

Recipes and Reflective Learning:

"What Would Prevent You From Saying It That Way?"

Robert W. Putnam

Recently a colleague wrote an article advocating an action research approach to stress in the workplace. He sent it to several practitioners he knew for their comments. One called to suggest revising the article to "instruct the reader how to do this exactly." While he did not say this to his caller, he wondered, "Is she looking for a recipe that people can use flawlessly? Can she be that naive?"

Many of us who seek to engage people in significant learning experiences disparage formulas, rules, or recipes for action as superficial. Practicing a skill requires judgement rooted in intuitive familiarity with the phenomena (Mayo, 1945; Roethlisberger et al., 1954). Conduct is guided by a system of values and standards; piecemeal changes in discrete techniques have limited impact (Lewin & Grabbe, 1948). Rules do not apply themselves; for every rule there must be additional rules on how to use the rule, and so on ad infinitum (Homans, 1950). For each of these reasons, novices are likely to misuse rules and recipes; they have not developed the know-how to use them correctly.

Yet well-intentioned learners do search for rules and recipes, especially early in a learning process. As one participant said after a workshop on promoting organizational learning, "If you could only give us a list of the eight things to say, that would be really helpful in getting started." This person was not naive; he understood that a handful of recipes was not a substitute for genuine mastery. The difficulty is that a new theory of practice cannot be acquired whole. Yet if it is acquired piecemeal, the pieces are likely to be used in ways that violate the whole.

Hence educators seeking to engage people in reflective learning are understandably ambivalent about teaching recipes. How much more ambivalent, then, might we be toward recipes designed to help bring about reflective learning? On the one hand, such recipes hold forth the promise of helping us with that difficult and uncertain

task. On the other hand, they pose the spectre of reducing the art of engaging people in reflective learning to technique.

This chapter considers the role of recipes in learning a theory of practice for engaging members of social systems in reflective learning. The new theory of practice is that described by Argyris and Schön (1974, 1978) as model II. The chapter illustrates how recipes are used differently as a novice develops increasing mastery in using model II. It also suggests how such shifts may be brought about. By reflecting on the use or misuse of recipes in particular situations, the learner develops understanding and skill in acting more consistently with the theory of practice from which the recipes were drawn.

The learning task: Acquiring model II as theory-in-use

Argyris and Schön (1974, 1978) propose that human beings hold theories of action that determine all deliberate behavior. These theories are of two kinds: espoused theories that individuals can state explicitly, and theories-in-use that must be inferred from actual behavior. While espoused theories vary widely, research suggests that virtually everyone acts consistently with the theory-in-use that Argyris and Schön call model I (Argyris, 1982). Model I is a theory of unilateral control over others. Action is designed to maintain four underlying values: achieving purposes as defined by the actor, winning, suppressing negative feelings, and being rational. The primary strategies are those of unilateral advocacy, controlling inquiry, and protection of self and other. Consequences include defensive interpersonal and group relationships, limited learning, and decreased effectiveness.

Argyris and Schön have proposed an alternative theory-in-use, model II, for creating learning systems. Model II is a theory of joint control and inquiry. Its underlying values are valid information, free and informed choice, and internal commitment. The primary strategies are to combine advocacy and inquiry, to make reasoning explicit and confrontable, and to encourage others to do the same.

Consequences include an increasing capacity for learning not only to improve strategies for achieving existing goals (single-loop learning), but also to choose among competing norms, goals, and values (double-loop learning).

Most people readily espouse model II, yet are unable to act consistently with it (Argyris, 1982). Learning to design model II action, moreover, is not simply a matter of learning new techniques. It also requires change in underlying values and assumptions that structure one's theory of practice. Hence there is a paradox in the notion that recipes, seemingly superficial techniques, could play an important role in learning a new theory of practice such as model II.

Recipes and model II

The concept of recipes can be understood in both a broad and a narrow sense. The broad sense includes a cluster of meanings embedded in ordinary language, with perhaps the core meaning that of a list of ingredients and steps for combining them, as in a cookbook. By extension, a recipe is a formula or set of instructions for designing action.

