A Handbook for Participatory Action Research, Planning and Evaluation

Jacques M. Chevalier and Daniel J. Buckles
Copyright for *A Handbook for Participatory Action Research, Planning and Evaluation* is held by the authors, Jacques M. Chevalier and Daniel J. Buckles. The work is licensed under the Creative Commons Attribution-Noncommercial 2.5 Canada License, and is available in pdf format from our website at www.participatoryactionresearch.net.

You are free to make a limited number of copies of *A Handbook for Participatory Action Research, Planning and Evaluation* on condition that it is reproduced in its existing format, without reference to Third Parties, and that these copies are not used for commercial purposes. If you are interested in producing multiple copies of the handbook or purchasing additional copies, contact the authors at www.sas2dialogue.com for permission and discussion of appropriate terms and conditions.


# Table of Contents

## INTRODUCTION

### SYSTEMS THAT LEARN

- Creating an action-learning system
  - Planning, Inquiry, Evaluation (P.I.E.) 6
  - A.R.T. (Action, Research, Training) 7
  - Order and Chaos 8
  - Process Manager 9

- Putting it all together
  - Process Design 11
  - Skillful Means 19
  - Combos 27

## FACT-FINDING AND LISTENING

- Seeking evidence and consensus
  - Validation 32

- Engaging people
  - Participation 33
  - Active Listening 35

- Measuring and mobilizing evidence
  - Free List and Pile Sort 39
  - Ranking 41
  - Rating 43
  - Scoring Tips 45
  - The Socratic Wheel 47
  - Weighting 49
  - Information G.A.S. (Gathering, Analysis, Sharing) 51

## EXPLORING PROBLEMS

- Telling the story
  - Timeline 59
  - Previous Responses 61
  - Resource Mapping 63

- Getting to the root of a problem
  - Problem Tree 65
  - Gaps and Conflicts 67
  - Force Field 69
  - Analyze This 71
  - Attribution or Contribution 73

## KNOWING THE ACTORS

- Identifying the stakeholders
  - Nominal Identification 77
  - Personification 78
  - Stakeholder Sampling 79

- Understanding the stakeholder structure
  - Stakeholder Rainbow 81
  - Social Analysis C.L.I.P. 83
  - Power 87
  - Interests 89
  - Legitimacy 91

- Managing expectations
  - Positions and Interests 93
  - Negotiation Fair 95

## ASSESSING OPTIONS

- Blue sky thinking
  - Ideal Scenario 99
  - Sabotage 101
  - Projections 103

- Knowing what matters
  - Values, Interests, Positions (V.I.P.) 105
  - Lessons and Values 107
  - Disagreements and Misunderstandings 109
  - Levels of Support 111

- Predicting the future
  - Impact and Feasibility 112
  - Action Potential 113
  - Results and Risks 115
  - What If 117
  - Critical Path 118

## UNDERSTANDING SYSTEMS

- Reconstructing models of reality
  - DOMAIN ANALYSIS 121
    - Ecological Domain 131
    - Activity Domain 132
    - Problem Domain 133
    - Option Domain 134
    - Social Domain 135

- Systems thinking
  - SYSTEM DYNAMICS 137
    - Ecological Dynamics 143
    - Causal Dynamics 145
    - Activity Dynamics 147
    - Skill Dynamics 149
    - Network Dynamics 150
    - Social Dynamics 151
    - Value Dynamics 152
Weaving is an interlacing of yarn of different colors and textures to create a tapestry. The practical art of collaborative research, planning and evaluation is a similar endeavor. It mobilizes the living knowledge of people connected to each other and their environment, and weaves a collective understanding of ways to act for the common good. It is a practical engagement of mind with the world that invites us to reason carefully, with rigor, while caring for others and the world we live in.

This handbook is an integrated collection of adapted and new tools and processes to engage people and mobilize evidence in complex settings involving multiple stakeholders. They draw inspiration from different disciplines, theoretical perspectives, and methodological approaches. Fully participatory and flexible, the tools and underlying ideas are accessible to beginners and will provide experienced researchers and facilitators with a new approach to educational, workplace, community, and public engagement. People in the voluntary, academic, private and government sectors are using them for community-based action-research, project or program planning and evaluation, organizational learning, problem solving, and social engagement.

A Handbook for Participatory Action Research, Planning and Evaluation is divided into six modules. Three modules in the middle reflect basic questions applicable to any situation: what are the problems people face and must explore (Module 3), who are the actors or stakeholders affected by a situation or with the capacity to intervene (Module 4), and what options or alternatives for action should be assessed (Module 5)? These techniques are supported by all-purpose tools for fact-finding and active listening described in Module 2.

Module 6 offers tools for understanding systems in a complex world. Domain Analysis is a social adaptation of Personal Construct Psychology developed by George Kelly. It shows how stakeholders view a domain or topic area by creating and organizing elements and their characteristics. The method uncovers ways people make sense of reality in context and helps create opportunities for problem solving and learning. System Dynamics is an adaptation of input-output reasoning used in economics. It helps identify entry points into a system based on an assessment of how elements interact to create specific behaviors and situations.
Module 1 is about the full tapestry, not the threads. The focus is on creating an action learning system and developing skills to mix, balance and integrate tools, dialogue and careful reasoning. Skillful means build on the experience and creativity of the people involved and the use of appropriate tools. Four techniques are key to designing processes that integrate authentic learning (answering the “So What?” question) and decision-making (answering the “Now what?” question). The first two techniques support systems that learn how to balance and integrate action, research, and training (A.R.T.) or planning, inquiry, and evaluation (P.I.E.). Order and Chaos, a pivotal tool informed by chaos and complexity theory, helps craft the planning process. Plans may be blueprints for orderly action when key factors are easy to predict. Or they may be working hypotheses developed in complex settings, to be tested against experience and changing circumstances and needs. Process Manager is a visual planning tool that helps ground the inquiry, including monitoring and evaluation, in ongoing activities and broader plans. Gaps and flexibility built into plans using Process Manager ensure that allows inquiry and action to evolve over time and adjust to unforeseen events and new information.

