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# Teaching Reflective Practice in the Action Science/Action Inquiry Tradition: Key Stages, Concepts and Practices

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This chapter describes an approach for teaching reflective practice in the action science/action inquiry tradition. We offer a theoretical background for our approach and then break it down into three key stages: (1) understanding the social construction of reality; (2) recognizing one's own contribution to that construction; and (3) taking action to reshape that construction. We articulate key concepts (e.g. the ladder of inference and competing commitments) and tools (e.g. the change immunity map and the learning pathways grid) for each stage. We end with suggestions for assignments that integrate learning across stages and concepts. In short, we offer a conceptually grounded set of concrete practices for teaching reflective practice.

Reflective practice, the process of examining one's own actions and learning about oneself, has long been part of many great transformational traditions, from Buddhism (Goldstein, 1983) to the Jesuit (Coghlan, 2004) spiritual exercises to Socrates and the transcendentalists' call to 'know thyself' (Emerson, 1903). In modern social science, reflective practice is also known as 'first-person research' (e.g. Marshall and Mead, 2005). Our particular

approach draws heavily on the definitions and disciplines of reflective practice as articulated by Argyris and Schön's Action Science and Reflective Practitioner work (Argyris and Schön, 1974; Argyris et al., 1985; Schön, 1983, 1987; Schön and Rein, 1994), and Torbert's action inquiry (Torbert, 1972, 1991; Torbert et al., 2004).

We draw upon this work to teach graduate students the theory and skills of reflective

practice. Steve Taylor teaches management students at Worcester Polytechnic Institute, a largely technically oriented population. Jenny Rudolph teaches healthcare management and policy students at Boston University and clinicians at the Center for Medical Simulation, Boston. Erica Foldy teaches public administration and policy students at the Wagner School of Public Service at New York University. Together we have been learning the theory and skills of reflective practice for over a decade and teaching those skills in various contexts for the majority of that time (e.g. Rudolph et al., 2001). Over time we have synthesized an approach that pulls together concepts and practices from a wide variety of scholars working in this tradition (e.g. Friedman, 2001/2006; Friedman and Lipshitz, 1992; Kegan and Lahey, 2001; Mazen, 2000; Reason, 1996; Senge et al., 1994; Stone et al., 2000). Our pedagogic goal is to enable students to enhance their personal and professional effectiveness by having greater self-knowledge along with a broader repertoire of cognitive frames, emotional reactions, and behaviors on which to draw. We focus on students' ability to reflect *on* action as a step towards being able to reflect *in* action.

Although each of us tailors this approach to our own teaching context, we have identified important commonalities: key stages in the learning of reflective practice, as well as supporting concepts and practice exercises. In this chapter, we draw on these commonalities to present one integrated approach to teaching reflective practice.

The chapter is organized as follows. We start by laying out the theoretical foundations for our pedagogical approach to teaching reflective practice. We then describe the concepts we use in building reflective practice skills in our students: helping them understand in a visceral way what it means for social reality to be constructed and how their own construction of reality contributes to many of the challenges they face; helping them discover how they are personally implicated in problems they have previously understood as exogenous to themselves; and offering prescriptive actions for intervening in these problems. We then

describe take-home assignments that build their skills in all these areas and help them take effective action based in reflective practice.

## THEORETICAL FOUNDATIONS

Our approach to teaching reflective practice is built on theoretical work broadly related to self-awareness directed at effective action. At the heart of the work is Argyris's (Argyris et al., 1985) Action Science which begins with the core idea that our frames (in a broad sense which includes mental models, schemas, etc.) lead us to act in certain ways and those actions produce outcomes. We also draw on Torbert's discipline of Action Inquiry which offers us the fundamental notion that by consciously paying attention to the alignment (or misalignment) among our intentions, strategies used to carry out these intentions, and our own actions, we can continue to develop psychologically as adults (Torbert, 1991; Torbert et al., 2004).

We also draw upon Quinn's (Quinn, 2000; Quinn et al., 2000) Advanced Change Theory to explain why reflective practice is critical for enhancing personal and professional effectiveness. This theory argues that change processes that resort to telling, forcing, and even participation of others without self-change have limited effectiveness. Quinn argues that without changing one's own behavior, significant, sustainable, and systemic change is unlikely. Advanced Change Theory follows the process of identifying the problem, identifying one's own role in that problem, changing one's own behavior, and then letting the system respond to the change. While there are structural limits to the effects of such actions, we believe it is a starting point and one that most students may overlook. Identifying one's own role in the problem is not easy and requires reflective practice skills.

