

Handbook of
**Action
Research**

*Participative
Inquiry
& Practice*



edited by
Peter Reason & Hilary Bradbury

SAGE

Collaborative Off-line Reflection: a Way to Develop Skill in Action Science and Action Inquiry

JENNY W. RUDOLPH, STEVEN S. TAYLOR AND
ERICA GABRIELLE FOLDY

How does a person loosen the bonds of firmly held beliefs and entrenched thought patterns enough to learn new ways of acting, seeing and inquiring? Action researchers need these capabilities to conduct themselves on-line in ways that enhance inquiry and valid information. Action science (Argyris, Putnam and Smith, 1985) and action inquiry (Fisher and Torbert, 1995; Torbert, 1991) offer both theory and technique to build these skills. Action science (AS) and action inquiry (AI) are meant primarily to help reshape action on-line, in the moment. However, reflecting and changing in the moment is enormously difficult for most people. This chapter highlights the intermediate step of learning to reflect, off-line, on our thoughts, feelings and actions, and the results they produce. Collaborative off-line reflection is one step in an iterative, ongoing learning practice that includes experience, off-line reflection and experimentation with newly designed approaches. Off-line reflection is not only for people who identify as action researchers; it is useful for anyone who wishes to enhance his or her capability for effective action in complex social situations.

Reflecting on practice off-line helps build AS/AI skills in at least three ways. First, off-line reflection gives one distance in time and space to analyse and re-experience feelings and thoughts, actions and results that may have been imperceptible or confusing in real time. Secondly, it provides a practice arena in which to build skill with action science/inquiry tools where mistakes have little or no adverse impact. Thirdly, it allows one to experiment with different ways to phrase interventions, a crucial step in adopting new behaviours that feel authentic.

This chapter illustrates a process by which the three authors (and many students of AS/AI before us) conduct research to improve their own effectiveness. Working with others gives the reflective practitioner (see Schön, 1987) a variety of perspectives on the

situation and future options that can help break through established patterns of seeing and acting that are often invisible to us. In this group approach to off-line reflection, we usually explore the challenges faced by one group member, and help him or her devise new approaches to similar dilemmas in the future. This process of thinking through one person's challenges helps all members of the reflection group explore ways to improve their effectiveness in action.

The chapter also offers a specific illustration of how Dana (a pseudonym for one of the authors), could resolve dilemmas common to power-holders in any organization. Dana is not conducting action research in the example presented here; she is trying to run her organization effectively. The action research described is our collaborative effort to understand and recraft her way of acting.

Collaborative off-line reflection starts with one group member writing a case about a problematic situation s/he faced. The case includes a brief orientation to the situation, actual or remembered dialogue from the situation, and a 'left-hand column' that captures what the case-writer thought and felt, but may not have said. The case below portrays dilemmas that Dana faced in how to set strategy for her organization.

Dana's Case: 'Butting Heads'

Dana was the director at *Action on Changing Technology* (ACT), a union-based coalition that addressed the occupational health effects of computer technology. When this conversation took place, Dana had been the director for less than a year. Anne, the other person in the case, pre-dated Dana at the organization by about a year and a half. Anne hadn't wanted the director position. Anne was very smart organizationally and politically, despite her youth.

Dana had a lot of respect for her and relied on her heavily, especially when she first took the director's post. At the time of this conversation, there were two other staff members, Miriam and Fred. Dana had hired both of them several months after she arrived. Though Dana was the director, all decisions of any importance were made collectively.

Anne and Dana had a very good relationship for the first few months after Dana arrived, but at some point it began to get strained. More and more often, their conversations would reach an impasse. In the following example, typical of the pattern, Dana and Anne argue about what sites are appropriate targets for their organization's help. Miriam and Fred were present, but quiet, in the following exchange.