Module 1 ends with Process Design guidelines and tips for inquiry in different settings (see Skillful Means). Process Design is the thought process that shuttles back and forth between tools and context to weave a meaningful fabric out of diverse events, methods, and moments of inquiry. It is the key to planning a collaborative inquiry at the right time and to selecting and adapting tools for real settings. Examples are provided of simple combinations and sequences of tools designed for typical tasks (see Combos).

For more information on the initiative, the people involved and examples of results in different fields from around the world, see www.participatoryactionresearch.net.

Jacques M. Chevalier is Chancellor’s Professor at the Department of Sociology and Anthropology and the Institute of Political Economy, Carleton University, Ottawa, Canada.

Daniel J. Buckles is Adjunct Research Professor at the Department of Sociology and Anthropology, Carleton University, Ottawa, Canada.
Module 1

Systems that Learn
Planning, Inquiring, Evaluation (P.I.E.)

**Purpose**  
To create a learning system that balances and integrates planning, evaluation, and inquiry.

**Planning** (P) creates logical schemes for doing things to achieve goals with appropriate inputs. **Inquiry** (I) examines and explains facts and situations, using the appropriate tools. **Evaluation** (E) assesses results or outcomes against goals, using well-defined criteria and markers of progress. A learning system combines all three processes. It also grounds them in meaningful action, mobilizes stakeholder participation, and applies a wide range of tools at the proper time and scaled to the right level of detail.

**Step 1** Define a key project or program and list major planning, evaluation, and inquiry activities.

**Step 2** Assess and compare the relative weight or importance given to planning, evaluation and inquiry over a specified time. Draw a triangle to represent P.I.E. components in each corner, and add circles to indicate components that play a significant role in the project or program. Adjust the size and density of the circle to reflect the relative weight or level of effort dedicated to each component.

**Step 3** If more than one component plays a significant role, assess the extent to which each component contributes to the other(s). Does the planning (P) build on the collection and examination of relevant facts (I) and lessons learned about results or outcomes of the past (E)? Does the evaluation (E) reflect an adequate examination and explanation of facts and relevant experience (I)? Is the inquiry (I) well planned (P) and appropriately evaluated (E)?

Draw arrows to indicate which component contributes to another. Adjust the thickness of the arrow to reflect the importance of the contribution.

**Step 4** Rate the extent to which each component is grounded in meaningful action and mediates stakeholder differences through dialogue, using a scale of 0 to 3 (where 3 represents the highest rating). Using the same scale, also rate the extent to which each component uses a range of tools, at the right time and scaled to the right level of detail (see P.I.E. chart).

**Step 5** Review the P.I.E. profile and discuss how satisfactory it is. Decide where more effort is needed and why. A flexible learning system that continuously balances and integrates P.I.E. may be particularly important in complex situations.

---

This organization pays attention to planning (in detail) and evaluating its work but does not give time to inquiry or stakeholder involvement. The planning is well grounded and uses a variety of the right tools at the right time. Evaluation makes a poor contribution to the system as a whole.
Purpose

To assess the current and ideal balance and integration of three components: 1) actions, to apply learning and achieve goals, 2) research, consisting of data collection and analysis, and 3) training, involving capacity-building events and strategies.

Step 1
Define a key project or program and list major actions, research and/or training activities.

Step 2
Assess and compare the relative weight or importance given to action, research, and training over a specified time. Draw a Venn Diagram representing the three A.R.T. components (Action, Research, Training) and place one mark in the intersecting circles that best reflects the A.R.T. profile of the project or program.

Step 3
If the profile includes more than one component, assess the extent to which each component contributes to the other(s). For instance, if the profile combines R & T mostly, are the results of the research used in the teaching activities, and is the teaching useful to the research? Use a code or symbol between each (broken, thin or thick arrows, for instance) to indicate the level of interaction among the components of the resulting A.R.T. profile.

Step 4
Review the A.R.T. profile and discuss how satisfactory it is. Decide where more effort is needed and why, and place a mark in the Venn Diagram to show what the profile should be. Draw an arrow from the current profile to the ideal profile (see A.R.T. figure). Explore what can be done to achieve this ideal profile.

TIPS
Use the Venn Diagram to compare the profile of different activities within a project, projects within an organization or activities of a network or program, and explore ways to achieve overall balance through integration.

Use Activity Dynamics to measure the level of interaction among the components in the A.R.T. profile.
Order and Chaos

Purpose To decide on the planning approach needed by answering two questions: what are the chances of achieving project or program goals, and how certain or confident people are that the information and knowledge they have (about the conditions or factors affecting the project or program) is complete and reliable?

Step 1 Define the project or program and review its higher-level goals.

Step 2 Prepare a graph by drawing a vertical line that crosses a horizontal line of equal length. Discuss and plot on the vertical line the chances of achieving the project or program goals, using a scale of 0 to 10. A value of 10 would indicate very high chances of achieving the goals. A value of 0 would show the opposite (the chances of success are very low).

Step 3 Discuss and plot on the horizontal line the level of confidence that people have in the information and knowledge they possess about the conditions and factors affecting the project or program. How certain are they that this information and knowledge is complete and reliable? A value of 10 would indicate that knowledge about the conditions and factors affecting the project or program is detailed and informed by extensive experience. A value of 0 would show the opposite (knowledge about the conditions and factors is sketchy and not informed by experience).

