In the first phases of research, participants acquire large quantities of information (data) that must be analyzed. The next task, therefore, is to identify the aspects of the information that will assist people in clarifying and understanding the nature of the activities and events they are investigating. Analysis is the process of distilling large quantities of information to uncover significant features and elements that are embedded in the data. The end result of analysis is a set of concepts and ideas that enable stakeholding participants to understand more clearly the nature of the problematic experiences affecting their lives. These concepts and ideas may then be used to construct reports providing accounts of what is happening and how it is happening.

Analysis may be envisaged as a process of reflection and interpretation, providing participants and other stakeholding audiences with new ways of thinking about the issues and events investigated. I begin with a brief discussion of the nature of interpretation and then present a selection of frameworks that assist research participants in formulating productive interpretations of issues investigated.

INTERPRETATION: IDENTIFYING KEY CONCEPTS

Denzin (1989) has written of the need to make the problematic, lived experience of ordinary people directly available to policymakers, welfare workers,
and other service professionals, so that programs and services can be made more relevant to people’s lives. He suggests that an interpretive perspective identifies different definitions of the situation, the assumptions held by various interested parties, and appropriate points of intervention:

Research of this order can produce meaningful descriptions and interpretations of social process. It can offer explanations of how certain conditions came into existence and persist. Interpretive research can also furnish the basis for realistic proposals concerning the improvement or removal of certain events, or problems. (p. 23)

The task of the research facilitator in this phase of the research process is to interpret and render understandable the problematic experiences being considered. Interpretation builds on description through conceptual frameworks—definitions and frameworks of meaning—that enable participants to make better sense of their experiences. It uses experience-near concepts—terms people use to describe events in their day-to-day lives (rather than, e.g., theoretical concepts from the behavioral sciences)—to clarify and untangle meanings and to help the individuals illuminate and organize their experiences. The researcher must provide the opportunity, in other words, for participants to understand their own experiences in terms that make sense to them.

Interpretive activity exposes the conceptual structures and pragmatic working theories that people use to explain their conduct. The researcher’s task is to assist participants in revealing those taken-for-granted meanings and reformulating them into “constructions [that are] improved, matured, expanded, and elaborated” and that enhance their conscious experiencing of the world (Guba & Lincoln, 1989). These new ways of interpreting the situation are not intended as merely intellectualized, rational explanations; rather, they are real-life constructs-in-use that assist people in reshaping actions and behaviors that affect their lives.

“Interpretation is a clarification of meaning. Understanding is the process of interpreting, knowing, and comprehending the meaning that is felt, intended, and expressed by another” (Denzin, 1989, p. 120). The purpose of interpretive work, therefore, is to help participants to “take the attitude of the other” (Mead, 1934), not in a superficial, mechanistic sense but in a way that enables them to understand empathetically the complex and deeply rooted forces that move their lives.

In some instances, initial interpretive work provides the basis for immediate action. Some problems, however, are more intransigent and require
extended processes of exploration, analysis, and theorizing. The form of analysis should be appropriate to the problem at hand. Complex or highly abstract theories, when applied to small, localized issues, are likely to drain people's energy and inhibit action. Explanations and interpretations produced in action research processes should be framed in terms that participants use in their everyday lives, rather than in terms derived from the academic disciplines or professional practices.

When I began working at the community level, I would often present explanations for problems as derived from my background in the social sciences. I would include concepts such as social class, racism, power, authority, and so on. In few instances did these forms of analysis strike a chord with the people with whom I was working.

On one occasion, I presented an analysis to a group of Aboriginal people that implied that their responses to racism were inappropriate. My explanation outlined a theory of minority responses to racism that highlighted apathy, avoidance, and aggression as typical behaviors that derived from a history of oppression. The anger directed at me by the Aboriginal people present was a humbling experience.

In retrospect, I understand their anger and wonder at my naiveté. Not only was I interpreting their situation from my perspective; I was also judging their behavior in stereotypical ways, implicitly criticizing their responses to situations they faced. Today, I ensure that any analysis I make is drawn from terms known to the people with whom I am working, is expressed in their language, and is derived from their experience-near concepts. My own role in this process is to assist them in articulating their ideas and to ensure that they express their ideas clearly and accurately. I also ask probing questions that challenge the rigor of their interpretations to ensure that their interpretations will hold up in the court of public scrutiny and future action.