Our approach is informed by the following concepts. First, we attempt to move students from 'Mystery-Mastery' or 'Model I' frames or governing values to 'Collaborative Inquiry' or 'Model II' governing values (Argyris and Schön, 1974; Torbert, 1972). In other words,

we are attempting to help them move from an approach that emphasizes keeping their own concerns and goals a mystery while unilaterally attempting to master the outside world to an approach that values transparent thinking and collaborative dialogue (Torbert, 1972). Second, we are attempting to create a context for learning that allows students to become increasingly 'self-authoring' in a process that allows them to 'have their beliefs' rather than 'their beliefs having them' (Kegan, 1982, 1994; Kegan and Lahey, 2001). This means that instead of being ruled by assumptions, or theories-in-use (Argyris et al., 1985) of which they are unaware, they become aware of these governing frames and decide whether they are in alignment with their goals.

The concepts and practices we propose are grounded in a pedagogical approach that Torbert (1991) calls 'Liberating Disciplines'. In this paradoxical approach to transformation, we exercise our available forms of power to unilaterally try and force the students to develop their own power which, over time, can free them of the unilateral power of others. We are transparent about this approach which makes our actions discussable, thereby making us vulnerable, even as we wield power. Some students are disconcerted by that vulnerability; upending conventional power relations leaves them feeling insecure. Others try to take advantage of the instructor's vulnerability as they attempt to assert their own power. A liberating disciplines approach means treating students' discomfort with the unusual deployment of power as real-time opportunities for teacher and student to learn. This is a very difficult challenge that requires the instructor to tolerate uncertainty as new class structures emerge. We use power openly to create a situation in which students can begin (indeed are required) to experiment with their own creative power to transform themselves, their teams and the class.

In this approach we help students develop the skills and awareness to see themselves as authors (rather than characters) of their work or personal lives. The paradox in this approach is that we force students to become self-authoring by obliging them to conform to the requirements of the class using grades and other tools

that come from our power as the instructor. We complement these forcing strategies with three supportive elements: building mutuality by allowing students to influence the course of the class (see course feedback memo below as an example); establishing oneself as ally in students developing their professional skills; and revealing one's own weaknesses (and strengths) as reflective practitioner (by 'telling stories on oneself', using examples that show one's own mistakes and breakthroughs in the process). Many teachers may already use 'liberating structures' intuitively, but we believe that being explicit (explaining the process to students mid-way through a semester, for example) and purposive about using them can enhance success.

### THREE KEY STAGES IN LEARNING REFLECTIVE PRACTICE

Based on these broad conceptual groundings we have broken down learning reflective practice into three core stages. The stages are (1) understanding the social construction of reality, (2) recognizing one's own contribution to that construction, and (3) taking action to reshape that construction. This breaks down the complex process of reflecting in action into simpler steps. Of course, reflective practice requires a constant intermingling of the three stages and even in teaching the separation is seldom neat and tidy; nonetheless, we find this a useful way to structure the material. Table 46.1 outlines the three stages with their key supporting concepts and practice exercises. The rest of this chapter fleshes out this table in greater detail.

### KEY CONCEPTS AND PRACTICES

#### ***Social Construction of Reality***

*Concept: Internal perceptions shape external reality.* A foundational concept for teaching reflective practice is the idea that people's perception of external reality is influenced by internal images and that these internal

**Table 46.1 Key stages, concepts and practices in learning reflective practice**

Stage	Supporting concepts	Practice
Understanding the social construction of reality	Internal perceptions shape external reality	Social construction of the physical room
	Ladder of inference	Uncritical inference test
	Unconscious filters/frames	The implicit association test
Recognizing one's own contribution to that construction	Competing commitments that cause stasis	Change immunity map
	Impact of frames on actions and outcomes	Two-column Case and Learning pathways grid
Taking action to reshape that construction	Types of speech	Two-column Case and Learning Pathways Grid Clean and dirty questions

images shape how they act. We want our managers-in-training to understand, both intellectually and viscerally, that, like all of us, they co-create the organizational reality in which they move. Our goal is to help students see how their internal frames, emotional reactions, and actions influence and co-create organizational structures and practices that they previously viewed as immutable, external facts (see Figure 46.1). Establishing a gut-level sense that their internal reality images shape their own action and the reality around them is the foundation that motivates and makes possible further reflective practice (Friedman, 2001; Friedman and Lipshitz., 1992).