Step 4 Mark where the values from the two lines meet and label or place a drawing representing the project or program at this intersection.

Step 5 Review the four quadrants created by the graph and discuss how these reflect different ways to understand a project or program plan (for example, as a blueprint that calls for Result-Based Management, or as a challenge, a wager or a dream — a plan defined as a working hypothesis, to be tested using Process Management). Discuss the location of the plotted project or program in the graph and ways to increase knowledge about the conditions and factors affecting the project or program and improve the chances of achieving goals. Projects or programs in the ‘Chaos’ quadrants (see Order and Chaos figure) would benefit from planning approaches that incorporate working hypotheses, further inquiry and continuous planning as ways to accommodate uncertainty and complexity.

TIPS

Use the same graph to plot the chances of success and the level of certainty needed and that should be aimed for before going on with the project or program. Mark the place where the two plotted values meet and draw an arrow from the mark showing the current situation to the mark showing the situation aimed for.

Instead of assessing the higher-level goals of a project or program, identify several objectives or activities that are part of the project or program, and then use the graph to plot the chances of success and the level of certainty for each objective or activity. Different planning approaches may be needed, depending on where the objective or activity appears in the graph (see Order and Chaos figure).
Creating an action-learning system

Process Manager

Purpose
To ground and integrate inquiry, including monitoring and evaluation, in ongoing action plans. Supports planning at the right time and at the appropriate level of detail, in light of new information and unforeseen events.

Step 1
Define the project and discuss the overall goals and expected results. List all current and/or proposed activities on cards using keywords (one activity per card).

Step 2
Organize the activity cards into sets and subsets (see Free List and Pile Sort). Create a label or title for each set and for each subset.

Step 3
Create a process map, beginning with a title card, drawing or object representing the project placed in the center or in the upper left corner of the map. Then add the sets and subsets of activity cards to the map, creating levels and sub-levels.

Step 4
Decide which activity or set of activities is ready to plan in detail. If enough information is available, write the details on the back of the corresponding cards, including the start and finish dates, people involved (and their roles), material resources needed (equipment, budget), the information required, methods to be used, and the expected results or outcomes. Provide the optimal level of planning detail, and decide whether further planning is needed at a later date, when more information is available about the results of other activities, the actions of stakeholders, or key conditions that need to be met. Discuss information gaps thoroughly and add new fact-finding or inquiry activities to the process map, as needed.

Step 5
Compile the planning details from sets and subsets of activity cards to produce a table. In Column 1, list project activities (some or all of all of them). Use other columns to record information for each activity on who does what, why, when, and how. When new or more detailed plans are made, modify the table. Mind Mapping software can be used to create a process map and compile planning details for sharing.
Creating an action-learning system

Process Manager

TIPS

Use concrete action verbs to describe an activity or set of activities, instead of words for objectives or topics. For example, use ‘train’ instead of ‘capacity-building,’ ‘raise funds’ instead of ‘resources,’ or ‘lobby’ instead of ‘policy impact’. The language of activities implicitly embeds goals and desired results, and accommodates a plurality of stakeholder interests and potential outcomes around a common set of actions.

When developing a process map, use program or project activities (goal-oriented actions) as the point of entry instead of the general and specific objectives (action-oriented goals) emphasized in Result-Based Management frameworks. Goal-oriented actions expressed as verbs are more grounded, and closer to the day-to-day language that people use to make plans and assess their progress. They implicitly embed goals and desired results, and accommodate a plurality of stakeholder interests and potential outcomes around a common set of actions. By contrast, action-oriented goals tend to be abstract and ambitious, making them more difficult for multiple stakeholders to agree on and assess.

When key factors are easy to predict, plan actions and inquiries in some detail, well in advance. In more complex situations, plan only immediate activities (4 months and sooner, for instance), leaving later activities identified in the map but unplanned for a while. Leave gaps and details unspecified until the conditions for further planning are met. This allows inquiry, monitoring and evaluation questions and ways to answer them to evolve over time and adjust to ongoing learning and planning circumstances and needs. Goals and expected results are verified through continuous testing and learning from failure — through feedback and an ongoing action-reaction loop, as in medical practice.

Include in the process map references to major activities carried out before and following the planning period. This helps to recognize that planning occurs ‘in the middle’ of complex situations involving other stakeholder contributions that have a prior history and are ongoing following the planning period.

ADAPT

Arrange the activities in the order or sequence of implementation (see Critical Path). Place those activities that are ongoing throughout the project or not scheduled in a separate area of the process map. Create and use a visual code to highlight in the map important aspects such as levels of priority, the stage of completion for each activity, or the methods to be used.
Process Design is a flexible systems approach to planning and managing an action learning system. Tools are selected and adapted through the design process to create a collaborative inquiry that is grounded in action and dialogue.

**Step 1 Review the general context**
Review existing plans and the general context where an inquiry needs to be planned in detail. Describe the event or situation that prompts the need for an inquiry.

**Step 2 Define the planning situation**
Define the planning situation for the project or program where an inquiry is needed. Use *Order and Chaos* to assess the project or program in relation to the following three planning scenarios (next page).

---

**National Park Example**

**Step 1: Context**
The National Park receives 1.7 million visits per year. The managers have various means to identify client needs such as open house sessions for park users, suggestion boxes and logbooks, an Infocentre, a Visitor Centre, an e-mail inbox, contacts with park staff, volunteers and tourist guides, and attendance at community meetings. With the emergence of new media (e-mail, blogs, etc.), an increasing number of users are voicing complaints about the park's management methods and services delivered by a private contractor. Responding to complaints draws time and scarce resources away from other park management activities. The Park management team wants to review its past responses to service-related complaints and find ways to reduce the volume. It also wants to shift its approach from a client service focus to a partnership model with Park stakeholders.