The use of experience-near concepts does not eliminate the need for rigorous inquiry. Restricted or cursory analyses that produce superficial solutions to deep-seated and complex problems are unlikely to be effective. Researchers and facilitators can ensure that explanatory frameworks are sufficiently rigorous to move people past stereotypical or simplistic interpretations of their situations, but these frameworks must be grounded in the reality of their everyday lives. They must acknowledge the experiences and perspectives of those to whom programs and services are directed, rather than of those who deliver those services.
In the early phases of a recent project in East Timor, principals and superintendents often commented that parents were not interested in their children’s schooling—that it would be difficult to get them to participate in school life. Through a series of parent workshops I was able to demonstrate that parents had high levels of interest in their children’s schooling. Using participatory processes of inquiry based on small-group techniques, these workshops gave parents opportunities to express their concerns about the school and to suggest ways that they might be able to engage in activities that would assist the staff of the school in dealing with the issues that emerged. In most schools parents identified a number of ways that they would be willing to participate in improving the school, and many successful projects emerged—fund-raising; school repair and maintenance; garden maintenance; teaching materials manufacture; local crafts, art, songs, and dances; and assisting with school security arrangements. Parents found many ways that they, with their limited education and resources, could make a difference in their children’s schooling.

ANALYSIS AND INTERPRETATION I: DISTILLING THE DATA

Two major processes provide the means to distill the data that emerge from the ongoing processes of investigation. The first is a *categorizing and coding* procedure that identifies units of meaning (experience/perception) within the data and organizes them into a set of categories that typify or summarize the experiences and perspectives of participants. The second data analysis process selects *key experiences* or transformational moments and “unpacks” them to identify the elements that compose them, thus illuminating the nature of those experiences. Researchers may use either or both of these techniques of data analysis as they seek to acquire clarity and understanding by distilling and organizing the information they have gathered.

**Categorizing and Coding (1)**

The major task of this procedure is to identify the significant features and elements that make up the experience and perception of the people involved in the study (stakeholders). *All* analysis is an act of interpretation, but the major aim in analysis is to identify information that clearly represents the perspective and experience of the stakeholding participants. Those involved in data analysis must “bracket” their own understandings, intuitions, or interpretations.
as much as possible and focus on the meanings that are inherent in the world of the participants. This is a difficult task that requires some practice and feedback to identify the ways in which we tend to view events through our own perspectives, and it points to the need to “ground” our analysis in participant terms, concepts, and meanings. This is tricky ground, especially when we come to coding procedures, where we must use a term or heading to represent the data within a category:

Maria Hines, a member of a city neighborhood collective, is most explicit about her experience of analyzing data in a project in which she participated. With a slight frown she describes how “I never knew how difficult it was not to put my own words and meanings in. We had to really concentrate to make sure we used what people had actually said and not put it in our own words. It was hard.” (Stringer, 2004)

To minimize the propensity to conceptualize events through their own interpretive lenses, researchers should, wherever possible, apply the verbatim principle, using terms and concepts drawn from the words of the participants themselves. By doing so they are more likely to capture the meanings inherent in people’s experience.

Because different stakeholders are likely to have quite different experiences and perspectives on any issue, analysis of each stakeholding group should initially be kept separate, and more general categories developed at later stages of a project. Thus initial analysis will keep, for example, teacher, student, and parent perspectives separate to identify ways that these stakeholders “see” the situation. It will then be possible to understand the elements that their perspectives have in common and the ways in which they diverge. Likewise, city planners, businesspeople, and residents may have differing perceptions of a neighborhood development project that all need to be acknowledged and incorporated into planning procedures.

Procedures for categorizing and coding involve

- Reviewing the collected data
- Unitizing the data
- Categorizing and coding
- Identifying themes
- Organizing a category system
- Developing a report framework
Reviewing the Data

Commence this phase by first reviewing the issue on which the study is focused and any associated research questions. The purpose of analysis is to identify data (information) that is pertinent to these issues and questions. As data analysis continues, there may be considerable amounts of data that are either irrelevant or peripherally relevant, so that choices need to be made about which data to incorporate into processes of analysis.

Researchers should first review transcripts or records of interviews, reading them to familiarize themselves with the contents and to get a feel for the views and ideas being expressed. Other types of information will be incorporated in further cycles of analysis.

Unitizing the Data

As people talk about their experience and perspective, their narrative is composed of a wide range of related and interconnected ideas, activities, and events. They will often change direction or focus on the many parts of the story that compose the interrelated aspects of everyday experience. The next phase is to identify the discrete ideas, concepts, events, and experiences that are incorporated into their description to isolate the elements of which their experience is composed.

Using a photocopy of the original data, block out each separate item of information using a pencil to identify units of meaning. A unit of meaning may be a word, a phrase, a sentence, or a sequence of sentences. You will then literally cut out each of these pieces and paste it onto a card, labeling the card to indicate the origin of that unit—the interview from which it was drawn.
When pasting units onto a card, extra information may need to be added to make the meaning clear. For example, to the unit “Some parents refused to consider this,” researchers would need to add in brackets “starting a Parent Teacher Association.” The intent is to identify units of meaning—statements that have discrete meaning when isolated from other information.