In this chapter, recipe is used in a narrow sense to refer to a sentence fragment with a characteristic wording that can be used to design interventions for some class of situations. The recipe that will be the focus of attention is "what prevents you from (...)?" This is a move for engaging people in reflecting on their reasoning. Other recipes in the model II repertoire include "what have I said or done that leads you to believe (...)," and "what would lead you to (...)."

People who are learning model II frequently use recipes in this narrow sense. They seem to notice phrases used by faculty and to adopt them. The purpose of this chapter is to describe how learners use such recipes as they gain mastery and to suggest how the shifts that occur may be brought about.

Educational practices for helping people learn model II have not included explicit instruction in recipes (Argyris, 1982; Argyris, Putnam, & Smith, 1985; Schön, 1987). Indeed, learners are cautioned about using "gimmicks," or model II strategies (such as the above recipes) in ways inconsistent with model II values of valid information, free choice, and internal commitment. For example, if "what prevents you from (...)" were used with the subtext, "come on, dummy, can't you see you should (...)," it would be a form of covert advocacy designed to get the other to do what the speaker had decided should be done. The impact would more likely be defensiveness and polarization than mutual inquiry and reflective learning. This would be an instance of misusing a recipe, which is to say using it in ways inconsistent with the theory of practice from which the recipe was drawn.

To foreshadow the argument to be presented through the illustrations that follow: novices use recipes such as "what prevents you from (...)" as one-liners. They lack skill for following through when the other responds unexpectedly. With increasing experience, the learner develops a repertoire of moves for using the recipe to implement a broader strategy such as "help the client explore his reasoning." But this strategy may continue to be used within the system of values, assumptions, and frames characteristic of the learner's old theory of practice. Increasing mastery requires a second shift, as the learner becomes able to use the recipe and broader strategies consistently with the values and assumptions of the new theory of practice.

Illustrations: Recipes in action

The data to be presented in this chapter are from my work with an organization development (OD) consultant whom I will call Paul. Paul and several of his colleagues participated in a series of workshops with Chris Argyris and with me, seeking to learn model II. After about a year and a half I arranged to work more intensively with Paul to study how he was using what he had learned and to help him continue learning.

First episode: "I think that's what I'm supposed to say."

This episode illustrates an early stage of Paul's learning to use the "what prevents you" recipe. It is from the first meeting that he tape recorded for the intensive phase of our research.

Paul was meeting with a group of supervisors in the first of a series of meetings designed to help them learn leadership skills. One of the supervisors, Linda, said that she hoped to learn skills to help in situations like a recent incident in which someone had been fired. Paul asked what aspect of the situation she wanted to focus on, and then said:

PAUL: Is somebody going to use this as a learning incident?

LINDA: I'm not going to bring it up.

PAUL: What prevents you from using that as an incident?

LINDA: Nothing prevents me. I don't know, what do you want me to say?

PAUL: No, I'm trying to put together two things. I heard you say you want to learn how to deal with those situations. And then you said, right afterwards, you wouldn't bring it up.

LINDA: I don't think I want to talk about it now.

I have suggested that "what prevents you" is a characteristic wording, a verbal formula or recipe. To get some insight into what saying that sentence meant to Paul, let us shift from the action episode between Paul and Linda to the interview I had with Paul two days later in which I asked him to reflect on that episode.

We pick up the interview at the point I was reading the data given above:

BOB: And then you said, "What prevents you from using it as an incident?"

PAUL: I thought that was a pretty good thing. (laughs)

BOB: Say more about that.

PAUL: I was thinking to myself, "I think that's what I'm supposed to say. If Argyris was here, he'd say the same thing."

Consider what we discover from Paul's reflective talk. First, his "what prevents you" move was highly salient to him. He remarks on it; he evaluates it positively; and he laughs. Second, Paul describes the move as "what I'm supposed to say," and (or because?) Argyris "would say the same thing." It is almost as if it were Argyris talking, not Paul. This could be a cue to a particular kind of learning, or a particular stage of learning, that of identifying with a model. It is also possible that this aspect of "doing as Argyris would" was especially salient on this day, the first time Paul had tape recorded his work for the research.

Paul also felt some discomfort with imitating Argyris, as indicated by a comment he made later in our interview: "I said (to myself), I don't want to start sounding like a parrot or anything; I want to be able to know what I'm doing. It just sounded like, here I am using a new tool." The metaphor of a parrot suggests one who squawks verbal formulas without understanding their meaning. This lack of deeper understanding is the reason that recipes are so often misused.