Dana's thoughts and feelings	What Dana and Anne said
	<i>Dana:</i> What are some other potential sites?
	<i>Anne:</i> A while ago we talked to some people at Phoning, Inc. Maybe we can check back with them.
That's not a good idea. Why is she suggesting it?	<i>Dana:</i> You mean the telemarketing group in Western Mass? They do good stuff, don't they? They only take progressive clients. <i>Anne:</i> Well, they don't treat their phoners very well.
She's missing the point.	<i>Dana:</i> They're a tiny outfit and they're basically on our side. Maybe if we had infinite resources, but we don't. <i>Anne:</i> I don't see what all that has to do with it. There are workers there working under bad conditions. They could use our help.
Shit, are we going to butt heads again? Her purist politics drive me nuts.	<i>Dana:</i> The enemy is not the director of Phoning, Inc. <i>Anne:</i> Maybe he's not your enemy, but maybe he's my enemy!
Why do we get like this? Why does it get so tense? Why do we fall into this pattern over and over?	<i>Dana:</i> But that's not strategic.

Tools of the Trade

The point of working through a case is to help the casewriter (and others) see how s/he is stymied and to avoid similar problems in the future. The learning pathways grid (see Figure 41.1) provides one overarching framework that guides this work.¹ The work group sits together with copies of the case and a flip-chart version of an empty grid. Using the tools described below, we analyse the case and fill in the grid with observations about Dana's frames, actions and results (see Table 41.1). 'Frame' in this setting refers to the ways the casewriter understands and feels about the situation. Frames can run the gamut from if-then decision rules (if someone is yelling, then withdraw) to an amorphous sense, for example, of what is safe, right, rational or polite behaviour.²

The left-hand column, described above, the learning pathways grid (Action Design, 1993) and the ladder of inference (Argyris, Putnam and Smith, 1985) are three tools we use here. Moving around the grid step-by-step helps us clarify both the impasse Dana finds herself in and how she got there. The goal of the reflection process is to address the mismatch between the desired and actual results, which filling in the grid reveals. The grid helps illuminate some of the sources of this mismatch: we examine what actions seem to have led to the actual outcomes and the way Dana framed the situation that would lead her to act the way she did. We then help the casewriter develop alternative frames and role play new actions that could surface, transcend or transform the dilemma s/he faces.³

The ladder of inference is a 'schematic representation of the steps by which human beings select from and read into interaction as they make sense of everyday life' (Argyris, Putnam and Smith, 1985: 57). For the most part, this process is automatic and unconscious. That is why it is so powerful and potentially so dangerous. At the bottom of the ladder is some observable data: a live conversation, a transcript, answers on a questionnaire, a newspaper account, facial expressions or other behaviours. At the first rung, we unconsciously make some choices, attending to some data and ignoring others. At the next rung we name the data in a way that makes sense to us; next we draw an inference about the (incomplete) data. We connect that inference with other theories we have – thus integrating it into our larger way of understanding the world – and decide what to do. As an example, let's look at an interaction between Sal and Elizabeth, work colleagues. Sal comes up to say hello to Elizabeth. As he does so, he both smiles warmly and takes a quick glance at his watch. Elizabeth, who tends not to think of herself as very important, notices the glance at the watch, rather than the smile. She assumes Sal is busy or late and doesn't have time to talk. Even though she would like to talk to Sal, she just says a quick hello and