**Categorizing and Coding**

Once the data has been unitized, the units of meaning must be sorted into related groups or categories. The previous boxed example would provide information about parent activities, experiences, and perspectives about a PTA. It would provide the basis for a category that may be identified (coded) as “Parents’ Perspectives on a PTA.” Information from other interviews would be added and the category resorted to identify different dimensions of their perspective. Each pile of cards, or category, would then be labeled to identify the particular dimension; for example, an initial set of categories based on the previously discussed data might be “Starting a PTA,” “Parents With Good Ideas,” or “Parents With Interest and Enthusiasm.” As data from other interviews are included, however, these categories might be seen as inappropriate and the code revised.

As the data are analyzed, categories might emerge that enable a large number of activities to be included under a relatively small number of headings. For instance, analysis of interviews that focus on PTAs might reveal the following categories: “Organizing a PTA,” “The Structure of a PTA,” “Parent Activities,” “Improving the School,” and so on. This is quite a natural way of organizing information. In everyday life we would include oranges, apples, pears, and peaches within a category called “fruit.” Likewise, shirts, shorts, slacks, and sweaters might be categorized as “clothing.”

**Identifying Themes**

When the categories associated with each stakeholding group have been placed in a system of categories it may be possible to identify themes that are held in common across stakeholder groups. Within a school we may see that teachers, students, and parents are concerned about “results,” even though their concerns are expressed differently. Neighborhood stakeholders, similarly, may be concerned about the effect of a new roadway, though they may see that...
effect in either positive or negative ways. All perspectives need to be incorpo-
rated under the overarching theme “Effect of a New Roadway.”

Research participants therefore need to identify themes—issues or expe-
riences that people have in common—by comparing categories and subcate-
gories across stakeholding groups.

Organizing a Category System

The category system must then be recorded in some rational form, pro-
viding a clear picture of the categories and subcategories of information
related to the topic investigated.

The list of contents for this chapter provides an example of a category
system. The broad theme “Think: Interpreting and Analyzing” presents a
number of major features of analysis. Next, the contents list elements of
each of these followed by subelements. Thus the features and elements of
the process of analysis are organized in a logical order that assists readers
in understanding the material being presented:

**Think: Interpreting and Analyzing**

Interpretation: Identifying Key Concepts

*Analysis and Interpretation I: Distilling the Data*

  Categorizing and Coding (1)
  Analyzing Key Experiences (2)
  Case Example: Facilitating Workshops

*Analysis and Interpretation II: Enriching the Analysis*

*Extending Understanding: Frameworks for Interpretation*

  Alternative 1: Interpretive Questions: Why, What, How, Who, Where,
  When
  Alternative 2: Organizational Review
Developing a Report Framework

This structure provides a framework for reports or presentations that communicate the outcomes of this phase of the research to relevant stakeholders. Themes, categories, and subcategories provide the headings and subheadings for this purpose.

Analyzing Key Experiences (2)

The purpose of this approach to analysis is to focus on events that seem to have a marked impact on the experience of major stakeholders. Denzin (1989) talks of moments of crisis, or turning-point experiences that have a significant impact on people. Such events may appear as moments of crisis, triumph, anger, confrontation, love, warmth, or despair that have a lasting impact on people. They may result in a “lightbulb” or “aha” experience that provides people with greater clarity about puzzling events or phenomena, or leave them with deep-seated feelings of alienation, distrust, affiliation, or hope.

As we interview people, especially about issues in their lives, they are likely to focus on events that have special significance for them. By “unpacking” these events we can learn the features of that experience that make them so meaningful, and in the process we extend our understanding of the way the issues affect their lives.
Review the Data

Review the data as suggested in “Categorizing and Coding.”

Identify Key Experiences

For each participant, identify events or experiences that appear to be particularly significant or to have an especially meaningful impact on them.

Identify Main Features of Each Experience

For each significant event or experience, identify the features that seem to be a major part of that experience.

Identify the Elements That Compose the Experience

For each feature, identify the elements that compose the detailed aspects of that experience.

Identify Themes

List experiences, features, and elements for each participant. Compare lists to identify experiences and features of experience that are common to groups of participants. List these as themes.

Case Example: Facilitating Workshops

The following case provides an example of part of a study on a group of people whose work involved facilitating workshops. The analysis commences with a piece of raw data and demonstrates how the analysis identifies a key experience and its associated features and elements.

I remember the anxiety that used to sit in the pit of my stomach as I watched my colleagues commence a workshop, my mind racing with details of what needed to happen and the “what-ifs” that haunted me. My organizational mind was constantly working on plans to institute if things failed to eventuate as they were intended. It was something that nagged me and caused me many sleepless nights.
I eventually learned that the start of a workshop was always likely to be a bit “lumpy” and that, provided facilitators were well prepared and flexible enough to accommodate the needs and capabilities of participants, we would almost always accomplish our goals.