Paul continued by describing his purposes in using the recipe:

PAUL: It's a way to get Linda to look at what to me was an apparent contradiction. And it was a way for me to get real information that I didn't have. I didn't understand why Linda would not use that, when she says she wants to learn how to deal with it. It still perplexes me.

This begins to identify the class of situations for which Paul sees "what prevents you" as appropriate. In particular, he understands himself to be getting Linda to see a contradiction and to be gathering information.

Although Paul felt a sense of success when he used the "what prevents you" move, he did not see the episode as a success story. In fact, when he first mentioned it as one we might discuss he said, "I seemed to get myself into trouble that I couldn't get myself out of." As he persevered in probing "what prevented" Linda from using the incident, she became increasingly upset. Commenting in our interview on what he was thinking during this part of the episode, Paul said:

PAUL: "I'm feeling stuck," is what I'm saying (to myself). "I don't know how to get myself out of this one a la Argyris," I say to myself. "I'm not handling it right. Am I too concerned about what I'm doing? Am I getting stuck in the technique of what am I going to do about helping her learn? And that may be dysfunctional, so let me shelve it for a while."

Paul's reflections suggest just the difficulties we would expect in the early stages of using a new technique. It feels unnatural to him; when he gets into difficulty, he doubts his ability to follow through consistently with the new approach; and his self-consciousness makes it even less likely he will be able to follow through competently.

I suggested in the introduction that if "what prevents you" were used as a kind of covert advocacy, in this case as a way of getting Linda to talk about the incident, then it would be inconsistent with the values guiding model II. Other data from our interview suggest that this was what Paul was doing. What is interesting in the present context is that Paul became aware of this while reflecting in our interview. The data thus illustrate how reflecting on the use of recipes may contribute to learning to use them more

consistently with the practice from which they are drawn. Consider the following two excerpts from the interview:

PAUL: I see now, if that's the way it went, maybe it wasn't inconsistent for her to say, "I want to learn from it, but I don't want to talk about it now." It (may have been) just a timing kind of thing. But I wasn't hearing that. I was sort of forcing it into an inconsistency kind of thing.

PAUL: I had already prejudged, "I'm sure she could have done something earlier to prevent the firing." That was my bias, okay?

Paul's retrospective critique of his action, I suggest, is important to his learning how to use the "what prevents you" move in the future in ways more consistent with model II values. In the interview he described himself as prejudging the issue, forcing his interpretation, and missing relevant meanings. These errors can be understood as created by the frame within which he used the new technique. It would seem that his reflections should increase his ability to recognize such errors as they occur in the future, and therefore to correct himself during an encounter.

Indeed, Paul was partially able to correct himself during this encounter by using another recipe, one that he had developed more skill in using. As Linda became more upset at being asked what prevented her from using the firing incident for her learning, finally she said:

LINDA: It could have probably come up if you didn't mention it.

PAUL: I don't understand. Why--what is it in what I say or do that makes you say, "I don't want to talk about it?"

"What is it in what I say or do" is another recipe from the model II repertoire. Unlike "what prevents you," which Paul was just beginning to use, this recipe was more integrated into Paul's practice. As he said in the interview:

PAUL: There's another one of the (recipes). That's okay, I felt comfortable with that one. I use that one a lot, now. It was more a part of me.

Paul's move seemed to help him and Linda recover from their growing impasse. Later in the meeting Linda volunteered to talk about the firing incident.

This episode has illustrated two features of how a novice uses recipes. First, attention focuses on the recipe itself, and there is little understanding of how it fits into a larger sequence. Thus the novice quickly gets stuck, and quite appropriately lacks confidence in his ability to follow through. Second, the recipe is used within the context of existing skill, even when the larger practice from which the recipe is drawn is inconsistent with that skill. In this case, the existing skill is Paul's ability to frame the situation as one in which Linda should talk about the firing incident, and his role is to get her to do so. Data from the interview show that Paul was able, on reflection, to become aware of this framing and to call it into question.

Second episode: "I was really into the meat of his unawareness."