**Step 2: Planning situation**
The Park team hopes to reduce the volume of user complaints by analyzing the problems and designing solutions that reflect a good understanding of the situation. Given the complexity of Park and user relationships and the many views and interests involved, the inquiry process should be planned progressively (continuous planning), starting with stakeholders concerned about recreational services and tourism (see Process Manager map). Once the key problem and objectives are clearly defined, a workshop will be held with team members and the Park contractor to assess the situation, identify priorities and develop a plan of action. The plan may include the creation of a Park Dialogue Committee, a process that would involve several steps, to be planned in due time. If successful, the same process will be extended to other Park services and stakeholder groups.
CONTINUOUS PLANNING

The first scenario involves complex, multi-stakeholder situations affected by great uncertainty. Information and knowledge are incomplete, links between causes and effects are not linear or straightforward, and chains of actions, partners and results are complex. Planning in this scenario requires continuous thinking and planning as activities and goals interact and evolve, subject to negotiations, compromise, and change over time. Planning occurs ‘in the middle’ of an ongoing process where the results of prior activities, the performance of key factors, and stakeholder interventions or responses cannot be fully predicted.

For this kind of situation, characterized by some degree of chaos, use Process Manager to map out activities with varying and optimal levels of detail and timeframes. When needed, integrate multiple, flexible inquiries in a continuous planning process to create and mobilize knowledge and engage the right people along the way. Plans in this scenario are working hypotheses, adjusted in light of new information and unforeseen events. Keep in mind that some activities do not need a formal inquiry either because it is not pressing, the expected results are clear, or the activity can be monitored through day-to-day tracking (using informal exchanges, for instance).

PLAN FIRST, IMPLEMENT AFTER

The second scenario is any predictable process where activities to achieve goals can be planned in detail and well in advance. Implementation follows the plan, assuming a coherent set of objectives shared by all stakeholders and results that are clearly achievable with a well defined set of inputs (time, resources, people). Under these orderly conditions, use Process Manager and selected handbook tools to do four things in sequence:

1. Assess the general context and need for an inquiry;
2. Make detailed activity plans based on general and specific objectives and existing information about the link between planned activities and expected results;
3. Monitor the emerging results of implementation against the initial set of observations or findings;
4. Evaluate the final results against the objectives using relevant criteria, indicators or progress markers. The starting situation can also be reassessed using hindsight to produce effects of Socratic learning (such as “Now we know we knew more than we thought” or “Now we know we didn’t know as much as we thought”; see The Socratic Wheel).

Results-based Management planning tools such as a Logical Framework may also be helpful in this scenario. They rely on high levels of information, widespread consensus around objectives, and certainty regarding the chances of achieving particular goals (see Order and Chaos).

SINGLE EVENT

Some situations are so pressing or follow-up so uncertain only immediate events can be planned. A Process Map or Logical Framework in this scenario is not really needed. Use the remaining steps of Process Design and the appropriate inquiry tools from this handbook to facilitate a single or one-off event, and plan follow-up actions in detail based on the results.
Process Design

Putting it all together

For each inquiry ready to be designed

1. Review the general context — What prompts the need for an inquiry?


3. Identify prior decisions — Who will be involved? Profiles and roles of participants? Time available? Prior knowledge and decisions? Role(s) of facilitator(s)? If necessary, use Handbook tools to make these decisions.

4. Define the inquiry purpose — Type: upstream, midstream or downstream assessment? Goal: for accountability, planning or story telling? See P.I.E. Scope: amount of information, analysis and participation needed? See Validation. Results: expected results (outputs and outcomes), who for and what for?

5. Identify/clarify main questions — See Active Listening.

5.1 Identify questions in sequence — Use input-output reasoning.

5.2 Organize questions in sequence — Use input-output reasoning.

5.3 Select and sequence tools — Consult the Table of Contents legend. Vary the techniques. Combine Handbook tools with other methods and facilitation techniques. Or Just do it!

5.4 Design all steps — Decide the following, considering event purpose, prior decisions, expected results, level of social and scientific validation needed, and familiarity with the technique. See Skilful Means.

Instructions: guiding questions and detailed procedures? Level: how simple or advanced? SMART indicators or progress markers required? Technology: hands-on or computer-based? Analysis and narration: right mix/sequence of formal analysis (tables, graphs) and story telling? Subgroups: based on what criteria? Homogeneous or mixed? Full or strategic and progressive participation? Explanation: brief or debrief people on the techniques used?

5.5 Review remaining decisions — If necessary, use Handbook tools to make these decisions.

Who will be involved? Profiles and roles of participants? Time available? Prior knowledge and decisions? Role(s) of facilitator(s)?


Go back and forth between steps, until the design meets its purpose.
Step 3  Identify prior decisions

Identify decisions already made regarding: (a) who will be involved in the inquiry; (b) the participants’ profiles and roles; (c) how much time will be dedicated to the inquiry; (d) the available inputs from previous events (knowledge, other decisions); (e) the role(s) that the facilitator(s) should play.

When defining roles, decide whether the facilitator or facilitating team is expected to combine various roles, such as instructor, expert-consultant, researcher, note-taker, or stakeholder. Teamwork and a clear division of labor may be necessary when the facilitator(s) must combine several roles.

Use tools in this handbook to make these decisions, if needed.

National Park Example (continued)

Step 3: Prior decisions

The analysis of the problem at hand (increasing volume of park user complaints) will be done with a group of about 12 people, including Park team members, three or four head office administrators, and the Park contractor. The inquiry involves several tasks, including compiling and synthesizing all relevant documents, co-designing and holding a one-day workshop, and writing up a final report. Completing these tasks requires about 7 days of work, to be done within a five-week period, with the assistance of a university-based consultant using a SAS\textsuperscript{2} approach to collaborative inquiry and stakeholder engagement.

