coding process, also look for exceptions to themes, as well as stories and quotations that illustrate a theme.

- **Synthesize coded data.** Summarize coded data by calculating counts and/or percentages of the responses, identifying trends (such as the most frequent responses), and identifying important responses that are mentioned infrequently or not at all (e.g., where no one mentions a particular practice or topic that is core to the SSIP). For one-on-one interviews, count the responses of each interviewee (e.g., 19 of 25 early interventionists interviewed reported that they were satisfied with the coaching they received). Findings from focus groups should be counted at the group level (e.g., communication challenges were mentioned in half the focus groups).
- **Identify overarching themes.** Review coded data to identify overarching and interrelated themes. Using the example in Figure A-1, responses coded as scheduling/time to meet (A3) and billing for time in team meetings (A4) could indicate logistical/administrative challenges, whereas other responses (e.g., A5 and A6) could suggest challenges related to interpersonal relationships.

Appendix B: Resources

Resource	Description
Resources on Qualitative Methods	
U.S. Department of Health and Human Services, Centers for Disease Control (CDC), Evaluation Briefs.	A series of two-page briefs on a variety of evaluation topics, including several related to qualitative evaluation methods. Each brief describes when and how to use the method, as well as tips and resources. * Data Collection Methods for Program Evaluation: Interviews https://www.cdc.gov/healthyyouth/evaluation/pdf/brief17.pdf * Data Collection Methods for Program Evaluation: Focus Groups https://www.cdc.gov/healthyyouth/evaluation/pdf/brief13.pdf * Data Collection Methods for Evaluation: Document Review https://www.cdc.gov/healthyyouth/evaluation/pdf/brief18.pdf
Marrelli, A. F. (2008). Collecting data through focus groups. Performance Improvement, 47(4), 39–45.	An article providing different variations on facilitating focus groups. The article has guidelines for planning, facilitating, and collecting focus group data.
Frechtling, J. (2010). The 2010 user-friendly handbook for project evaluation. NSF Series, Vol. 2, Issue 57. National Science Foundation, Directorate for Education and Human Resources, Division of Research and Learning in Formal and Informal Settings.	Chapter 6 of this resource describes and compares multiple methods, including qualitative methods, used in program evaluations. The author suggests when to use each method, identifies advantages and disadvantages to each, and lists factors to consider when choosing between focus groups and interviews.
Other Resources	
ECTA Evaluation Resources: Recommended Resources for Evaluating Program Improvement Efforts	A list of recommended resources for state Part C and Part B 619 staff and technical assistance (TA) providers to use to support evaluation planning for program improvement efforts (including the SSIP). Of the many resources available related to evaluation and evaluation planning, these were selected as most relevant to and useful for early intervention and preschool special education.
Data pathway—From source to use (ECTA, DaSy, NCSI 2017). http://ectacenter.org/~pdfs/topics/ssip/Data_Pathway.pdf	Designed for states that are planning for or engaged in data collection to evaluate implementation and outcomes for the SSIP. It lists steps and critical questions that guide the use of data from planning to reporting.
ECTA local contributing factors Local Contributing Factor Tool for SPP/APR Indicator C-3 or B-7 (scroll to bottom)	Provides ideas for the types of questions a local team would consider in identifying factors impacting performance on the APR. This tool may help states generate questions for interviews, focus groups, or document review.
DaSy Data Visualization Toolkit http://dasycenter.org/data-visualization-toolkit/infographics/	Helps states present their data effectively to stakeholders by making the data more inviting and easier for wider audiences to understand.
Qualitative Chart Chooser http://stephanieevergreen.com/qualitative-chart-chooser/	Provides ideas for visualization techniques for qualitative data.