So now I can watch my colleagues facilitating a workshop and appreciate the careful planning that has occurred and sit proudly as they work competently with the participants, engaging their attention and enthusiasm. I watch the energy of the participants as they focus on the real issues emerging from their work. I feel that I have become blessedly redundant and that my colleagues have the capacity, evolved from their previous work with me, to carry on the business at hand. They’re clear, competent, and well-spoken, able to achieve excellent results and to enable participants to achieve the solutions they have sought through their participation.

**Key Experience**

Experiencing an effective workshop

**Features and Elements**

Anxiety

Feelings

Sleeplessness

“Lumpy” start to workshop

Careful planning

Identify outcomes

Identify learning tasks

Sequence tasks

Report

Evaluate

Flexible processes

Explain each task

Demonstrate or model the activity

Participants enact the activity

Debrief or feedback (evaluation)
Repeat if necessary
Timing according to participant needs, skills, or understanding

Accomplishing purposes
Engaging attention and enthusiasm
Focusing on real issues
Working competently
Having the capacity
Achieving solutions
Feeling proud, redundant

This example provides the key features “Anxiety,” “Careful Planning,” “Identifying Learning Tasks,” “Flexible Processes,” and “Accomplishing Purposes.” The elements composing details of the first and last features are drawn from the previous data. A following interview revealed the (italicized) elements composing “Careful Planning” and “Flexible Processes.” These features and elements would provide the basis for writing a report that enables people to understand how I experienced an effective workshop.

ANALYSIS AND INTERPRETATION II:
ENRICHING THE ANALYSIS

The first cycles of an action research process enable researchers to refine their focus of investigation and to understand the ways in which primary stakeholders experience and interpret emerging issues. In following cycles other information is incorporated that further clarifies or extends participants’ understandings by adding information from other stakeholders and data sources. In a school research process, the perspectives of parents might be added to those of students and teachers, and school or student records or the research literature might provide relevant information. In a health program, patient and health professional perspectives might be complemented by evidence-based information from the professional literature.

The purpose for this activity is to provide the means for achieving a holistic analysis that incorporates all factors likely to have an impact on
achieving an effective solution to the problem investigated. Thus the part
that each major stakeholder plays will be taken into account, as well as the
substantial information that exists in policy and program documents and the
research literature.

The example previously presented of parent concerns for mixed-grade
classrooms provides an example of this process. Parents were able to clearly
articulate their desire to ensure that their children’s education would not suf-
fer from these arrangements, and information from the research literature pro-
vided them with reassurance. The diagram in Figure 5.1 presents ways that
different types of information may be incorporated into cycles of an action
research process.

EXTENDING UNDERSTANDING:
FRAMEWORKS FOR INTERPRETATION

When people engage the significant issues embedded in long-standing or
highly contentious problems, they sometimes need to engage in extensive
research to identify the underlying issues involved in the situation. Frameworks
of analysis that enable them to delve beneath the surface of events can provide
rich understandings that enable them to “make sense” of the situation and deal
effectively with the complex problems that often are part of their experience.
Four alternative approaches or frameworks that assist stakeholders in this
process of sense making and clarification are presented in the following
sections: *interpretive questions, organizational review, concept mapping,* and *problem analysis.* Larger or complex projects may require more extended and detailed frameworks, such as those found in the literature on management, planning, community development, and/or applied anthropology (e.g., Black, 1991; Van Willigen, 1993; Whyte, 1984).


For relatively simple projects, participants might work through a series of questions that enable them to extend their understanding of the problems and contexts they have previously described. Interpretive statements that result from this process should help them develop accounts that reveal the nature of the problem at hand and important features of the context that sustain it. Interpretive questions might include the following:

- Why are we meeting? (purpose, focus, problem)
- What are the key elements and features of the problem?
- How is the problem affecting us? What is happening?
- Who is being affected?
- Where are they being affected?
- When are they being affected?

It may be useful for the facilitator to repeat each of these questions a number of times to enable participants to build more information into their interpretations.

More complex projects may require more detailed and extended questioning strategies, to reveal such elements as the following:

- The history of the situation—how it came about
- The individuals, groups, and types of actors involved
- Interactions and/or relationships among the people involved
- The purposes and intents of the people involved
- The sequence and duration of related events and activities
- The attitudes and values of the people involved
- The availability of and access to resources, and their use
The following types of questions may be relevant:

- **Who?**
  - Who is centrally involved? (individuals, groups)
  - Who else is significant?
  - Who are the influential people? What is the nature of their influence?
  - Who is linked to whom? In what ways?
  - Who is friendly or cooperative? With whom?
  - Who is antagonistic or uncooperative? With whom?
  - Who has resources? Which ones?

- **What?**
  - What major activities, events, or issues are relevant to the problem?
  - What is each person or group doing, or not doing?
  - What are their interests and concerns?
  - What are their purposes? What do they want to achieve? What do they want to happen?
  - What do they value?
  - What resources are available? (people, material, equipment, space, time, funds)
  - What resources are being used? By whom?