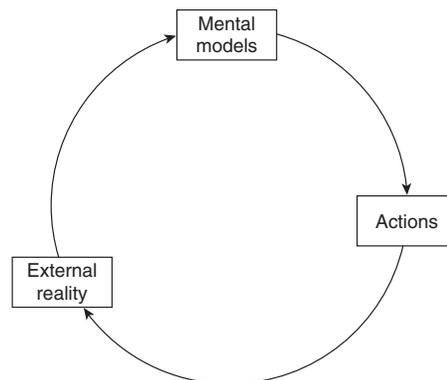
*Practice: Social construction of the physical classroom* (Gergen and Gergen, 2004). We begin this process experientially – by allowing students to experience how the frames provided by different professions cause people to view the same apparently objective reality differently. We break a class into groups, and give each subgroup a slip of paper (privately) that names a profession to which they belong during the exercise. The subgroup's task is to describe the room in which we are working from the standpoint of their profession. Professions might include teachers, fire inspectors, interior decorators, janitors and burglars. When the subgroups have completed their internal discussions they then share with the group as a whole (it works best to have the burglars report out last). Each group comes up with entirely different accounts of 'what is here'. Students generally

grasp, at a gut level, the idea that seemingly concrete realities are socially constructed.

*Concept: Ladder of inference.* A practical tool for working with the social construction of reality is the ladder of inference, which is a 'schematic representation of the steps by which human beings select from and read into interactions as they make sense of everyday life' (Argyris et al., 1985: 57) and is described extensively elsewhere (e.g. Senge et al., 1994).

We want students to understand that all of us instantaneously, unconsciously, and automatically select, name, and draw conclusions as we move up the ladder, reaching internally-derived conclusions we often then mistake for external reality. We also attempt to convey that: (1) categorizing and drawing inferences is absolutely necessary to allow us to act in the world – otherwise we face a world of undifferentiated 'buzzing, blooming confusion' (James, 1890: 462); (2) inference drawing is so powerful and potentially dangerous because it is easy to lose sight of the fact that we have drawn an inference; and (3) if people forget to treat their inferences as inferences, it undermines effective action (Kegan and Lahey, 2001).

*Practice related to ladder of inference: Haney's 'uncritical inference test'.* To help students do a 'slow motion' analysis of how they climb the ladder of inference, selecting and naming data and then linking it with previous belief systems to arrive at inferences about a given situation, we use an exercise based on William Haney's (1955) uncritical



**Figure: 46.1** *Simple model of social construction of reality for class use*

inference test in which students answer true/false questions about a four-sentence story. In debriefing the ‘test’ they quickly discover that their process of interpreting the story was informed by (or fraught with) numerous inferences about which they were totally unaware (such as the businessman and the owner are the same person).

*Concept: Unconscious filters/frames.* The ladder of inference and similar practices assume that, if we are self-reflective, we can identify the frames or ways of thinking that are affecting our behaviors. Some work suggests that it may help to work with a group, since others may be able to point out our ways of thinking that are so automatic we can’t identify them without help. But the assumption in both cases is that our mental models are lurking just below the surface. Once surfaced, we can decide if they are, in fact, one of our frames and then assess them

and decide whether they are helping us or hurting us.

However, we believe that some of our most powerful ways of thinking may simply not be available to us. Of course, a long history of work in psychology suggests that we have unconscious motives that drive behavior. More recently, researchers have sought ways of uncovering unconscious preferences or attitudes related to race, gender and other social identities. We draw on this research to illustrate to students that not all of their ways of thinking are necessarily subject to their own control.

*Practice: The implicit association test.* The implicit association test (IAT) is a web-based instrument that purports to measure automatic and, often, unconscious preferences and attitudes. Researchers have developed tests related to race, age, gender, disability and others. The test asks the test-taker to associate

*The Haney Uncritical Inference Test Story:* A businessman had just turned off the lights in the store when a man appeared and demanded money. The owner opened a cash register. The contents of the cash register were scooped up, and the man sped away. A member of the police force was notified promptly.  
*Sample of the 15 Statements Students Assess as (T/F)* A man appeared after the owner had turned off his store lights; the robber was a man; the man who appeared did not demand money; the man who opened the cash register was the owner; the store owner scooped up the contents of the cash register and ran away.

two sets of terms or images. One set of terms or images represents two groups of individuals: white and black Americans, women and men, old people and young people, etc. The other set of terms or images represents positive statements or images vs. negative statements or images. The rationale of the test is that we will take longer to associate positive statements with some groups than other groups, and take longer to associate negative statements with some groups than with other groups. For example, in one version of the test designed for people in the United States, pictures of people that are easily characterized as either white or African American are flashed on the screen at the same time as positive and negative words and images. The majority of people who take the test take a longer time to associate positive words with African Americans (and a shorter time to associate positive words with whites) and longer to associate negative words with whites (and shorter to associate negative words with blacks). The researchers behind this work argue that the length of time that it takes to make the association manifests preferences for some kind of people over others. They argue further that these preferences are often unconscious and inaccessible to the test-taker and that only an instrument like the IAT can document them. While this research is controversial, it has a long track record and has been vetted by a number of psychology journals (Banaji et al., 1993; Greenwald and Banaji, 1995).

