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## Preface to the Second Edition

Let's begin with the photo on the cover. Residents and visitors to New York may recognise the two buildings depicted. Both are part of the landscape of what became known after 11 September, 2001, as Ground Zero. The one in the background has the boxy windows that seemed to our co-author, the late Nancy Mohr, who took the photo, an apt image of worklife in many fields – education in particular. Most teachers, for example, work largely within cells, separated in time and space from all the colleagues on whom their own success as teachers ultimately depends. The cells in this case are viewed from inside the curvilinearly designed building next door. Called the Winter Garden, it is built of glass supported by gracefully arcing steel. Though one might have considered it the most vulnerable structure at the foot of its once-giant neighbors, the Twin Towers, the Winter Garden actually became the first structure following 9-11 to be restored and to reopen. Nancy's photo celebrates this reopening. In the context of its service as book cover, the photo also captures the underlying power of protocol. A close reading makes the point. The photo is comprised of two intersecting images. In the foreground, strength supports transparency. There is nothing stronger than protocol when it comes to undergirding human interactions, but the strength is in the service of expression and discovery. Our New York University colleague Alex Galloway (2004), in his book about the architecture of the Internet and other distributed networks, identifies the same paradox. "The contradiction at the heart of protocol," he writes, referring to protocols like the HTML language that supports the World Wide Web, "is that it has to standardize in order to liberate" (p. 95). This is exactly like the protocols that concern us in this book: They constrain participation in order to heighten it.

But to what end? Here Nancy's other image becomes salient. The curvilinear trumps the cellular. The curving steel and all that glass seem not just counterpoint to the stony boxes next door, but provocation. They suggest a different way of working. So it is with our protocols. They are all artifice and call attention to the fact. But they do so not to set themselves apart from ordinary activity as in a game, but to provoke its reconstruction. What if ordinary activity were more like the artificial activity of a protocol? What

if people stopped to listen to other people's takes on the important problems at hand? What if problems were unpeeled layer by layer? What if we examined success as closely as we do failure? What if we took time to read student work at least as closely as we read the cover of this book? What if everyone's voice were heard, everyone's perspective valued? What if lots of people were as skilful in facilitating genuine conversation as so many now are at avoiding it, suppressing it, or smothering it with self-centred talk? These are the questions that many protocol participants come to ask, and that readers of our book have shared with us.

Ah, another book about process, when what educators really need is to focus on product! We reject the implication. We think that product worth producing begins with thoughtful process. Teaching is first of all process. Leadership is, too. They both deal in content, of course, and they aim to produce. However, there is no way for teachers to teach all their children well and leave none of them behind without taking time together to talk about the children and their work. There is no way to solve a complex problem without listening to the perspectives on the problem of all those immersed in it. There is no way to gain the full value of outside expertise without subjecting it to dialogical encounters with internal expertise. And there is no way to find the creative solutions to the many educational problems at hand without cultivating and protecting diversity of viewpoints. This is particularly true at a time when the 'constitution' of education as we knew it through much of the 20th century seems to be coming undone. How do teaching and learning happen? How are educational institutions designed and governed? What expectations do we hold concerning their productivity? The answers to these questions have recently changed in important and sometimes dramatic ways. The result is turbulence. The power of protocol amid turbulence is that it can assist discovery and creativity. Eric Trist and Hugh Murray (1997) explain how:

Turbulence cannot be managed by top-down hierarchies of the kind exhibited in bureaucratic forms of organization. These are variety-reducing, so that there is not enough internal variety to manage the increase in external variety [Ashby, 1960]. Needed are organizational forms that are variety-increasing. These are inherently participative and require a substantial degree of democratization in organizational life. (p. 32)

We like this phrase – *variety-increasing organisational forms*. It seems to apply to all the protocols described in this book. They, too, are inher-

ently participative. And they not only require – or we would say *foster* – a substantial degree of democratisation, they also insist on a certain quality of democratisation – one that prizes diversity, universal participation, and wide cultivation of what we call *facilitative leadership*. The latter is democracy's lubricant.