- **How?**
  - How do acts, activities, and events happen?
  - How are decisions made?
  - How are resources used?
  - How are individuals and/or groups related to each other?
  - How do different individuals and groups affect the situation?
  - How much influence do they have?

- **Where?**
  - Where do people live, meet, work, and interact?
  - Where are resources located?
  - Where do activities and events happen?

- **When?**
  - When do things happen?
  - When are resources available?
  - When do people meet, work, and engage in activities?
  - When does the problem occur?
  - What is the duration of occurrences of the problem?
Not all these questions will be relevant to any one situation. The questions the facilitator selects will depend on the context of the problem and the setting. The researcher should record in detail answers to the questions and should write a summary on a chart that can be seen by all members of the group. Such charts help participants visualize the situation they are interpreting and provide records that can be employed in subsequent activities.

**Alternative 2: Organizational Review**

In some circumstances—where, for instance, different sections of the same institution or agency experience similar problems—it may be appropriate for the researcher to conduct a review of the whole organization. This activity is intended to reveal different interpretations of problematic features of the organization and sources of the problems. It is intended not as an evaluation of competence or assessment of performance but as a method for discovering points where action can be taken. Participants in the review process should focus on the following features of the organization:

**Vision and Mission**

- **Vision**: What is the overarching or general purpose of the organization? Education? Health improvement? Assistance for the needy?
- **Mission**: In which ways does the organization seek to enact its vision? Providing educational services, courses, and classes? Engaging in health promotion programs? Providing welfare services?

**Goals and Objectives**

- **Goals**: How does the organization seek to achieve its purposes? In what activities does it engage?
- **Objectives**: What are the desired outcomes of these activities? For whom?

**Structure of the Organization**

- **Roles**: Are roles clearly delineated? Who works with whom? Who has authority over whom? Who supervises and gives directions? To whom?
• **Responsibilities**: What types of people are responsible for different categories of activities? Who performs which types of tasks?
• **Rules and procedures**: Is it clear what needs to be done and how it is to be done?
• **Resources**: Are the resources required for tasks adequate and available (e.g., time, materials, and skills)?

**Operation**
• Is each person clear about his or her roles and responsibilities?
• How effectively is each person enacting his or her roles and responsibilities?
• What factors hinder the enacting of those responsibilities (e.g., lack of materials, time, skills, or support)?
• Are there tasks and responsibilities to which no one is clearly assigned?
• What is not happening that should be? What is happening that should not be? Where are the gaps? Where are the barriers?

**Problems, Issues, and Concerns**
• What problems, issues, and concerns are expressed by stakeholders?
• Who is associated with each?
• How do stakeholders explain or interpret problems, issues, and concerns?

As participants work through these issues, they will extend their understanding of the organization and aspects of its operation that are relevant to their problems, issues, and concerns. The outcomes of their inquiries should be recorded in detail and summarized on charts for use in later stages of the research process.

I once worked as a consultant with a community child care agency whose mandate was to find appropriate foster homes for children and to ensure that the foster families were adequately supported. The agency was experiencing a number of difficulties in performing these functions. Staff members were stressed and overworked, and funding sources questioned the effectiveness of the agency’s services. When we charted the purposes for which the agency had been formed and matched those against its actual activities, we discovered that staff were engaged in work that was of peripheral relevance to the agency’s stated main function. They were attempting to provide a
wide range of support services to foster families—furniture, clothing, food, and counseling—that could be provided by other agencies funded for those purposes. When they saw what was happening, staff and committee members decided to terminate many of those activities and to link clients to other relevant agencies when such needs arose.

Alternative 3: Concept Mapping

Long-term, entrenched problems frequently defy the remedial efforts of professional practitioners. Occurrences of drug abuse, eating disorders, lack of interest in schoolwork, youth crime, and other problems are so pervasive that they often appear beyond the reach of ordinary programs and services. They exist as part of a complex system of interwoven events and circumstances that are deeply embedded in the social fabric of the community.

Attempts to remediate these problems are unlikely to be successful if they focus merely on one aspect of the interrelated factors that make up the situation. Quick-fix, “spray-on” solutions rarely work. Participants need to reconceptualize such issues in ways that clearly identify the interrelationships among all the significant elements that affect the situation. The intent of this type of activity is to help participants find a way to pursue multiple, holistic, and inclusive strategies that will assist people in dealing with the problems that affect their lives.