Tab

Dan

1 A

th

fo

2 It

(a

If

sh

3 It

th

(a

4 If

lo

Dan

1 I

2 I'

th

or

3 R

di

cr

4 I'

a

mov

frien

Th

very

(the

from

auton

(Sal

same

As w

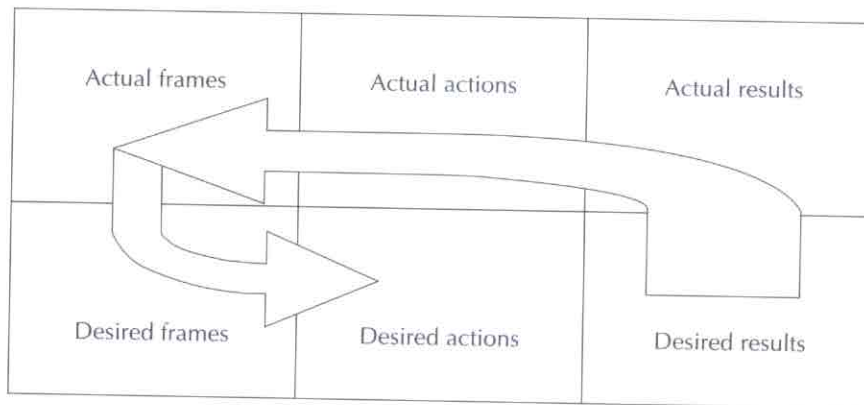


Figure 41.1 The learning pathways grid

Table 41.1 Case summary using the learning pathways grid

Dana's actual frames	Dana's actual actions	Actual results
<ol style="list-style-type: none"> Anne has purist politics and these are the wrong standards for the organization. If I'm wrong, then my credibility (as the boss) is shot. If I'm wrong, then maybe I shouldn't be the boss. It's my responsibility to handle this tough strategy question (alone). If I admit I was mistaken, then I lose face. 	<ul style="list-style-type: none"> Advocate own point of view but don't inquire about others'. Keep reasoning hidden. Appeal to abstract standard of being 'strategic' about which there is no consensus. 	<ul style="list-style-type: none"> Deadlock: Dana's view does not prevail and there is no real dialogue. Frustration.
Dana's desired frames	Dana's desired actions	Desired results
<ol style="list-style-type: none"> I respect Anne and her views. I'm not solely responsible for the strategic direction of the organization. Real dialogue about strategic direction enhances my credibility. I'm willing to experiment to get a better outcome. 	<ul style="list-style-type: none"> Dana inquires about Anne's view. Dana makes her own reasoning public and inquires about other people's views. Dana publicly reflects on her and Anne's conflict and asks for help. 	<ul style="list-style-type: none"> Dana's point of view prevails. Harmony in the group. Real dialogue in the group.

moves on. Sal wonders why Elizabeth was not very friendly to him.

The ladder shows how an existing frame (I am not very important) can influence what data we attend to (the glance at the watch) and what inferences we draw from that data (Sal is busy). It also shows how automatic inferences can lead to undesirable results (Sal and Elizabeth missing a chance to connect). That same dynamic is continually present in conversations. As we analyse the case, we try to make explicit the

reasoning that takes the casewriter, and us, the case analysers, up the ladder.

Analysing the Case

Desired results

What did Dana want to get out of this interaction? The left-hand 'What I thought and felt' column of the

dialogue often provides clues about the casewriter's desired results. Below we consider some of the results Dana seems to care about in this scenario.

Dana's point of view prevails

Dana's left-hand column suggests she thinks Anne's nomination of a target site for an educational effort is wrong-headed. Dana thinks, 'That's not a good idea' and 'She's missing the point.' In the spoken dialogue Dana attempts to set Anne straight, exclaiming, 'The enemy is not the director of Phoning Inc.', and when Anne retorts that maybe he *is* Anne's enemy, Dana's rejoinder is 'But that's not strategic.'

What is the right sort of target, as far as Dana is concerned? We get a hint that it is *not* a small, progressive organization when Dana attempts to turn aside Anne's suggested target by saying, 'They do good stuff, don't they? They only take progressive clients?' and 'They're a tiny outfit and they're basically on our side.' When we analysed the case with Dana and noted these patterns, we asked her if she could clarify why she said these things. She said she wanted to influence the group to identify targets that fit *her* criteria.

Harmony

Dana also seems to be bothered by the conflict between herself and Anne. She thinks to herself, 'Shit, are we going to butt heads again?' and 'Why do we get like this? Why does it get so tense?' When we queried Dana about this, she said she wanted a harmonious discussion that would help the organization move forward.