We began the first edition of *The Power of Protocols* by recounting the debut of what is called the Tuning Protocol in 1991. It was the first time the word *protocol* was used in quite the way we use it throughout this book. However, it was hardly the first time that a group deliberately constrained participation in order to heighten it. That is as old as schooling, as old as democracy. Educators from five urban high schools had gathered for a meeting in Boston. Their schools had been funded by the IBM Corporation to devise systems for graduating students on the basis of student exhibitions. The idea was to 'plan backward' from a vision of what they wanted all their graduates to know and be able to do, rethinking all their systems accordingly (McDonald, 1996; McDonald, Barton, Smith, Turner & Finney, 1993). Participants also included a couple of high school students, executives from IBM, and staff from the Coalition of Essential Schools. The latter had organised the meeting with three purposes in mind: to introduce the educators to one another (the schools were in different regions of the country), to offer IBM an early progress report on the work it had funded, and to engage in what the organisers called 'tuning'. The metaphor sometimes gets a musical interpretation (as in *tuning up* the instruments) and sometimes an electromagnetic one (as in *tuning to* a different frequency. Forgive the now anachronistic image of working a dial to get just the right sound). Drawing on both meanings, the organisers hoped that educators might gain new sources of insight and energy for their work by sharing honest accounts of it with one another, by giving and receiving honest feedback, and by coming to appreciate a different perspective on their joint concerns.

The organisers knew that educators are not used to tuning, and that accomplishing it at this meeting would be particularly challenging given the meeting's other two purposes. If the participants did not even know one another – never mind trust one another – and if they were to be reporting progress to still other strangers who had given them a lot of

money to make progress, wouldn't they just put on a show? Moreover, might this rare opportunity to hear about early work provoke the funders to be more critical than they ought to be at such a point? The meeting presented much possibility of social danger. To save the tuning from the danger, the organisers designed a *protocol* to guide the meeting. Why they chose this word to identify their design is explained more fully in Chapter 1. Here we say only that the protocol structured the conversation that day so that everybody got time to speak and everybody got time to listen; so that presenting, examining, questioning and responding were kept in balance; and so that the meeting proved optimally honest and respectful.

Still, the meeting got off to a rocky start – predictably so, given the participants' inexperience with tuning and with protocols. Initially some of the school people resisted the facilitator's efforts to limit the presentations and to structure the conversation. They had prepared for the meeting with a show in mind – one aimed at building the funder's confidence in their capacity to deliver the student benefits they promised. Naturally, they wanted simply to do what they thought they had come to do.

However, the facilitator insisted on the protocol, although even he buckled at one point under the pressure to put it aside. His slip proved fortuitous. It occurred when he called on one of the students to answer a question – in plain violation of the protocol's rules about when presenters may speak. His intentions were good: One of the funders had asked a question about the student's own experience, and the facilitator thought that having the chance to answer the question immediately might make the student feel more comfortable. Before he could answer the question, however, a teacher interrupted: "The students are expecting the same format as the rest of us. They know that hard questions are going to be coming at them, but they want the same time to think about their answers that the rest of us get." His statement helped everyone present understand instantly the value of a protocol. The result was that the resistance abated.

Since that day in Boston, use of the Tuning Protocol has spread (Allen, 1998; Blythe, Allen & Powell, 1999). Its use has also become linked with a number of other meeting tools to which the word *protocol* is often attached (McDonald, 2001, 2002). We describe many of these in this book. Some involve tuning – particularly the ones that help educators study their students' work together or help them examine each other's practice. Others involve comparable levels of social danger because they challenge long-standing norms among educators to avoid exploring complex problems

or discussing controversial topics. But all of the protocols featured in the book have the premise that was made explicit in Boston: Whenever talk has important consequences, we deserve a chance to think through what we want to say, and an environment where what we choose to say can be heard and respected.

Since our book's first edition, we've learned about many new protocols, some of which we've added to this edition – seven new ones in total. To make room for them, we've also deleted a few. Thus it is important not to think of this book as an encyclopedic effort. As chroniclers of a highly diverse and widespread set of professional practices, the best we can do is to present some diverse types in sufficient detail, as we think we do here, and then invite our readers to continue diversifying.

Meanwhile, as the use of protocols continues to spread from conferences and workshops to everyday settings where colleagues meet to plan and work together and teachers and students meet to learn together, it becomes possible for all of us to imagine a new kind of educational setting – not cellular but collaborative, not isolated but networked, not opaque but transparent and accountable. Readers may use this book merely as a handbook of protocols, a collection of step-by-step accounts of how to use them to study together, work on problems of practice, and explore their students' work. We hope, however, that many will also use it to join with colleagues to help imagine and create this other kind of educational setting.