Step 4: Inquiry purpose

The first inquiry involves a short-term, midstream assessment of an existing problem, using available information and the current knowledge and experience of key stakeholders to evaluate responses already in place and define priorities for planning purposes. Discussions revolve around the creation of a multistakeholder committee and defining its mandate, composition, and functioning.
**Step 4  Define the inquiry purpose**

Define the inquiry purpose in terms of the type of inquiry needed, its goal, its scope, and the expected results (see definitions, below). Make sure that the purpose is compatible with the prior decisions identified in Step 3.

**DEFINITIONS**

**TYPE**  Is the inquiry an upstream assessment of an existing situation for planning purposes? Is it a midstream monitoring exercise to take stock of progress towards results? Is it a downstream evaluation of the results and outcomes of actions against goals or against initial observations?

**GOAL**  Is the intent of the inquiry mainly to account for resources, to plan ongoing or future actions, and/or to tell the project or program story and inspire others with lessons learned? See *Planning, Inquiry, Evaluation (P.I.E.)*.

**SCOPE**  How much information, analysis and participation are needed to perform the inquiry? (See *Validation.*)

**RESULTS**  What are the expected or desired results (outputs and outcomes) of the inquiry, who is the audience and what are they expected to do with the information and conclusions?

---

**Monitoring and evaluation (M&E)** is a midstream or downstream inquiry. It raises questions such as “What are the results or impacts of this program or project thus far?”, or “How well has the program or project used its resources?” Common problems with M&E methods are twofold: they are often poorly grounded in ongoing action-oriented processes, and they do not support collaborative thinking. While some methods try to address these problems, efforts to create a single, comprehensive M&E method that applies to all situations are misplaced. M&E is not a special form of inquiry that requires unique concepts or special bundles of techniques. It is merely inquiry that assesses observed results against people’s expectations, plans and actions.

In our view, there are no M&E frameworks or methods per se, only M&E *questions*. Appropriate methods depend entirely on the questions people want to monitor and evaluate, which are as varied as the projects and programs they are involved in. So are the baseline conditions against which project and program activities are assessed. Each project and program must decide what to monitor or evaluate, how the results are going to be used, and which tools are needed to achieve this. Sometimes, all activities must be evaluated against their expected results and goals. In other cases, a set or subset of activities needs to be looked at, each with its own objective and expected results. These are key decisions that determine the methods to be used. Any technique, whether it’s a soil test or collection of stories about struggles to end poverty, can be used to effectively monitor or evaluate relationships between planned actions and observed results, provided it is the right tool to answer the right question, at the right time, at the right level of detail, with the right people, and for the right audience. Every evaluation is a unique design for a particular purpose.
Step 5  Design the inquiry

5.1  **Identify and clarify the main question(s)** the inquiry is expected to answer, using terms that are meaningful to the participants. To do this, identify and unpack the different questions that may seem relevant, and clarify each of them. Then identify the question(s) that are the most important and that reflect the purpose and prior decisions, as defined in Step 3 and 4. Test the questions and work towards a precise formulation of each question. For tips on how to clarify the main question(s), see *Active Listening*.

5.2  **Organize the main questions in sequence** using output-input reasoning (where the answer to one question serves as the input to the question that follows).

5.3  **Select and sequence tools** in this handbook and from other sources needed to answer the main questions of the inquiry. Consult the Table of Contents and its legend (page 1).

Choose the **combination of tools and facilitation procedures** that suit the needs and culture of the people involved (see *Information G.A.S.*).

**JUST DO IT**

Include in the plans well-established ways of doing things that reflect local culture and customs, rather than always trying to innovate. Judge when the established ways to gather and analyze information, create priorities, resolve problems, take action, and interact with others in the process are working well enough, and just do it!

5.4  **Design all steps**

Define and adjust all the **steps** and **procedures** to be used in each tool. Choose the right level of depth and the kind of technology needed in the situation and adjust the relative weight of formal analysis, description, narration and story telling. Decide how explicit and detailed the instructions should be and how participants should interact and contribute to the inquiry.

5.5  **Identify remaining decisions**

Identify the remaining decisions using the planning questions listed in Step 3. Make sure that the decisions are compatible with the purpose of the inquiry and all other decisions taken when designing it.
National Park Example (continued)

Step 5: Inquiry design

The inquiry focuses on three sets of questions and related exercises over the course of a day. The first, addressed in the morning, concerns actions already in place to manage park users’ complaints, what remains to be done to implement them fully, how feasible this is, the amount of time dedicated to each action, and their projected effectiveness if fully implemented. The technique used to address these questions is *Action Potential* (in *Options* module) and takes about 3 hours. To save time, the list of actions in place is prepared by the consultant and the team director and supplied at the beginning of the exercise; no particular technique is used to complete this task. Workshop participants divide themselves into small groups, evaluate two actions each, present their assessments in a plenary discussion, and validate their views with other groups. The exercise ends with an invitation to prioritize some actions based on the *Action Potential* criteria of feasibility, level of effort, and projected impact.

In the second exercise, the group organizes its priority actions in sequence, using the *Timeline* technique (in *Problems* module). This one-hour discussion involves revising some of the decisions taken in the previous step regarding what actions should be prioritized.