We also use the IAT to add a social and political dimension to the often apolitical approaches that make up the core of the literature on reflective practice. Reflective practice approaches often make it seem like, with work, we can have full control over how we think. The IAT reminds us that we are shaped by racism, ethnocentrism, sexism and other embedded ways of thinking about each other and that we have less control than we think. When someone takes the IAT and, according to the test, has a strong preference for Europeans over Asians, or the opposite, that won't necessarily resonate for the test-taker. In fact, it may come as a rude shock. The IAT doesn't solve these issues, but it does spur

individuals and groups to think more about how much awareness and how much control we have over our own frames or mental models.

### ***The Self's Contribution to the Social Construction of Reality***

The next stage is for students to realize that they are implicated. That is, they need to see how our frames lead us to act in ways that contribute to a situation being problematic. This is often difficult: we tend to blame our problems on others rather than considering how we ourselves have contributed (Ross, 1977). Recognizing one's own contribution is a logical extension of the idea that our social reality is constructed: if we have participated in that construction then we have some responsibility for how it is constructed – and for changing it. From a systems point of view, we are part of the system and thus our own behavior is part of the explanation for how the system behaved (Senge, 1990).

*Concept: Competing commitments.* At this point in the process, we begin to encourage students to consider changing thoughts and behaviors. It is helpful, therefore, for students to understand why it is difficult to change. Kegan and Lahey (2001) developed the concept of 'competing commitments' as a replacement for the notion of resistance to change. They argue that change is difficult not because we are resistant for its own sake, but because we have very good reasons to avoid change – just as we do to pursue it. In fact, when change is difficult, it is the result of competing commitments which pull us in opposite directions. Only by surfacing these competing commitments do we surface our internal conflict. For example, powerful desires to stay safe can be in dynamic tension with desires to try new things. Once made explicit, we can develop experiments that resolve the conflict in a way that feels truly integral rather than imposed. Exploring our competing commitments is one way to explore how we contribute to outcomes we may or may not want.

Complaint	Commitment	Doing/Not doing	Competing commitment	Big assumption
'Walking on eggshells' around my sister.	A real, open and honest relationship between two caring people.	Suppress true feelings.	I am committed to not fighting with my sister.	If I share my true feelings with my sister, we will get in a big fight and I will lose the relationship.

**Figure 46.2** *'Walking on Eggshells': Change immunity map*

*Practice: The Change Immunity Map.* To help students uncover their own competing commitments, we use Kegan and Lahey's (2001) change immunity map. This map starts with students' complaints and thus provides an easy way in. It moves from complaints to the commitments underneath the complaint, then onto what the student is doing or not doing that prevents the commitment from being fully realized. It is here that the students really start to see how they are implicated. In the example in Figure 46.2, one student analyzes his relationship with his sister, beginning with his complaint that he felt he was constantly walking on eggshells around her. The process took him through unfolding realizations which ultimately revealed his 'big assumption' – that he was scared of losing this relationship. The change immunity map offers a view of how the students' own competing commitments and internal protective routines lead to the very outcomes that they complain about, thus implicating themselves. The big assumption suggests a potential point of leverage, a problematic frame for the student to address.

*Concept: Impact of frames on action and outcomes.* We use the generic term 'frames' (Bolman and Deal, 2003) to denote the knowledge structures or 'mental template[s]' that individuals impose on an information environment to give it form or meaning' (Walsh, 1995; 281). There are myriad other terms for these internal filters such as schemas, mental models, or scripts. These frames determine how we understand the world and how we translate that understanding into action. For example, if I believe a

person I am dealing with is stupid I will act differently towards them than if I believe they are a genius. Taking action, based on these frames, will lead to particular outcomes. Identifying the causal chain of frames leading to actions which lead to outcomes offers a useful analytic map for understanding behavior (Argyris et al., 1985).