In the first phase of the research process, delineated in Chapter 4, participants describe the problem and define key elements or characteristics of the situation. In concept mapping, those elements are plotted diagrammatically, so that participants can visualize the ways in which different components of the situation relate to the problems they are investigating. To guide participants in formulating a concept map, the facilitator should take the following steps:

- Begin by printing on a large piece of paper or a board visible to all participants a word or phrase that characterizes the central problem, and then enclose the word or phrase inside a geometric figure (e.g., a square or circle).
- Add to the chart other geometric figures labeled to represent various elements associated with the problem.
- Link the figures containing the elements that seem to be related to each other.
- Extend the mapping process to include additional figures until each participant is satisfied that all significant elements have been included.
An example of a concept map is provided in Figure 5.2. This interpretation of poor school behavior of youth in a rural town is ascribed by stakeholders to a number of interlinked factors—poor attendance, low academic attainment, general family issues, parent issues, financial problems, and poor health. All issues are seen to contribute to the identified behavior problem and need to be addressed as part of the process of defining a solution to the problem of poor school behavior. Further analysis may have extended this map to delineate factors associated with health problems, financial problems, and so on. Financial problems, for instance, may be associated with high unemployment in the town, which in turn may relate to closure of businesses or other economic conditions.

Concept maps help participants visualize the major influences that need to be taken into account and assist them in evaluating whether all relevant stakeholders have been included in the investigation. In Figure 5.2, the appearance of family issues signals the need to involve relevant family members in the inquiry process. The young people who are themselves the focus of the
problem should be central to the concept-mapping process. Incorporating additional stakeholders in turn may extend the factors incorporated into the map and thus the elements that need to be considered when action is planned. Activities from other interpretive frameworks (e.g., interpretive questions) can be used to further expand this form of analysis.1

The explanatory frameworks produced in this process are not meant to be scientifically or professionally defensible. We are looking not for the best or the correct explanation but for one that makes sense to or can be accommodated by all the stakeholders. In all the processes described earlier, it is essential that each stakeholding group provide input about its own situation. Analyses based on other people’s interpretations do not provide an appropriate basis for action. In Figure 5.2, for instance, teacher or administrator perspectives on the family are less relevant than the perspectives of the family members themselves. Outsider interpretations often are incomplete or inaccurate and are sometimes judgmental; they may tend to create divisiveness and hostility, which are antithetical to the participatory principles of community-based action research.

Alternative 4: Problem Analysis—Antecedents and Consequences

An approach similar to concept mapping enables participants to identify the antecedents of existing problems (i.e., elements of the situation that led up to the problems) and the consequences that derive from those problems. In this process, the facilitator should have each stakeholder group identify the following elements and describe them on a chart:

- The core problem
- Major antecedents to the problem
- Other significant factors related to those antecedents
- Major negative consequences
- Other significant consequences

A committee of agency workers and community representatives investigated the high incidence of juvenile crime in a small country town. A process of exploration revealed that criminal activity appeared to be related to the lack of leisure activities for teenagers and to poor school attendance. No one in
town accepted responsibility for organizing activities, there were few facilities available for that purpose, and the school provided little in the way of after-school programs or activities. Poor school attendance was directly related to poor school performance, uninteresting or irrelevant curricula, and family poverty.

As a result of increases in juvenile crime, burglary, petty theft, and vandalism there was a general increase in alienation of some groups of young people from other sectors of the community. There were increasing incidents of conflict between youth and members of the community, businesspeople, law enforcement personnel, teachers, and so on, and deterioration in employment opportunities for young people. The long-term prospects of some youth also seemed likely to be affected by the negative outcomes of incarceration in prisons and other institutions and growing criminal records. This situation is drawn as a concept map in Figure 5.3.

This process is sometimes defined as causes and effects rather than antecedents and consequences. In many situations, however, it is impossible to delineate the difference between cause and effect because of the complexity of interactions between the constituent parts of the picture. The same phenomenon often can be envisaged as cause, effect, or both. Nevertheless, this approach can help participants identify significant elements of their analysis and visualize aspects of the situation that require action.

WRITING REPORTS COLLABORATIVELY

Researchers commonly work independently to analyze data and formulate reports on the basis of their own interpretive lenses. In the process they tend to lose the interpretive perspective of other participants and to fashion a report that often fails to adequately represent the perspective of those with whom they work. The following procedures provide the means to engage stakeholding groups in the processes of analysis, thus ensuring that the end result integrates their perspectives and priorities. Research facilitators help participants engage in meaning-making discussion and dialogue—hermeneutic dialectic processes—with the intent of developing mutually acceptable accounts of the issues and problems they are investigating. To facilitate these processes, researchers assist selected participants with organizing meetings, setting an agenda, reviewing descriptive accounts, and analyzing information and developing accounts and reports.
Organizing Meetings

Research facilitators will work with key stakeholders to organize meetings (see Chapter 4). It is important that members of the principal stakeholding group, for whom the problem or issue is most central, have a key role in the

Figure 5.3 Antecedents and Consequences of Juvenile Crime
organization of meetings. These members should ensure that representatives who can speak for each of the stakeholding groups are able to attend.