The last exercise, done in the afternoon, focuses on a new strategy that the Park wants to introduce as part of its approach to public relations: setting up a multistakeholder Park Dialogue Committee. Two techniques, the *Caroussel* (in *Ideal Scenario, Options* module) and *Free List and Pile Sort* (in *Fact-Finding and Listening* module), are used to address three related questions: the mandate, the composition, and the functioning of the committee. Participants form small groups, formulate a committee mandate, make a list of stakeholders (on cards) that should be part of it, and propose key rules on how the committee should function. To facilitate the discussion, the consultant provides one or two examples of public advisory committees implemented in other parks. When ready, each group presents its suggestions to the whole group. Participants identify similarities and differences between the views expressed (piling up similar stakeholder cards and identifying key words and ideas proposed by different groups), and progressively identify suggestions that are to their liking and could be adopted as recommendations to Park management.
Process Design

Step 6  Plan the documentation, testing and capacity building process

Decide how extensively to report on the group discussions, and determine the exact purpose or use to be made of the documentation. Define the activities needed to document the results during and after the inquiry (see Information G.A.S.) and assign the related responsibilities.

Consider documenting the following elements: the context or situation in need of attention; the purpose of the inquiry; a summary of the process; a descriptive analysis of the results; an interpretation of the findings; follow-up actions identified by the participants; observations regarding what went well or difficulties met during the process.

Determine the need for prior testing and capacity-building activities to support the inquiry process and make the corresponding plans.

TIP  The design steps may require going back and forth between steps in an iterative fashion, until the design meets its purpose. (See summary on page 13.)

National Park Example (continued)

Step 6: Documentation, testing and capacity-building

The Action Potential technique is tested with the Park director prior to the first workshop, to make sure that the key questions are well grounded and meaningful. No capacity building activity is needed before the event as the consultant facilitates the workshop. Notes prepared for the workshop and taken during the event are used to write up a short report after the event. The consultant asks for the permission of the workshop participants to publish the results and share the process with other audiences interested in the concepts and tools of collaborative inquiry, evaluation and planning.
Skillful Means

A collaborative inquiry cannot be guided by a formula or science involving strict rules. Rather, collaborative inquiry is an art based on judgment, creativity, and much practice. The Process Manager and Process Design frameworks, along with the tools for inquiry and Active Listening, are intended to structure and support the design and facilitation of a collaborative inquiry. However, many other considerations come into play. To apply reasoning and dialogue to pressing matters involving multiple stakeholders and real-life choices requires the development of an essential set of skillful means for creating and mobilizing knowledge in service of the common good. These bring people-based inquiry and evidence-based thinking together to support a meaningful action-learning process for all.

Following is an outline of the five skillful means and some related tips that must be applied when designing and facilitating a collaborative inquiry.

**MEDIATING.** Engage people and knowledge from different perspectives and facilitate dialogue across social boundaries, cultural settings, and modes of learning.

**GROUNDING.** Build inquiry and learning on felt needs and ongoing processes, towards meaningful actions and decisions appropriate to peoples’ goals and available resources.

**NAVIGATING.** Select and combine the forms of inquiry, planning and participation that help people deal with complexity (the uncertain, the unknown) in a timely fashion.

**SCALING.** Adjust inquiry methods and actions to fit the depth of evidence, planning and participation needed to achieve meaningful results.

**SENSEMAKING.** Co-create meaning in complex situations by integrating information, analysis (quantitative, qualitative) and theoretical insights into stories and explanations that inspire and persuade.

**TIP:** Use The Socratic Wheel to rate individual or group abilities to mediate, ground, navigate, scale and co-create meaning through collaborative inquiry and to set learning goals.
Consider local language and forms of inquiry, learning and interaction

Find ways to accommodate differences in language, meaning, and symbolism.
Build on local forms of inquiry, learning and interaction that are well established and work well in either literate or non-literate contexts.

Manage group and individual differences

Decide whether participants should first address key questions individually, in groups or both (e.g., start with an individual rating exercise and then form subgroups that share similar views and prepare recommendations for plenary discussion). Decide whether subgroups should include a mix of people with different characteristics (heterogeneous groups) or participants that share a particular set of characteristics (homogenous groups). Mixed groups are needed if the exercise is intended to draw out views representative of the entire group. Each subgroup can be assigned a different task, depending on whether all participants need to be involved in all parts of the inquiry.

When forming groups pay special attention to differences and specialized knowledge that may affect how people assess the same issues. Subgroups based on age, gender, marital status, ethnic origin, religion, education, the amount of time they have lived in a certain place, their place of residence, their occupation, or their role in an organization or project may be important in some contexts.

If participants disagree about some issues, clarify the differences and discuss how important they are to the purpose of the inquiry.

When differences arise regarding numbers and measurements, facilitate discussion of the reasons for particular ratings and go with the majority view rather than an average. Another way to mediate differences in ratings is to place numbers on the floor for each point on the scale and ask participants to stand next to the number they think is correct for a particular criterion. Agreement and differences on ratings will be easy to see. The group can then focus on major differences only, and adjust positions until a single rating is obtained.
Facilitate multisite and interactive engagement

If the chain of actions and partners has **multiple sites and organizational layers** (local, national and international, for instance), determine key inquiry questions that are specific to each site or organizational layer, those that concern the broader interaction of sites and layers, and those that apply to all sites and layers and that can be rolled up at the program level.

Establish how mutual accounting and learning between partners can help answer key inquiry questions and demonstrate what is attributable to each partner and to their collaborative work.

Define the responsibilities of each partner in the inquiry process. Design the inquiry to include **interactive engagement**, along with **self-evaluation** and **third party assistance**, when appropriate. Interactive engagement creates a structured conversation that goes beyond self-reflexive stories or surveys and interviews conceived and led by outside experts.

Define the role of facilitators and third parties

Normally, the facilitator’s role is to help people express their views as knowledgeable decision makers and to encourage respect among participants. He/she can state his/her own opinions on the issues being raised, provided he/she is a stakeholder or a member of the group doing the exercise. A facilitator can intervene as an expert on a topic if he/she has permission from the group to do so.