*Practice: Two-column case and the learning pathways grid.* We begin the practice of this concept by having each student write a short two-column case about an interpersonal interaction that turned out badly. The case includes a brief description of the context of the interaction, actual or remembered dialogue from the encounter in the right-hand column, and a left-hand column that captures what the casewriter thought and felt, but did not say (Argyris et al., 1985; Senge et al., 1994). Simply writing the case often triggers learning – the casewriter can become uncomfortably aware of the kinds of language she used or how her thoughts seem oddly disconnected with what she is saying.

However, systematic analysis of the case generally provides the richest insights into how we contribute to problematic outcomes. We use the Learning Pathways Grid (developed by Action Design [www.actiondesign.com], see Rudolph et al., 2001/2006; Taylor, 2004, for examples). The LPG analysis makes very explicit the connections between the casewriter's frames and actions and the outcomes of the interaction. The analysis identifies the actual outcomes in the situation, the actual actions that were taken that led to the outcomes, and the salient actual frames that led to those actions (see Figure 46.3).

Actual frames	Actual actions	Actual outcomes
Desired frames	Desired actions	Desired outcomes

**Figure 46.3** *The learning pathways grid*

In addition to analyzing what actually happened, the LPG includes a space for suggesting different ways of framing and acting that might lead to better outcomes for the casewriter. Therefore, it acts as a bridge from the stage of Recognizing One's Own Contribution to the stage of Taking Action. Although the LPG analysis provides compelling evidence of how the casewriter is implicated in co-creating the problematic situation, students are often still too deep within their own frames to be able to see and enact different frames. Prescriptive frameworks provide off-the-shelf blueprints that create a starting place for how to act differently.

### ***Taking Action to Reshape our Reality***

Once students have internalized the social construction of reality and how they are implicated in that construction, the next step is to act on that knowledge. Even when we have recognized how our own frames lead to actions that produce undesirable results, we are often unable to act differently because those frames have been our reality for so long that we can't imagine alternatives. At this point it is useful to provide generic approaches to action that suggest new and different ways of acting that may produce more desirable results.

*Concept: Types of speech.* Once managers have a well-developed map of how their own frames and emotional reactions contribute to problems they face, our next move is to help them characterize and improve the actions they take, particularly the types of speech they use. We start by conveying that talk, aphorisms to the contrary (e.g. sticks and stones ...) notwithstanding, is action (Austin, 1962; Searle, 1969). Operating on the premise that social and organizational realities are socially

constructed, we argue that it is through talk that these realities are iteratively and continually re-enacted (Weick, 1995). To help students explore how different types of speech enact different social and organizational realities, we introduce Torbert's typology of four types of speech (Torbert et al., 2004). 'Advocating' asserts a point of view or judgment; 'illustration' offers data or anecdote to back up the advocacy; 'inquiry' is a question that helps people find out about information or other people's points of view. Finally, and most rarely, people use 'framing' to set out a charter and seek a public agreement for the direction of the current conversation or formal meeting.

*Practice: The two column case and the learning pathways grid.* We continue our work with the two-column case that we introduced in the last section. The Four Types of Speech provide a simple and useful framework for analyzing these cases. By reading through the dialogue in the right-hand column of the case and labeling the types of speech, students usually find that they use advocacy exclusively or heavily, with no inquiry, contributing to a pattern of dueling arguments with little inquiry and low levels of interpersonal influence and learning on both sides. Students then experiment with new ways of talking to improve their problem-solving ability by, for example, adding the simple (but not easy to execute) move of pairing advocacy and inquiry in their interactions. They can do this first by writing out sample advocacy-inquiry statements and then by redoing the problematic conversation in a role play.

*Practice: Clean and dirty questions.* To strengthen students' ability to pair advocacy and inquiry, we ask students to practice moving from a 'dirty' question to a 'clean' advocacy paired with an inquiry. A 'dirty' question is a term developed by Schön to denote questions that have judgments or solutions embedded in them. An example is 'Wouldn't it be better to finish that marketing report early?' The exercise is detailed in the following box.

*Exercise* : To practice this skill, we form students into groups of four to six. Two people will interact as role play partners; others will observe and consult to the roleplayer in the pair. Each person picks a problem or mistake made by someone else (outside the group) that annoyed or upset them. The first role player in the group very briefly (1 minute) describes the situation. Then interacting with his roleplay partner, he states the feelings and judgment about the situation as a 'filthy' question or statement. This statement usually berates or exhorts. For example, 'I can't believe you're still tinkering with that marketing report. Everyone else is going to get their ideas in ahead of us! What are you thinking?!' Using clues from this 'filthy' question, the roleplayer then reflects with his partner and group about what thoughts, feelings, or identity issues underlie this filthy intervention. Using this input, the roleplayer attempts to put some of these feelings and judgment into the advocacy and then pairs it with an inquiry to find out what is going on with the other person. For example, 'I'm frustrated that you're still working on that report. Can you help me understand why you think the report needs more work?' The roleplayer then checks with his roleplay partner about how the statement made the partner feel. Using this input and ideas from others in the group, the roleplayer makes further improvements if needed. Students then switch their roles in the pair.