**Procedures for Analysis**

*Setting the Agenda*

In this phase of the process, participants learn something about the **people** involved, the **purpose** of meeting, and the **activities** in which they will be engaged. The facilitator’s role includes the following duties:

- Inform people of the purpose of the meeting.
- Provide an opportunity for participants to introduce themselves and identify the groups to which they belong.
- Present a broad agenda for the session.
- Allow time for participants to discuss, clarify, and modify the agenda. Do not discuss the **issues** at this time, but focus on the processes of the meeting.

*Reviewing Descriptive Information*

The purpose of this activity is to give participants a chance to review the descriptive information produced in previous meetings. This is especially important when stakeholding groups have done some initial work separately. Facilitators should provide opportunities for each stakeholding group to do the following:

- Send written versions of the descriptive accounts or give them to participants prior to the meeting.
- Present a verbal report that summarizes descriptive information produced by their previous activities.
- Present the key elements of these reports on a chart.
- Allow time for meeting participants to discuss and clarify the accounts, avoiding extended or detailed discussion unless there are contentious issues that need to be resolved.

*Distilling the Information: Analysis*

Using one of the processes for data analysis presented earlier, participants should work collectively to organize the information in the charted summaries.
into sets of categories. They should identify *converging perspectives* (i.e., those ideas, concepts, or elements common to all or a number of groups) and *diverging perspectives* (i.e., those ideas, concepts, or elements found in the accounts of only one or a few groups). Because this activity is time-consuming, it may sometimes be appropriate to formulate a *working party* to carry it out:

- Participants should select elements from the charts that are perceived to be significant features or characteristics of the issue investigated.

- Participants should sort elements into categories, so that those associated in some significant way are clustered together. The idea is to rationalize the large number of individual ideas, accounts, or issues to create a smaller number of categories. In doing so, facilitators should ensure that the process of categorizing does not erase important information. A category labeled youth issues, for instance, might erase important distinctions between early and late teens, or between males and females. Decisions about ideas that can be incorporated into particular categories and those that must remain separate should be made through discussion and negotiation.

- Participants may organize categories in a variety of ways. A color-coding system may be used, for example, wherein similar items are identified on charts with colored markers. Alternatively, each idea, issue, or concept may be copied onto a card, and the cards can then be sorted into piles according to their similarities or common characteristics. Groups may also use large-sized self-adhesive labels, placing all elements on a large wall and allowing participants to move them around into groups associated together. Participants should know that there is no right way or correct answer for this process. The way that they organize the information is the way that makes best sense to them collectively.

- When participants have reached agreement on the categories and the information contained in each, they should classify each group of concepts according to a label or term that both identifies and describes the category. This process is represented symbolically in Figure 5.4.

*Constructing Reports*

The previously described process provides material that forms the basis for reports and identifies actions to be taken by participants. Research facilitators...
should continue to meet with participating stakeholders—a working group to formulate a report. The working group should

- Review materials
- Use the category system developed during analysis as a framework for writing a report
- Use the outline to write a detailed written report (Detailed records from meetings should provide the content of the report; see sections on reporting in previous chapters and in Chapter 8.)
- Provide the time and opportunity for all members of the working group to read the report and give feedback
- Modify the report on the basis of their comments
- Meet again with the working party if any members suggest significant revisions
- Distribute the report to all stakeholders
Presentations and Performances

In his book *Interpretive Ethnography*, Denzin (1997) signals the need for forms of reporting that more clearly represent people’s lived experience. Current formats tend to render people’s lives in forms that are stiff, formalistic, and often encompassed in technical language. They silence the voices of the people to whom they refer and mask the realities of their day-to-day lives. Denzin suggests the need for reports that are more evocative, enabling readers to more readily understand people’s experiences. Such reports would be open-ended, multifaceted, and multivoiced and would not indulge in abstract terminology or privilege the perspective of persons in positions of authority. Thus he suggests the need for writing reports that experiment with genre, voice, and narrative style, so that *official* reports may take on the appearance of writing more usually associated with fiction or poetry.

He extends this argument to suggest that such writing may be envisaged as texts waiting to be staged. That is, people may be better able to represent their ideas and experiences through performances than through written reports. Thus it may be possible to present the outcomes of a research process through

- Drama
- Role plays
- Simulation
- Dance
- Song
- Poetry
- Works of art
- A combination of the above

This move to performance is especially important in action research because participants often include people whose feelings of well-being are diminished by the intrusion of formalistic texts. Researchers need to find ways of communicating that do not disempower groups of participants.