Real dialogue

By this time in our conversation about Dana's case, the irony of Dana wanting a harmonious discussion in which only her point of view was allowed to prevail was plain to all of us, especially Dana. In hindsight, Dana noted that she had another goal in the conversation which was less obvious to her at the time and which seemed to have been overridden by her desire to have her viewpoint prevail. That other desired outcome was 'to have a real dialogue'. 'What is a real dialogue?' we asked. Dana said a real dialogue would be one in which Anne and Dana share their views fully, listen to each other and negotiate actively.

Actual results

There are a host of actual outcomes here, but we will focus on two: deadlock about what organizations to target and frustrating conflict.

Deadlock

Dana's point of view does not prevail and there is no real dialogue. Rather, there is a deadlock between Dana and Anne about what to do next. It is easy to see their argument degenerating into the sort of schoolyard argument that goes back and forth with duelling assertions and no inquiry:

'It is strategic!'
'Is not!'
'Is too!'

Frustrating conflict

Dana and Anne's argument leaves Dana frustrated, 'Why do we fall into this pattern over and over?' and hot under the collar, 'Her purist politics drive me nuts!' It's easy to imagine that they are angry with each other, and that hostility is rising. Our case analysis conversation with Dana confirmed that our imaginings are on target.

Dana's challenge: a mismatch between desired and actual results

When we compare Dana's desired results with the ones she got, we get a clear picture of the challenge facing Dana. In this case, the actual results are almost the exact opposite of what Dana hoped for. Instead of having her point of view prevail, she and Anne are deadlocked. Instead of real dialogue, they have duelling assertions. Instead of harmony, they have simmering frustration. How did this happen?

Actual actions

Dana's main strategy seems to be advocating her view strongly, and not inquiring about other people's views. Though the dialogue starts with Dana's question 'What are some other potential sites?', from then on Dana advocates her point of view and makes only one shallow inquiry about Anne's comments, 'You mean the telemarketing group in Western Mass?' It is hard to see how one can foster real dialogue without asking any real questions. Unless she inquires of Anne or anyone else in the room 'What makes you think it is important to target such-and-such?' they are likely to keep their reasoning to themselves.

Dana also keeps her reasoning to herself by advocating her positions unilaterally without inviting scrutiny of them. Throughout most of the dialogue Dana asserts her inference that Phoning Inc. is not a good target, and does not invite others to comment on this view or offer theirs. Dana does begin to make her reasoning public by implying what criteria would

exclude organizations from being targeted: '[Phoning Inc. is] a tiny outfit and they're basically on our side.' She also begins to explain some of her reasoning for having to pick and choose among targets: 'Maybe [we could target them] if we had infinite resources but we don't.' But she seems to offer these statements as a way to buttress her own view and doesn't explain that they illustrate her reasoning or invite others to share their views.

Dana implies that her organization should act 'strategically', a standard about which the group clearly has not yet reached consensus. Yet she does nothing to move the dialogue to ground where consensus could be developed.

In sum, Dana contributes to the outcomes of deadlock and conflict by advocating a lot, inquiring little and keeping her reasoning opaque. Why does she do this? Her cognitive and emotional framing of the situation offers some clues.

Actual frame

What may have led Dana to act the way she did, especially when those actions led to outcomes she didn't want? One way to understand her actions is to examine the words, deeds and thoughts in the case and make inferences about how Dana framed her role and the situation, and check these inferences with Dana. The casewriter's collaborators ask questions like, 'What were you thinking and feeling that led you to act in such-and-such a way?' We describe two of the frames we generated by this process below.

Anne has purist politics and these are the wrong standards for the organization

If Dana wanted real dialogue, how do we explain her failure to promote dialogue by inquiring about what Anne was thinking? One possible explanation is that she dismisses Anne's 'purist politics' and then appears to dismiss whatever else Anne has to say. She neither inquires into nor does her left-hand column reflect any consideration of Anne's point of view. As we discussed this pattern with Dana, we came to the conclusion that she was operating with a frame something like this: 'If someone evinces purist politics (which are stupid) then disregard (and don't inquire about) what they say.'