### ***Bringing it All Together: Assignments for Building Reflective Practice Skills***

At this point, we have developed a number of different theoretical concepts. We have also described how we use in-class exercises and discussion to allow students to engage those concepts, making them more concrete and connecting them to their own life experiences. We also use two take-home assignments that require students to integrate a number of these concepts into one project. We describe each here.

*Course feedback memo.* The course feedback assignment requires students to practice giving feedback, a key life skill. The assignment asks students to write a three-page memo to their professor, highlighting what is useful and what could be changed about the course. Not only does it help us get information on how students are experiencing the course, it also provides a real-life exercise in giving feedback, rather than using made-up scenarios as is often done in these circumstances. Giving feedback is difficult precisely because there is generally a relationship between feedback-giver and

feedback-receiver and both parties can be concerned about harming that relationship. When that relationship is completely hypothetical, as with made-up scenarios, some of the challenge is lost.

In preparation for writing the memo, students read several chapters of *How the Way We Talk Can Change the Way We Work* (Kegan and Lahey, 2001) and all of *Difficult Conversations* (Stone et al., 2000). The assignment instructs students to give feedback, drawing on those two sources for guidelines. The assignment is peer graded, given the potential for conflict of interest. Students bring two hard copies to class. They exchange one copy with another student; each grades the other's paper. We take the second copy and make comments and hand them back, but do not grade them.

On the day the assignment is due, we also practice verbal feedback, based on what they've written in their papers. They gather in groups of four or five to decide on several points they wish to raise with their professor. (We leave the room for this discussion so they won't feel inhibited by our presence.) On our return, we meet with one group at a time, while the whole class watches. We also ask for a second group to act as

observers so that they can provide suggestions on giving feedback to the first group that is speaking directly to the professor. We try to meet with each group and give each group a chance to be the observer group as well.

This exercise is meant not only to give practice in giving feedback, but also to model openness to feedback and a willingness to be vulnerable, in order to learn. One of the predominant messages of our teaching is that we only learn by such openness and vulnerability; if, as the professor, we do not model those qualities, then the force of the message will be undermined if not totally erased.

*Personal inquiry projects.* At the heart of action research is cycles of analysis, action based on that analysis, and further analysis (Reason and Bradbury, 2001/2006). This cycle can be embodied in a personal inquiry project assignment. The assignment includes (1) a description of a situation where they believe their own frames/assumptions about the world may be problematic; (2) an analysis of the situation that shows how their own frames/assumptions lead them to act in specific ways that contribute to causing the problem (this analysis should produce a testable hypothesis about the situation); (3) a plan of action to test their hypothesis including what results they might expect and how they will know if their test has been successful or not; (4) the results of their test in the form of concrete data, such as dialogue presented in a two-column format; and (5) analysis of the results of their experiment.

Although the personal inquiry projects vary tremendously, here is one example. A student has repeated difficult interactions with his sister in which he offers her advice on her job search and they end up having an argument. He writes a two-column case of one of the interactions. He then analyzes the two-column case using the ladder of inference and the Learning Pathways Grid with the help of his inquiry group. The analysis provides the insight that when he is in a position to offer someone advice in order to try and get them to change their behavior, he assumes that rational data is

all that is needed to convince people, that people are predisposed to not take his advice, and that people don't mind him giving them advice. This leads him to use accusatory language to try and indict the person with data and, when that doesn't work, he becomes frustrated and attacks them with sarcasm, which leads to the arguments and tension that are problematic.

He then tests this insight in a series of experiments (see Schön, 1983, for an excellent discussion of ways of experimenting). First he asks an assortment of people (that he often has this dynamic with) what they are looking for in someone who is giving them advice. He finds that his focus on rational data that is intended to get people to listen to him makes him appear arrogant or condescending and thus leads people to not listen to him. He also discovers that people are not predisposed to not listen to him but that they are not always interested in hearing his advice – thus all three of his primary frames are wrong. He then goes on to experiment with enacting different frames, such as first asking his sister whether she wants his advice or not, and generally avoids the tension and arguments. Thus he has managed to look at his own behavior, see how he is implicated in the problematic situation, test his own frames, and finally act differently in the situation, which in this case (and in most cases, but not all) produced vastly better results.