A researcher once showed me a report she had written for a government agency that presented an Aboriginal community’s account of a research process in which they had engaged. I asked her how many people in the
community had read the report, and she admitted that few would wish or be able to read what was rather a thick and formal report. “How,” I asked her, “will people get to know about the information in the report?” Her first impulse was to write another version of the report, but I suggested she think of a concert. This would enable different groups to present their perspectives in ways that were more in keeping with the life of the community. Thus people could choose to use song, dance, drama, poetry, humor, role plays, or other forms of presentation to get their message across.

Modern technology opens up possibilities for communication that were not available in the past. Groups may choose, for instance, to use carefully scripted video presentations to present information in their own voice and in their own way (Schouten & Watling, 1997). This form of presentation provides many dramatic and effective possibilities for communicating the outcomes of a research process.

I recently participated in a departmental review process whereby each of the units of the department reported on their activities for the year. The administration section staff, largely younger women, were somewhat shy and loath to present personally, so they produced a video. Taped in their offices, in a swimming pool, and in the garden, all members of the administrative staff reported on their activities. Their presentations were often touched with humor, as was the case of one woman who would speak to the camera only through a hole in a paper bag over her head. The video presentation was engaging and informative and provided other staff with a clear understanding of the work in which administrative staff were engaged and the issues that confronted them.

There are contexts and purposes, therefore, that may be better served by more creative thinking about the best ways for communicating information to audiences of stakeholders. Although formal written reports may be useful in some contexts, it is possible that more innovative uses of narrative texts, staged performances, or electronic productions may enhance the work in which we are engaged. Researchers need to keep the audience and the purpose clearly in mind as we formulate ways to communicate effectively the outcomes of our research processes.
CONCLUSION

The previously described procedures provide the means by which people can formulate clear, sophisticated, useful explanations and interpretations of their situations. The specific ideas and concepts contained within these interpretive frameworks provide the basis for planning concrete actions to remedy the problems on which the research has focused.

For complex problems involving multiple stakeholder groups, the activities described in this chapter may be enacted as separate parts of an action research process. For simpler problems within discrete settings, such as classrooms, offices, and small organizations, they may be incorporated into processes that move more directly from description, through interpretation, to problem solving. It is well to keep the distinction between these activities in mind, however, to ensure that people are clear about the nature and purpose of the processes in which they are engaged.

As presented here, the procedures may seem long-winded and complex, but experience will show researchers when and how to consolidate or abbreviate them to ensure a brisk, purposeful flow of activity. Researchers should be wary, however, of simplifying the research process by confining it to a small inner circle or by omitting “troublesome” stakeholders. Participation boosts personal investment in the process, extends people’s understanding of the contexts and social processes in which they are involved, and minimizes the possibility that the research will bog down in conflict. Action research is not just a tool for solving problems, but is a valuable resource for building a sense of community.

Reflection and Practice

Using the field notes gathered in interviews for previous activities,

1. Analyze the information using a coding and categorizing process. (If you have extensive notes, you may focus on one issue that emerged within the interview).

2. Present the resulting framework of key features and elements to a friend, colleague, or working group.

3. Explain how that framework will enable you to provide an account of the person you interviewed.
4. Reflect on and discuss the process of analysis. What did it feel like? What are some of your concerns or questions about the process? How was it informative or helpful?

5. Repeat that process using the technique for analyzing key experiences.

6. Reflect on and discuss that process. How were the outcomes of the two processes different?

7. Using features and elements from one of the frameworks, draw a concept map. Use one issue as the central element of the map.

8. Using features and elements from each framework, present short reports to your friend/colleague/classmate.

9. Reflect on your presentations. Are there more effective ways you might have presented that information using some of the techniques suggested in the section on Presentations and Performances?

10. Analyze the notes from your observations, using a coding and categorizing process. Write a short report about that setting.

NOTE

1. Deshler (1990) provides a more extensive treatment of concept mapping.
Think: Interpreting and Analyzing

**Purpose**

To use interpretive processes to distill the information gathered, identify key features and elements of people's experience, and enable participants to understand more clearly the way the issue affects their lives and activities.

**Process**

*Frameworks for Analysis and Interpretation*

**Categorizing and Coding**
- Review and unitize the data.
- Formulate categories and code them.
- Identify themes across the categories.
- Organize a category system.
- Develop a report framework using the category system.

**Analyzing Key Experiences**
- Review the data and identify key experiences.
- Identify main features and elements of each experience.
- Identify major themes across experiences.
- Organize a report framework using features and elements.

**Enriching Analysis Using Frameworks for Interpretation**
- Interpretive questions: Why, what, how, who, where, when
- Organizational review: Vision, mission, structure, operation, problems
- Concept mapping: Issue, concepts/influences, links
- Problem analysis: Problem, antecedents, consequences

**Writing Reports Collaboratively**
- Organizing meetings
- Procedures for analysis
  - Setting the agenda
  - Reviewing information
  - Distilling information—analysis
  - Constructing reports

**Presentations and Performances**
- Use drama, song, dance, art, and/or poetry for effective presentations