Eight weeks after the episode with Linda, Paul was using some model II recipes in ways that showed both more flexibility and a deeper level of understanding. At the same time, he continued to be limited in his ability to build on the information he generated with his recipes.

Paul was talking with Mike, the operations manager at a manufacturing plant, about a problem with a subordinate. Stan had taken vacation days at a time that Mike had thought it crucial he be at work. Paul engaged Mike in roleplaying how he planned

to talk to Stan. He learned that Mike had "strongly advised" Stan not to take vacation days, but had "left it open" for Stan to evaluate the advice. When Stan chose to take his vacation, Mike felt he had "done me an injustice by not respecting my wishes."

In helping Mike reflect on how he planned to talk with Stan, Paul focused on what he believed was a mixed message: While nominally leaving it open for Stan to use his judgement, Mike then criticized Stan for not respecting his wishes. Hence Mike must have expected Stan to realize that it wasn't really open.

Over the next twenty minutes, Paul used recipes for inquiring into Mike's reasoning on at least five occasions. Here is the first:

PAUL: What would lead you to have every intention of having him here, and letting him know he had any leeway at all not to be here? What would lead you to do that?

"What would lead you" is a model II recipe that can be reciprocal to "what prevents you." Thus, when Mike said "I couldn't have been any more direct unless I just said, 'Stan, you are not to take those two days off,'" Paul asked, "Why didn't you say that?" And when Mike later volunteered, "I guess I prevented myself from saying, 'Be here,'" Paul probed further: "And why is that? What is it that prevented you from doing that?"

Let us consider Paul's reflections in our interview on his "what would lead you" intervention:

PAUL: That's pretty good, I think. At the time, I know I was really into the meat of his unawareness. And I knew we were at the nub of something useful.

If we compare Paul's work with Mike and his work with Linda, we see both similarities and differences. In each case Paul identified an inconsistency and used "what prevents" or its reciprocal, "what leads you," to address it. In each case he spontaneously mentioned his sense of success at using a model II recipe.

The two cases differ in what Paul understood himself to be doing by using the recipe. With Linda he was "getting her to look at an inconsistency" and gathering information. With Mike he was "getting into the meat of his unawareness." Paul was not only helping Mike to see an inconsistency, but also helping him to reflect on the reasoning that led him to create the inconsistency. Paul's work with Mike exemplified a major theme in Paul's learning at the time, that of "exploring the reasoning."

A second difference is what seems to be a lower degree of self-consciousness about "using a new tool" or "being a parrot." Data not included here show that Paul still had difficulty with getting himself stuck; but with Mike he found himself able to say that he was stuck and to find ways to resume the inquiry. These differences suggest that Paul felt more confidence in his ability to follow through after using a recipe.

A deeper parallel between Paul's work with Mike and his work with Linda has to do with his framing of the situation and his consequent inability to take advantage of meanings that would have enabled him to move on. Four of the five times that Paul probed Mike's reasoning for giving Stan leeway, Mike gave a version of the following reply: A manager in Stan's position should not have to be told such things; he should evaluate and decide himself. Each time Paul said, in effect, "But Mike, you weren't direct." Mike would then repeat that he was direct enough and that Stan should have understood. Hence the repetitive pattern that gave Paul the opportunity to make the same intervention five times.

It is as if Paul framed the situation as one in which he had to get Mike to acknowledge that he had not been direct with Stan. Hence Paul understood Mike's reply that Stan shouldn't have to be told as a defense against acknowledging his own

indirection. In our interview I proposed another way that Paul might have understood and built on Mike's response:

BOB: My reaction is, Mike is articulating an important managerial dilemma. Which is, he's right. Managers at some level of authority ought to have space of free movement and should not be ordered what to do. So that's one thing I'd want to say to Mike: "I agree."

PAUL: And I do agree with that.

BOB: Okay. He's in a dilemma, because he believes he knows better than Stan what Stan should do. And yet he believes he cannot tell him, because then he will be undercutting the responsibility he believes Stan should have. That's a dilemma I'd like to help Mike manage more effectively.

PAUL: So the strategy is to lift out the dilemma in Mike's situation. And maybe the way to change his strategy would be, first, to state his dilemma to Stan. That he does value allowing Stan freedom. But that he's conflicted, when Stan acts in a way that he thinks is abusing his freedom. And to illustrate that.