## CONCLUSION

This chapter presents one approach to teaching reflective practice, building on well-established theoretical foundations. The approach is based on three stages in the learning process: understanding the social construction of reality, recognizing the self's contribution to that construction, and taking action to shape that construction. We then suggest specific concepts and practices associated with each stage.

While we do see the three stages as sequential, with each stage building on the previous one, we do not argue that the teaching design should strictly follow what we

outline here. Each of the different stages and concepts can be taught on its own; indeed many of the practices can also stand on their own, depending on the course context and what the instructor hopes to teach. Some courses, like those in leadership, consulting or developing management skills, could incorporate the full succession. However, the topics can also be interspersed in courses on negotiation, human resources, organizational behavior, business and society, and the like.

Regardless of how the concepts are introduced, we do believe that the concepts are best reinforced through a consistent and transparent pedagogy. By consistency, we mean that we try to model the sort of reflective practice that we are trying to teach in the class. This can manifest in many different ways: acknowledging our own frames – and their implications – related to the lesson material; explicitly pairing advocacy and inquiry in class discussion; a willingness to change aspects of the course that aren't working for students. By transparency we mean being explicit about our own practice as much as possible, especially when it can connect to the subject matter. For example, teachers make many choices that are similar to the kinds of choices or decisions that managers have to make. Grading is a form of performance appraisal. We make our grading style transparent, explain why we grade the way we do, connect that with how managers assess performance, and suggest that they, as managers, will face similar issues. We allow them time to think about how they might handle those situations, given their experience in this class and in other classes. We are also explicit about our use of positional power, late in the class explaining how we have used our position as instructors to 'force' them to develop as reflective practitioners. We then draw parallels to choices they can make as peers, managers, and subordinates.

We see this chapter as an orientation to teaching the fundamentals of reflective practice. It does not cover a number of other more complex topics in reflective practice that

we also teach, if we have the time. There are also other theoretical approaches to reflective practice. For example, psychoanalytic approaches have also been very influential in the fields of management and organizational behavior (e.g. Berg and Smith, 1985).

Finally, we want to acknowledge the challenges of this kind of teaching. Because it does not conform to the 'sage on the stage' archetype of teaching, some students are wary of it, mistaking the professor's acknowledgment of multiple perspectives for insecurity or lack of knowledge on the professor's part. With undergraduate and master's students, we sometimes find it useful to lead off with a style of teaching slightly more in sync with the 'sage on the stage' approach and gradually move to a more mutuality-enhancing 'guide on the side' approach once we have developed credibility as content experts. We then, eventually, make the topic of how they assess and evaluate knowledge and competence in authority figures and others part of the class dialogue.

We have found that this kind of teaching not only enhances our students' learning, but our own. Certainly, teaching reflective practice keeps us out of teaching ruts: it is never routine because it is never the same. It means being exquisitely attentive in the moment to students and the class dynamics – and the effect those dynamics are having on us. We are aware of our own fallibility and our capacity to fall into many of the traps that we explicate for our students. We do think we are relatively good at catching ourselves – and when we do, we try and offer that as a lesson to our students – and to ourselves.

## REFERENCES

- Argyris, C. and Schön, D. (1974) *Theory in Practice: Increasing Professional Effectiveness*. San Francisco, CA: Jossey-Bass.
- Argyris, C., Putnam, R. and Smith, D. (1985) *Action Science: Concepts, Methods, and Skills for Research and Intervention*. San Francisco, CA: Jossey-Bass.
- Austin, J. L. (1962) *How to Do Things with Words*. Oxford: Clarendon Press.