Dana elaborated her view when we queried her about it: She believed that an organization with limited resources has to pick its battles; Anne's interest in a small, progressive, non-profit organization was way off target. Rather, Dana's organization should be focusing on large corporations that had unions or union-organizing potential. Thus, her organization could leverage its interventions by strengthening both the labour movement and efforts to reduce workplace injury. In Dana's mind, Anne's idea should be derailed as quickly as possible.

If I'm wrong or my view of strategy is incomplete, then my credibility is shot

Dana never invites comment on her own views despite her stated desire to have real dialogue. Why not? As we analysed the case together, Dana said she worried that if others noticed that her strategy was incomplete or wrong, her credibility as the director of the organization would be undermined. She didn't realize she held these frames and was surprised by them. Here are some of the other assumptions that made up Dana's frame:

- Since I'm the boss, I'm supposed to be right and if I'm not right then maybe I shouldn't be the boss.
- It's my responsibility to handle the burden of this tough strategy question (alone).

Given these assumptions, it is easy to see how threatening Dana might find it to open up any discussion of her views. In Dana's mind, such a discussion would not simply have been about organizational strategy but, by implication, about her suitability to lead her organization.

Argyris, Putnam and Smith note that people tend to condemn mistakes when they view them as a sort of crime (1985: 287). We see this frame at work in Dana's assumption, stated as we examined the case together, that 'Once I've committed myself to a view, if I backtrack then I lose face.' For Dana to be embarrassed or ashamed about changing her mind, she also has to believe that it is wrong to be wrong.

Desired frames

Reframing how one sees a situation is one path (and sometimes the only path) to generating new, more effective behaviours (Watzlawick, Weakland and Fisch, 1974). Reframing is a process in which the same old situation is cast in a new light. The process of writing down and discussing one's own actual frames often prompts memories of less salient contrasting ones. In addition, baldly stating one's own frames often highlights the ridiculously high or low standards to which we hold ourselves and this is often enough to jar us loose from them. We don't mean to imply that adopting a new frame is easy, but reflecting on frames as we have done here often provides both a strong impetus to change them, and ideas on what changes to make. Below we suggest reframes for each of the actual frames Dana held.

Actual frame: Anne has purist politics and these are the wrong standards for the organization

Reframe: I respect Anne and her views

At first blush, this reframe sounds like a Pollyannaish reversal of Dana's earlier dismissal of Anne's

purist politics. In fact, however, we discovered that Dana frequently relied on Anne, who had been at the organization 18 months longer, for advice and knowledge about the field. In our off-line reflection, Dana said, 'I really do respect Anne, I just have to move this to the front of my mind.' This view of Anne is much more likely to make Dana curious about her views, and willing to inquire about them.

Actual frame: If I'm wrong or my view of strategy is incomplete, then my credibility is shot

Reframe A: I'm not solely responsible for the strategic direction of the organization

Dana knew that other people in the organization had useful perspectives on its mission and direction. In fact, when we analysed the case together, she noted that there was a good possibility that the strategy would be improved by discussing it. She could reframe her role as orchestrating processes to help surface the best possible strategy. Seen in this way, she could share the burden of developing an effective strategy. There was an important side effect of this reframe. Dana then realized that having her view prevail wasn't the result she really wanted. She didn't want her view to prevail at the expense of learning about other views. However, she wanted her view to be considered seriously along with others.

Reframe B: Real dialogue about strategic direction enhances my credibility

If Dana's role is to orchestrate a process that helps develop the best possible strategy, then she could now view such discussion as enhancing her stature as the leader of the organization.

Actual frame: If I admit I was mistaken, I will lose face

Reframe: I'm willing to experiment to get a better outcome

Once Dana was willing to relax her grip on the strategy development process, she recognized that, 'It's more important to me to have communication with Anne than to stick rigidly to my criteria for what is 'strategic' and totally dictate the strategy of the organization.' Put another way, Dana was willing to admit her strategy might not be the right one and explore other ways of developing strategy. Specifically, as Diana Smith often puts it (Smith, 1996), she was willing to entertain the 5 per cent possibility that Anne had something useful to say and pursue that possibility with 100 per cent of her effort.