Paul actively assimilates my coaching by inferring a maxim: "The strategy is to lift out the dilemma in Mike's situation." Such maxims might well help Paul transfer his learning to new situations. Indeed we will see in the next episode that Paul was able to "lift out the dilemma in the client's situation" on his own.

But "lifting out the dilemma" is more than a strategy. It requires stepping out of the framing that led Paul to see Mike only as defensively denying his own responsibility. In order to see Mike as caught in a dilemma, Paul would have to take the stance that Schön has described as "giving him reason" (1983, p. 68). That is, he would have to

appreciate what is valid in Mike's reasoning while not losing sight of its limits. This is a sophisticated form of perspective-taking that is both difficult to achieve in the rush of immediate experience and of great importance to engaging people in reflective learning. Using model II recipes appropriately requires developing the ability to take such a stance.

Paul offered an additional explanation for his not having been able to lift out Mike's dilemma:

PAUL: I was so caught up in the technique, and only looking at one thing at a time here, that I didn't see the bigger picture of the notion of a dilemma, which I am aware of and know about, theoretically. But I'm caught up in the mechanics with Mike of looking at his reasoning and the hole in his thinking. In a very narrow way.

Paul's difficulty would seem to be characteristic of all forms of skill learning. Competent performance requires following up any particular move by noticing its impact, what Schön (1983) would call the backtalk of the situation, and shifting to any of several possible further moves. Someone who is learning will tend to "fixate" on the move that is at his or her learning edge. One way of understanding this tendency is that the move at the learning edge requires so much conscious attention, so much of the limited available cognitive capacity, that even well-learned moves may not be accessible. With further practice, a move that was once at the learning edge becomes more skillful, freeing up attention for noticing other aspects of the situation.

After our interview, Paul met again with Mike. Mike decided to talk with Stan about the dilemma he experienced. Mike later reported that the conversation had gone well, and thanked Paul for his help.

This episode has illustrated a higher level of skill in using recipes as part of a broader strategy. Attention focuses less on the recipe itself and more on the strategy of

inquiring into reasoning. While the ability to follow up the initial recipe and keep inquiry moving has increased, considerable attention must be devoted to the mechanics of implementing the strategy. Hence it is difficult to respond flexibly to the backtalk of the situation. The difficulty becomes acute when flexible response would require shifting from the familiar model I stance of "getting him to see what I know he should see" to appreciating the possible validity of his perspective. At this stage of learning, while action has become more skillful, it remains consistent with the values and assumptions of the old theory of practice.

Third episode: "Here's where I change."

Five weeks after the episode described above, Paul met with a plant manager, Greg, and his staff as they worked to downsize the organization. Greg's boss, acting on a financial model created by upper management, had told Greg that he had to reduce the size of his organization from 200 people to 150. Greg had told his staff to figure out how many people each would give up while still doing all the work the plant had committed to. The episode described here is from the meeting at which Greg and his staff were adding up the numbers.

Paul believed that this process for reducing the number of employees was a massive error, and one that had been made repeatedly by the organization. In Paul's view, the real problem was redundancies between the several plants in the Division. Meeting the target, Paul believed, would require working across the Division instead of within each plant, and certainly not within each functional unit of a plant.

The plant staff spent the first two hours of their meeting going through each person's numbers. When they added them up, the total was 190, down a bit from the present 200 but well short of the target 150. Greg declared that this number was unacceptable.

Over the next 45 minutes, Paul made four attempts to advocate his view that the target could only be met by redesigning work across the organization. His hope, he told me in our interview, was to persuade Greg "to stand up in the Division meeting" and advocate the need to work across the organization. Each time Greg objected that redesigning work was not feasible. Three times the group then resumed arguing about the numbers, making little progress. Greg did allow that he would defend an argument for as many as 165 people, but others on the staff did not believe they could do the work with so few.

Paul felt increasingly frustrated as he looked for new ways to convince people of what he believed had to be done. As he made his argument for the fourth time, Paul was able to shift the discussion by using two moves from the model II repertoire, including "what prevents you." What was especially significant in Paul's action was that he was able to follow up his use of the recipe by stepping out of his original frame and empathizing with Greg's dilemma. This led Paul to let go of his "convince them" strategy and instead to focus on helping Greg manage his dilemma.