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- Banaji, M.R., Hardin, C. and Rothman, A.J. (1993) 'Implicit stereotyping in person judgment', *Journal of Personality and Social Psychology*, 65: 272–81.
- Berg, D.N. and Smith, K.K. (1985) *Exploring Clinical Methods for Social Research*. London: Sage.
- Bolman, L.G. and Deal, T.E. (2003) *Reframing Organizations: Artistry, Choice, and Leadership*. San Francisco, CA: Jossey-Bass.
- Coghlan, D. (2004) 'Seeking God in all things: Ignatian spirituality as action research', *The Way*, 43 (1): 1–14.
- Emerson, R.W. (1903) *Essays by Ralph Waldo Emerson*. London: Isbister.
- Friedman, V.J. (2001/2006) 'Action science: creating communities of inquiry in communities of practice', in P. Reason, and H. Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice*. London: Sage. pp. 1–14. Also published in P. Reason and H. Bradbury (eds) (2006), *Handbook of Action Research: Concise Paperback Edition*. London: Sage. pp. 131–43.
- Friedman, V. J. and Lipshitz, R. (1992) 'Teaching people to shift cognitive gears: overcoming resistance on the road to model II', *Journal of Applied Behavioral Science*, 28 (1): 118–137.
- Gergen, K.J. and Gergen, M. (2004) *Social Construction: Entering the Dialogue*. Chagrin Falls, OH: Taos Institute Publications.
- Goldstein, J. (1983) *The Experience of Insight: A Simple and Direct Guide to Buddhist Meditation*. Boulder, CO: Shambhala.
- Greenwald, A.G. and Banaji, M.R. (1995) 'Implicit social cognition: attitudes, self-esteem and stereotypes', *Psychological Review*, 102 (1): 4–27.
- Haney, W.V. (1955) *The Uncritical Inference Test*. San Francisco, CA: International Society for General Semantics.
- James, W. (1890) *The Principles of Psychology*. New York: Henry Holt & Co.
- Kegan, R. (1974) *In Over our Heads: The Mental Demands of Human Life*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1982) *The Evolving Self: Problems and Process in Human Development*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1994) *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press.
- Kegan, R., and Lahey, L.L. (2001) *How the Way We Talk Can Change the Way We Work*. San Francisco, CA: Jossey-Bass.
- Marshall, J. and Mead, G. (2005) 'Special Issue: Self-reflective practice and first-person action research', *Action Research*, 3 (4): 233–332.
- Mazen, A.M. (2000) 'Like water for chocolate: action theory for the OB class', *Journal of Management Education*, 24 (3): 304–21.
- Quinn, R.E. (2000) *Change the World: How Extraordinary People Can Accomplish Extraordinary Results*. San Francisco, CA: Jossey-Bass.
- Quinn, R.E., Spreitzer, G.M. and Brown, M.V. (2000) 'Changing others through changing ourselves: the transformation of human systems', *The Journal of Management Inquiry*, 9 (2): 147–164.
- Reason, P. 1996. *A Participative Inquiry Paradigm*. University of Bath.
- Reason, P., and Bradbury, H. (2001/2006) 'Introduction: Inquiry and participation in search of a world view worthy of human aspiration', in P. Reason, and H. Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice*. London: Sage. pp. 1–14.
- Ross, L. (1977) 'The intuitive psychologist and his shortcomings: distortions in the attribution process', in L. Berkowitz (ed.), *Advances in Experimental Social Psychology*, Vol. 10: London: Academic Press. pp. 173–240.
- Rudolph, J.W., Taylor, S.S. and Foldy, E.G. (2001/2006) 'Collaborative off-line reflection: a way to develop skill in action science and action inquiry', in P. Reason, and H. Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice*. London: Sage. pp. 405–12. Also published in P. Reason and H. Bradbury (2006) (eds), *Handbook of Action Research: Concise Paperback Edition*. London: Sage. pp. 307–14.
- Schön, D.A. (1983) *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Schön, D.A. (1987) *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass.
- Schön, D. and Rein, M. (1994) *Frame Reflection*. New York: Basic Books.
- Searle, J.R. (1969) *Speech Acts*. Cambridge: Cambridge University Press.
- Senge, P.M. (1990) *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Currency Doubleday.
- Senge, P.M., Roberts, C., Ross, R.B., Smith, B.J. and Kleiner, A. (1994) *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*. New York: Doubleday.
- Stone, D., Patton, B. and Heen, S. (2000) *Difficult Conversations: How to Discuss What Matters Most*. Penguin Books.
- Taylor, S.S. (2004) 'Presentational form in first person research: off-line collaborative reflection using art', *Action Research*, 2 (1): 71–88.

- Torbert, B. et al. (2004) *Action Inquiry: The Secret of Timely and Transforming Leadership*. San Francisco, CA: Berrett-Koehler.
- Torbert, W.R. (1972) *Learning from Experience: Toward Consciousness*. New York: Columbia University Press.
- Torbert, W.R. (1991) *The Power of Balance: Transforming Self, Society, and Scientific Inquiry*. Newbury Park, CA: Sage.
- Walsh, J.P. (1995) 'Managerial and organizational cognition: notes from a trip down memory lane', *Organization Science*, 6 (3): 280–321.
- Weick, K.E. (1995) *Sensemaking in Organizations*. Thousand Oaks, CA: Sage.