A third party may be needed if no one can play a mediating role in a context where there is considerable tension or mistrust, parties take rigid positions, participants do not express themselves freely, or clear rules-of-order are needed.
WHEN GROUNDING...

Create a safe and inviting environment

Safety is key to learning, and is based on trust in the relevance of the inquiry topic, the questions guiding the inquiry, and the skills of the facilitator(s). It also relies on a comfortable and enabling physical environment. Whenever possible, use an open space large enough to accommodate about three times the number of participants, with moveable chairs and tables for small group work. Natural light will improve peoples’ comfort as will periodic breaks and an absence of clutter.

Encourage creative expression

Use humor, games, physical movement, floor democracy, and other forms of creative expression (drawing, mime, sculpting, stories) to build awareness, energize the group, and connect to emotions. This will help facilitate teamwork, release tension, and ground learning in real life settings.

WHEN NAVIGATING...

Identify the point of entry

What is the ideal point of entry into a collaborative inquiry process? Analyzing the problem(s)? Knowing who the stakeholders are and how they interact? Assessing the options for immediate action? The answer to this question is a judgment call regarding what is the right thing to do at a particular time in a specific context. An inquiry is always ‘in the middle’ of broader and ongoing processes with no real beginning and no clear end. Choose an entry point in light of the main question(s) to be answered as well as the setting, the purpose, and the decisions made prior to the inquiry. Focus on what is more pressing and leave the other issues in the background until people are ready to explore them in detail. In complex and dynamic situations, go back and forth between a focus on Problems, Actors, and Options.

Describe characteristics or assess interactions

The Domain Analysis tools are social adaptations of Personal Construct Psychology designed to describe or characterize how people see a particular domain or topic. They assess the levels of similarity among elements of a domain, leading to an understanding of clusters and broader categories of elements in the domain. By contrast, System Dynamics tools build on the logic of input-output analysis used in the field of economics. They focus on the interaction between elements in a system, leading to an understanding of system boundaries and levels of integration. The distinction between ‘domain characterization’ and ‘dynamic interaction’ is useful when selecting a tool for a particular inquiry.
WHEN NAVIGATING (continued)...

Be flexible

Plans often change along the way. A tool may need to be adjusted or replaced with a different one on the fly. A clear understanding of where the group wants to go with an inquiry will help manage the transition. Vary the tools and the kinds of tables or diagrams used to avoid fatigue.

Choose the right technology and facilitation techniques

Determine what facilitation techniques and technology should be used and how to gather and analyze information with the support of user-friendly and visual, kinesthetic tools (people moving in space) that help see and discuss patterns emerging from the findings. Make a list of the supplies and equipment needed for each inquiry, such as cards, post-its, masking tape, scissors, low odor markers of different colors, sculpting wax, drawing paper, flip charts and stands for all groups, a video projector, etc. Decide whether to use software or ‘floor democracy’ to facilitate data analysis. Social Analysis C.L.I.P. and Domain Analysis are currently supported by specialized software. Data from many other tools can be displayed graphically using standard software such as Excel.

WHEN SCALING...

Manage time

Plan enough time to go through all the steps of a tool (about 2 hours per tool, on average), with breaks during the process as needed. To save time, divide the group into smaller groups, and then ask each one to complete one part of the assessment (for example, by having each group use a different criterion to rate the same set of options or compare and score cards that represent different elements). The group may decide at any time to stop the exercise, find more information about the questions being raised, and complete the exercise later.

Adjust the level of participation

Plan realistic ways to help people participate in an inquiry process. This includes deciding whether all the key actors should be present or not. In some cases it may be better to work only with stakeholders that are keen to cooperate. In other cases a ‘shuttle’ approach may be best: a third party facilitates a multi-stakeholder inquiry by engaging with individuals or small groups separately and then presenting the results at a general meeting where all the parties are together (assuming their prior consent).
Putting it all together

Skillful Means

WHEN SCALING (continued)...

Aim for the right level of application

The steps involved in each tool and the number of tools used can be reduced or expanded. Decide how simple or advanced the application of a tool or process needs to be, considering the following factors:

• How much time and resources are available to dedicate to a particular inquiry?

• How complex are the issues? Summary indicators that are SMART — specific, measurable, applicable, realistic, and timely — may provide sufficient understanding of an issue, and allow for fewer steps in an inquiry. Dividing a key variable into its component parts — looking at the various expressions of the power variable in *Social Analysis C.L.I.P.*, for instance — may be needed to expand the analysis. *Order and Chaos* can help determine the complexity of an issue.

• How reliable do the results need to be? If very important decisions are expected to follow immediately from the inquiry, or they are irreversible if proven wrong, high levels of evidence and consensus may be needed (see *Validation*). Tentative decisions and actions to be verified later or monitored closely can be made on less detailed information and a narrower base of stakeholder agreement.

• How familiar are the facilitators with the tools? It is usually safer to start with simpler applications of a tool and progress to more advanced applications and combinations of tools as experience is acquired. Facilitators should become familiar with a tool by testing their knowledge and design in a safe context.

It is a good idea to avoid extremes: on the one hand using tools to generate exhaustive data gathering and analysis and text-heavy reports that make authentic stakeholder participation difficult and push actions out into a distant future, once all factors are fully analyzed; and, on the other hand, using tools hurriedly and superficially, without providing the details, nuances and analyses needed to make the inquiry meaningful, useful and reliable. This means aiming for a level of detail and engagement that reflects existing constraints and goals and is "good enough" in context. (See *Validation*.)
Putting it all together

Skillful Means

WHEN MAKING SENSE...