Desired actions

We have analysed the 'Butting Heads' case, diagnosed some of the obstacles Dana faces in achieving outcomes she wants, and made some prescriptions about ways she might reframe the problem she faces (see Table 41.1 for a summary). We now turn to the process of crafting new ways for Dana to act. The goal is to devise approaches that are more likely to lead to the results Dana really wants, like having a real dialogue, having harmony in the group, and identifying targets that are strategically important. The first step in helping casewriters generate new ways of acting is to devise and write down new conversational approaches and phrases that they could use to express themselves. The second step, and it is a crucial one, is having casewriters role play these new actions. We find this is particularly useful in helping them try on the new frames, and in using the often-unfamiliar phrases that accompany them.

Dana inquires about Anne's view

One simple innovation, but only a start, would have been for Dana to ask Anne, 'Why do you see Phoning Inc. as a good target?' immediately after Anne suggested it. If Anne felt Dana was asking the question in good faith, the whole deadlock might have been avoided. If, however, we believe either that Anne might be suspicious of Dana's motives or would give reasons with which Dana wouldn't agree, then another approach might be necessary.

Dana makes her own reasoning public and inquires about other people's

Once the conflict between Dana and Anne surfaced, Dana could initiate a new dialogue with a brief introduction about where she wants it to go, then assert her view of what is strategic, and *then* inquire about what Anne and the others there (Miriam and Fred) see as strategic:

I'd like to share my current view of our organizational strategy and then hear other people's views. I think if we work together on this, there's a good chance we could come up with a better strategy than the ones each of us are individually carrying around in our heads. Would you all be willing to brainstorm together? [*She then would check for agreement or comments and then, if appropriate, move on to say*]... My view of our strategy is that we have limited resources that we need to leverage. The best way to leverage them is by focusing on for-profit corporations who may be doing other things we oppose and where we can dovetail with other groups – unions, environmental groups, whatever. Now I'm open to influence on this view. How do others see it?

This
and D
open c
Miriam
other v
the con
Giv
before
toward
their c
try sor

Dana
conflic

Dana c
invite
approa

I fee
us to
other
patte
stym
and
other
we ar
the r
we n
the o
our h
a try

This
interve
the con
Thoug
obvius
having
helps t

We sta
reflecti
research
describ
itself, e
specific
ways to
casewr
uninten
pattern
in a sp
line re
experie
change
Realizi
be right
How

This approach does not explicitly address Anne and Dana's conflict. It does, however, encourage open discussion of all views and it invites the silent Miriam and Fred into the conversation. Bringing other views into a two-person argument often shifts the conversational ground in helpful ways.

Given that Dana and Anne have butted heads before and have a certain amount of animosity towards each other, there's a possibility that ignoring their conflict may not work. In that case, Dana could try something like the following.

Dana publicly reflects on her (and Anne's) conflict and asks for help

Dana could describe what she sees happening and invite others in the group to help her figure out a better approach:

I feel in a dilemma here. On the one hand, I really want us to target the organizations I think are right. On the other, when I push my view I think that contributes to a pattern that Anne and I repeat over and over that has stymied us in the past: I say my view, then she says hers, and we don't seem to have much of an impact on each other. I'm not getting my way, she's not getting hers and we are all just stuck. I think I'm open to influence on what the right strategy is. I believe if we worked together, we might actually come up with a better strategy than the ones Anne and I are individually carrying around in our heads. Would others of you be willing to give this a try?

This approach has two advantages. Like the first intervention, it invites the silent Miriam and Fred into the conversation. Secondly, it describes the deadlock. Though the reader may now think this dynamic obvious, to the actors mired in the situation, simply having someone describe what is happening often helps them see a way through it.

Conclusion

We started this chapter contending that off-line reflection is one step towards better on-line action research in complex social interactions. We have described the first step, the off-line reflection process itself, examining the frames, actions and results of a specific past situation and inventing specific new ways to act. The off-line reflection process helps the casewriter and his or her co-investigators see the unintended consequences of the casewriter's action patterns and what frames motivated those patterns in a specific setting. But what impact does this off-line reflection have on later practice? Of her experience with this case Dana says: 'This case has changed the way I feel about authority and credibility. Realizing that, as the boss, I didn't always have to be right was enormously reassuring!'