The pivotal episode began when Carol, the finance manager, argued that it was impossible to meet Greg's target:

CAROL: (Makes calculations.) It is just not realistic to think we can do all we have to do with 165 people.

PAUL: An alternative is, yes we may be able to do it with those numbers. But, what it will take is going back and looking at how to reshape all of this work. And that's the kind of operation that I'm saying can't be done without a lot of hard work.

GREG: But I'm not disagreeing. I'm just trying to get you guys to realize the position that I'm in, while I agree with you, that's going to take

convincing of others. Because I can't be the only one to do that. (Other plants) need to do that, too.

PAUL: Sure. What would prevent you from going into the Division meeting and just saying it that way?

Let us turn to Paul's comments in our interview. As we reviewed the beginning of this episode he said, "Here I go again, getting my advocacy in there." When we came to his "what prevents you" intervention, here is what Paul said:

PAUL: Here's where I change. "Good intervention," I say to myself. I heard Greg saying something that he hasn't been saying so far. Now he's at least acknowledging that there are other parts of the system that are part of the problem. So maybe that's the timing of the intervention: (I see) some receptivity for this kind of (move).

As in previous weeks, Paul congratulated himself on his "what prevents you" move. His focus, however, is less on the wording than on making an intervention that changes his approach with Greg.

Let us dig further into how Paul saw the relevance of "what prevents you" in this situation. He suggests that the timing of the move was related to his perception that Greg was saying something that was new and that indicated receptivity. What is it that Greg now seemed more receptive to? The new meaning that Greg communicated was, in Paul's words, "other parts of the system are part of the problem." Recall that Paul's hope had been to get Greg to stand up in the Division meeting and advocate that downsizing required redesigning work across the organization. It seems likely, therefore, that what Paul sees Greg as now more receptive to is the idea of his making this argument in the Division meeting.

This interpretation suggests that "what prevents you" is used here in the service of Paul's original goal. It is, in other words, another way of convincing Greg to do what Paul believed he should do. Paul's initial follow-up supports this interpretation:

PAUL: What would prevent you from going into the Division meeting and just saying it that way?

GREG: What (my boss) is going to do is bang the table, yell, and say, "Guys, you were told to get to a number. We've got to get to that number. I don't care whether we reshape work or not. That's a Corporate number.

PAUL: And do you believe that (your boss's) reaction to you is a reasonable reaction?

GREG: It doesn't matter, at that point. See, the pressure of managing the numbers is being driven down by (high level executives).

Paul explained in our interview that his strategy in asking "is it reasonable" was, "If Greg understands that what his boss is demanding of him is unreasonable, then he could more easily hold a position there." Thus, the question was designed to get Greg to see that his boss's reaction was unreasonable, thereby furthering Paul's objective of getting Greg to "stand up."

What occurred next, however, was something new. Paul was struck by Greg's reply, "It doesn't matter." Paul was receptive enough to this window into Greg's perspective that he allowed himself to be surprised and to shift out of his effort to convince. Paul's shift became evident as the conversation continued:

CAROL: The numbers coming down from Corporate are not realistic. (Your boss) must be made to understand that he must make that argument at the Corporate level.

PAUL: I just want to confirm Greg's position. If I put myself in his shoes, I'm going to go into the Division meeting and from past experience I'm going to know, I can't push forward a reasonable argument, because my boss will act unreasonably. And Greg's likely to lose his head. So, understanding that position, I will still say, somebody has to push these reasonable arguments forward. Or this nonsense, which happens at this level and the level above it, will keep happening.

GREG: The breakthrough in the Division meeting will be if everybody comes in with the same kind of scenario, saying "we cannot do it."

Rather than join with Carol, Paul shifts to confirm the validity of Greg's dilemma. At the same time he does not back off from his view of what would be best for the organization. This move is similar to that which he was unable to make with Mike. Recall that it was during our interview that I helped him see the possibility of building on Mike's reply to "what prevents you" (or "what would lead you") by identifying Mike's dilemma while also working on the limits to how Mike was dealing with the dilemma. Here Paul is able to do it during the meeting. How did this occur?