Combine formal analysis and narration

Formal analysis supported by diagrams and tables helps to organize information and findings in ways that are clear, logical, and succinct. Narration (whether oral or written) gives the context, the sequence of events, a sense of purpose, and details that add richness and texture to understanding of the situation. Mesh the two kinds of thinking and adjust the relative weight of each to suit the context. When relevant, convert the findings of one kind of thinking (for example, story telling using Outcome Mapping or the Most Significant Change method) into the starting point for another kind of thinking (for example, criteria in The Socratic Wheel). Consult instructions provided in the tools to ensure that the collection of quantitative data such as ratings is integrated with analysis and interpretation of the results through group discussion.

Elicit concepts or start with predefined terms

Tools such as Gaps and Conflicts, Social Analysis C.L.I.P. and Legitimacy start with concepts adapted from the social sciences such as power, legitimacy, and gaps in values. While these are informed by theory and analysis of social history, they may not be meaningful in some contexts. Tools that use Domain Analysis and System Dynamics as their base intentionally allow participants to elicit their own terms and concepts. Other tools such as The Socratic Wheel also lend themselves to elicitation techniques. Decide which approach is needed at what point in the inquiry.

Use numbers and measurements wisely

When using a tool that includes ratings or ranking, keep in mind that numbers are not ends in themselves. Measurements are means to provide information, clarify people's views or knowledge about a topic, define priorities, focus the attention during a group discussion, structure the conversation, and find patterns. How much attention is given to numbers and measurements will depend in part on the extent to which dialogue between different knowledge systems, or between science and local experience and know-how, is important. Numbers and measurement can reduce tensions by providing an external point of reference or bring out differences among stakeholders that were not immediately evident.
WHEN MAKING SENSE (continued)...

**Explain tool instructions or not**

Explaining to participants all the step-by-step instructions of a tool before using it can be confusing and detract from the substance of a discussion. Instead, outline and seek agreement on the inquiry’s expected results, and then proceed step by step. When moving from one tool to another, clearly state the main question that the tool will address and invite participants to reformulate the question if necessary.

Many of the tools can be used discreetly or invisibly to guide an interview or group facilitation process, and to organize the findings in the facilitator’s mind, notebook or in a table (during or after the event). Participants can decide whether they want to learn more details about a tool and begin to use it themselves independently. In some cases, explaining the technique can help a group focus on a task and reduce tension.
Combos

There are different ways to combine and sequence tools in events or processes that support collaborative thinking. The following are examples of designs that can be implemented in a one-day workshop (setting aside time for introductions and an ice-breaker) or in several meetings. The amount of time needed and the number of meetings will depend on how important and complex the issues, the amount of information required, and the number of people that need to be engaged in the process (see Validation).

Defining project goals and mission

1. **Ideal Scenario (True or False)**: share stories of great things already accomplished or dreamed about, and that contribute to a successful project.
2. **Ideal Scenario (The Carrousel)**: develop and share statements toward a common vision of a successful project.
3. **Order and Chaos**: discuss ways to improve the likelihood of a project succeeding and the information needed to make plans.

Developing a proposal

1. **Resource Mapping**: draw a map of all the sites and resources that can contribute to a project.
2. **Timeline and Stakeholder Identification**: identify various project activities (in sequential order) that bring together different sites and resources; indicate the key stakeholders involved in each resource management activity.
3. **Impact and Feasibility**: identify which proposed activity is the most feasible and has greater potential impact.
4. **Process Manager**: plan the activities that would be part of the preferred action plan (based on the conclusions reached in previous steps).
Combos

Setting priorities

1. *Free List and Pile Sort*: identify the main options to resolve a problem or achieve project goals.
2. *Action Potential*: assess the options against the criteria decided by the group.
3. *Values, Interests, Positions (V.I.P.)*: discuss the extent to which the preferred options coincide with people’s values and interests.

Monitoring and evaluating a project

1. *The Socratic Wheel*: define the indicators and information needed to measure current, ongoing and expected progress in achieving project results.
2. *What If*: develop a plan to monitor risk factors and adjust activities accordingly.
3. *Process Manager*: plan the activities needed to achieve and monitor progress towards project goals.
4. *Attribution or Contribution*: assess the level of credit for observed change that results from the project and implications for future action.

Solving a problem

1. *Stakeholder Rainbow or Social Analysis C.L.I.P.*: identify the key stakeholders who can influence or may be affected by a key problem or issue to be discussed.
2. *Force Field*: identify ways to act on the key factors that contribute to the problem and those that stop it from getting worse.
3. *Validation*: discuss the additional evidence and stakeholder involvement needed to better understand the problem and make plans.
Combos

Managing a conflict

1. **Timeline**: reconstruct the chronology of events that created or maintained the conflict.

2. **Values, Interests, Positions (V.I.P.)**: discuss the extent to which the positions adopted by the parties coincide with their values and interests.

3. **Lessons and Values**: discuss the values held by the parties and apply the lessons learned from successful actions that are consistent with those values.

4. **Ideal Scenario**: imagine a scenario that describes what would happen if the conflict were resolved.

Creating a community of practice

1. **Action, Research, Planning (A.R.T.)**: assess the balance between action, research, and training goals in current projects.

2. **Social Domain**: describe and compare the skills and learning goals of members of the community of practice.

3. **Process Manager**: plan the activities needed to achieve and monitor progress towards learning goals.

4. **Levels of Support**: determine whether there is enough support for plans proposed in previous steps.
Combos

Manage change

1. *Sabotage*: identify and overcome behaviors that are barriers to success.

2. *Activity Dynamics*: examine how to strengthen the integration and synergy of ongoing activities.

3. *Ideal Scenario (The Carrousel)*: develop and share plans to implement change successfully.

Working together

1. *Force Field*: identify ways to act on the factors that contribute to a key problem and those that stop it from getting worse.

2. *Negotiation Fair*: discuss and plan concrete actions that stakeholders can take to meet their mutual expectations and resolve a key problem.