How can off-line reflection lead to skilled

reflective action on-line? First, it heightens on-line awareness of how people, including oneself, often produce consequences they do not want by falling into action patterns that backfire, driven by their own unrecognized frames. One of us now notices that:

When I find myself or someone else being judgemental, upset or frustrated, I now have the habit of asking myself, how am I (or s/he) framing this situation that would make me (him/her) feel this way? I then either try on different frames till I find one that might help me get a more productive view of the situation or start exploring what the other person's frame might be.

Secondly, it alerts one to one's own idiosyncratic responses and frames as one acts. One of us remarks that:

Surfacing my own (often subconscious) frames in cases where I found my own behaviour problematic has given me cues to pay attention to and an arsenal to draw on in real time. For example, when I notice that I am being extremely rational, I realize that this probably also means that I am angry. I can then look at some reasons for my anger based on the various frames that I have uncovered in off-line reflection. This level of awareness is often then enough to allow me to handle the situation in a much more effective way.

Finally, collaborative off-line reflection increases confidence in one's own ability to diagnose and transform frustrating situations on-line. Dana found that:

Rather than seeing such incidents [as she and Anne being stuck] as intractable and inevitable, I have a much clearer sense of action patterns I tend to fall into and what frames motivate those patterns. This helps me take a step back and try something different.

Our goal was to show how off-line reflection will help action researchers and others develop useful habits of attention and analysis, develop new ways to phrase interventions and give them an opportunity to see how inferences about their own and others' actions are formulated. Turning a clear eye on ways of acting that we often do not particularly admire takes courage, and we hope we've emboldened others to try it. Lastly, we hope to have conveyed the moment-to-moment excitement of this reflection process, as well as the big benefits for later action.

Notes

We would like to thank Diana McLain Smith for getting us started in action science/action inquiry and Bill Torbert for his role in keeping us going. John S. Carroll, Sandy Kendall, Charles Parry and Robert Putnam all provided feedback that improved this chapter.

1 The term 'learning pathways' (see Action Design, 1996) refers to a framework by which we can recraft our actions by examining connections and mismatches among

results we achieve, actions we take, and mental frames we hold.

2 These if-then rules illuminate people's 'theories-in-use' (Argyris and Schön, 1974), rules that guide their action. These are distinct from espoused theories of action, things they say they believe.

3 We would like to acknowledge Kenlin Wilder who skilfully orchestrated the first analysis of this case and introduced the three authors to the learning pathways grid.

References

- Action Design (1993) *Advanced Institute Training Materials*. Weston, MA: Action Design.
- Action Design, (1996) *Organizational Learning in Action: New Perspectives and Strategies*. Weston, MA: Action Design.
- Argyris, C. and Schön, D. (1974) *Theory in Practice: Increasing Professional Effectiveness*. San Francisco, CA: Jossey-Bass.
- Argyris, C., Putnam, R. and Smith, D.M. (1985) *Action Science: Concepts, Methods and Skills for Research and Intervention*. San Francisco, CA: Jossey-Bass.
- Fisher, D. and Torbert, W.R. (1995) *Personal and Organizational Transformations: the True Challenge of Continual Quality Improvement*. London: McGraw-Hill.
- Schön, D. (1987) *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*. San Francisco, CA: Jossey-Bass.
- Smith, D.M. (1996) 'Class lectures, January-May'. Carroll School of Management, Boston College doctoral seminar, *Consulting Theory and Practice*.
- Torbert, W.R. (1991) *The Power of Balance: Transforming Self, Society, and Scientific Inquiry*. Newbury Park, CA: Sage Publications.
- Watzlawick, P., Weakland, J.H. and Fisch, R. (1974) *Change: Principles of Problem Formation and Problem Resolution*. New York: Horton.