In our interview Paul suggested that the critical shift had occurred when he heard Greg say "it doesn't matter" if his boss's reaction is unreasonable:

PAUL: I think this is where I began changing, and I eventually get to empathize with him.

Paul's comment is curious in that minutes before, commenting on his "what would prevent you" intervention, he had also said "here's where I change." It may be that both reflections are accurate, in the sense that Paul changed twice, in different ways. The first change, with "what prevents you," was one of strategy: instead of advocating, Paul

inquired into Greg's reasoning. The second change was deeper, as Paul began to empathize with Greg's position and therefore to question the strategy of "convince him." Paul continued:

PAUL: As soon as Greg says, "Well, it doesn't matter," I begin to realize, "He's right. He's going to get his head squashed in anyway." So that's where I become much more sensitive to his position. This is why I don't pursue (my original strategy).

Paul could have dismissed Greg's answer as resistance. Instead he recognized what was valid and built on it. What seems to have happened is that Paul's model II recipe, "what prevents you," even if originally used within his frame of "getting Greg to stand up," generated data and evoked a set of understandings that together catapulted Paul into another frame. From this alternative frame, Paul said, "I began to realize that I can't really convince people to do (what I thought best). I mean, there is a real dilemma here. I'm caught in a system, Greg is caught in a system, where his head can roll."

Paul acted on his new-found empathy by confirming Greg's dilemma. This move appears to have been helpful in maintaining a learning relationship with Greg and in generating more productive dialogue in the meeting. Greg suggested a "breakthrough" scenario, and the group discussed how likely it was. Over the next several weeks, Paul helped Greg and others develop a plan for restructuring the organization that was accepted by the Division.

This episode has illustrated how a learner may become able to do on his own what he earlier had seen only on reflection or with the help of a coach. The process is neither easy nor certain; in this case Paul pushed his point of view four times before he thought to use the "what prevents you" recipe to inquire into Greg's reasoning; and even

then he was not immediately able to take a stance of "giving Greg reason." But this time, he was able to interrupt his perseverance and reframe the situation.

Generalizing from what happened in this episode, it may be that misusing recipes is a necessary part of the learning process. Recall that in this instance what helped Paul see the relevance of "what prevents you" was that it offered a way to achieve his original goal of "getting Greg to stand up." That is, from the frame he was embedded in, it seemed like it might work. What then happened was that the recipe generated surprising data that led Paul to reframe the situation. It may also be that the recipe served as a mnemonic, reminding Paul of the model II stance of "giving reason," or perhaps reminding him of our earlier discussion about "lifting out the dilemma in Mike's situation."

Calling recipes into question

At this point in Paul's learning, he was beginning to question how he was using some of the model II recipes. During our discussion of his work with Greg he asked, "Am I inviting enough inquiry in my own advocacy? I tried to, but I don't know whether it was just pro forma." Paul was referring to the way he had advocated his view that work had to be redesigned across the organization. He had prefaced his argument by saying, "knock me down if I'm wrong;" and after explaining his view said, "I don't know if that makes sense to you, or whether I'm fouling it up." He had not paused for reactions, however, but continued to explain his argument.

While the wording of these phrases is not standardized in the same way as "what prevents you," the phrases are recipe-like. They are intended to encourage others to confront or inquire into Paul's reasoning. But Paul wondered, "maybe I'm using something, and not really allowing, not stating it in such a way that I'm inviting inquiry. Does that become one of the mechanisms that's not true, that might be a disguised way of not allowing inquiry. I'm not sure."

We see here that Paul was no longer feeling a sense of success simply because he had used a model II recipe. He was aware of the possibility that he might misuse recipes by using them inconsistently with the values and purposes characteristic of model II. He raised these concerns spontaneously in our interview and we worked to design ways for him to create genuine opportunities for inquiry.

Summary

This chapter has described three episodes from the work of a single practitioner to identify qualitative differences in how a novice uses recipes while developing increasing mastery. For convenience, let us refer to phases of learning corresponding to the three episodes.

In the first phase, the novice uses recipes as one-liners. Lacking expertise in the theory of practice from which the recipe was drawn, the novice may get himself in trouble that he can't get himself out of. Nevertheless he may feel a sense of success at having done what he is "supposed to do," what he believes an expert might have done. At the same time he may feel some discomfort or chagrin at imitating or "being a parrot."

The second phase is marked by a shift of attention to using the recipe to implement broader strategies from the new theory of practice. In this case, the new strategy was "exploring the reasoning:" Paul used the "what would lead you" recipe to "get at the meat of Mike's unawareness." While the focus thus shifts to more general concepts and sequences of moves, the learner may remain caught in a kind of tunnel vision, concentrating intently on the mechanics of implementing the new strategy. It is therefore difficult to respond flexibly to the backtalk of the situation. In particular, the data here show an inability to reframe the situation to "give reason" or empathize with the dilemmas of the other person.

In the third phase the learner becomes able, at least at times, to respond to surprising data by reframing the situation, stepping out of his original perspective to take

account of another. Also in the third phase, the learner may call into question his own use of recipes. Rather than feeling successful simply by using a recipe, he may consider whether that usage was pro forma or genuine.

The three phases thus show a progression from using recipes as one-liners, to using them as part of a new strategy but still within old frames, to using them more consistently with the new theory of practice.

How do such changes come about? The emphasis here has been on learning through reflecting on instances of using or misusing recipes. For example, while reflecting on his work with Linda, Paul described himself as having prejudged the issue, forced his interpretation, and missed relevant meanings. In other words, he became aware that the sequence of moves he organized around the "what prevents you" recipe was inconsistent with model II values and purposes. A later echo of this kind of critique occurred in phase three when Paul questioned whether his use of inquiry phrases was pro forma rather than genuine. Such reflections should increase the learner's ability to recognize such errors as they occur and therefore to correct them on-line, as Paul seems to have done in his work with Greg.

Reflective learning can be promoted by the kind of coaching dialogue illustrated in the second episode. In that instance the researcher/educator recognized a point at which Paul was stuck. His learning edge seemed to be designing inquiry into Mike's reasoning, and he was unable to take advantage of meanings in Mike's responses. Moving further required reframing the situation to "give Mike reason." The coach modeled such an approach, and Paul actively assimilated the coaching by formulating a maxim: "the strategy is to lift out the dilemma in Mike's situation." Five weeks later Paul was able to implement such a move with Greg.

Using recipes would seem to be a form of imitation or mimicry. As Schön (1987) argues, imitation is not passive; rather it requires "selective construction" of what is essential in the performance to be imitated (p. 108). The phases of learning described

here suggest a progression in what is taken to be essential. The novice takes the recipes themselves as essential and looks for opportunities to use them. Good results, however, often are not forthcoming. If the learner reflects on what is going wrong, another aspect of masterful performance may be taken as essential: the repertoire of moves for using the recipe as part of a broader strategy. And, when results still leave something to be desired, further reflection may lead to focusing on the frame within which the recipe and strategy are used. Developing the ability to frame situations differently is closely related to shifting toward the values and assumptions of the new theory of practice.

What is it about recipes that makes them useful? First, even as a one-line intervention, a good recipe may elicit useful data. When Paul said "what prevents you" to Greg, he was told how Greg thought his boss would act. Paul was able to confirm for himself that Greg's concerns had validity. So the one-liner elicited data that triggered Paul's reframing of his work with Greg.

Second, recipes are memorable phrases. In moments of stress it may help to have recipes that come quickly to the tongue. Moreover, they may serve as mnemonics in the sense of cuing a set of understandings that help the learner remember what he is supposed to be doing. A one-liner may be more than a one-liner; it may be a retrieval cue for a set of concepts, models, and ways of acting.

The vividness of recipes may also aid in focusing reflection. Paul seemed to remember episodes in which he had used a new recipe and to propose that we discuss them in our interviews.

These considerations give a different perspective on the use or misuse of recipes as gimmicks. It is true that learners often use recipes within the context of their taken-for-granted framing of the situation. I have suggested that this is necessary, as the learner must see the relevance of the recipe from a perspective within the current frame. Seeing opportunities to use the recipe enables the learner to gain experience, thereby becoming more skillful. It also provides occasions for reflecting on how the recipe was

used. With increasing skill, helped along by episodes of reflecting and by appropriate coaching, the learner may become able to jump from gimmick to genuine reframing, from superficial technique to action consistent with the deeper meaning of a practice.

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