## ORGANISATION OF THE BOOK

Chapter 1 explains the basic ideas underlying all the rest of the book, beginning with an argument for why we educators should educate ourselves. It also makes the case for exploring student work as a crucial element in the effort to educate ourselves. Then, at greater length, it explains what protocols are and why we need them, and finally how the facilitative leadership they foster can help build within our institutions the new kind of educational setting we advocate.

Chapter 2 examines the work of the *facilitative leader*. We apply this term, borrowed from Roger Schwarz (1994), to all educators who have occasion to lead their colleagues in one of the protocols we describe – whether in the context of a simple team meeting, a multiday retreat, or any format in between.

As we suggested above, facilitative leadership is the lubricant of democracy in any setting or field, from nation to community to organisation. Indeed, its presence signifies that what is called democratic in the setting or field is not some old rusty idol, but a living influence in the form of people at hand who know how to call a meeting to order and run it, take thoughtful notes and use them to good and democratic effect, respect dissonance and surface it, press thoughtfully for consensus and negotiate its achievement, keep others on task and civil, use tension productively, mitigate personal animus, and so on. Moving the emphasis of the book from rationale to practical guidance, this chapter also offers advice and step-by-step activities for facilitators of protocols. Finally, we introduce here the format used to present all the book's protocols – beginning with some introductory material, proceeding to a note on purpose and practical details, moving through a careful description of the steps of the protocol, providing one or more facilitation tips, and finishing with some variants to consider.

Chapter 3 focuses on the crucial role of outside sources in efforts to educate ourselves and others. It presents protocols for use in exploring texts, and drawing advice from experts. These enable bifocal attention on both the sources of new insight and the issues the insight illuminates.

Chapter 4 includes protocols commonly used for problem-solving, planning, and other kinds of learning on the job, or just learning in general. These differ from the ones presented in Chapter 3 in that they search for insight among participants' own experiences.

Chapter 5 focuses on what is one of the most common uses of protocols today, namely the exploration of student work. It presents protocols for many different kinds and degrees of exploration, including ones aimed at deeper understanding of particular students, greater awareness of a curriculum's impact, and sharper awareness of the standards guiding teaching and learning.

It is important to note, however, that all the protocols we present in this book can be used for purposes other than the ones our chapter groupings suggest. A shift of purpose takes only the right circumstances, some modification, and a facilitator's imagination and skill. Moreover, a protocol useful one day in exploring a problem of practice might become useful on another day as the basis of a teacher's lesson plan. Indeed, our impression since the book's debut is that many educators buy it and read it especially for teaching ideas. They adapt nearly all the protocols to this use. In preparing this edition, we have kept this use in mind.



We encourage lots of cross-use, lots of improvisation and lots of adaptation. Other authors with such intentions might say that their book is ‘not a cookbook’. But we think of cookbooks differently, and the difference runs to the heart of what we mean by protocol. Nancy Mohr was a great cook – and indeed, this book was conceived while its other authors (and our editor) sat around her kitchen as she chopped vegetables. She was also a connoisseur and collector of cookbooks, and especially liked the ones that not only empower the cook with good designs and reliable procedures, but also provide an explicit or implicit invitation to play. She liked, for example, James Haller’s (1978) *The Blue Strawberry Cookbook: Cooking (Brilliantly) Without Recipes*. It proclaims – against all tradition – that pesto can be just as well made with any green, nut and cheese. She liked Judith Barrett and Norma Wasserman’s (1987) *Risotto*, which firmly asserts the tradition of risotto’s four distinct ‘movements’ – *soffrito*, *riso*, *brodo*, and *condimenti* – but encourages as much variation within them as Beethoven or Mozart managed to obtain within a different field. Nancy also liked Patricia Wells’s (2001) *The Paris Cookbook*, with the author’s “What I learned” notes on each recipe – as if inviting dialogue between authors and cooks – though she also appreciated the occasional firm guidance in such dialogue, like Wells’s advice on page 181: “This is one of those simplest dishes that must be followed to the letter.” We have a couple of such notes in our book, too – generally ones that Nancy insisted upon.

Because we encourage improvisation, but also because we know that many facilitators (like cooks) find it helpful to have at hand a quick at-a-glance guide to the steps of the protocols they facilitate, we have prepared abbreviated versions of all the protocols presented in this book (<http://www.tcpress.com/pdfs/mcdonaldprot.pdf>). Readers can download these abbreviated versions to their own computers, print them out as needed for their own use (and the use of other protocol participants as they like), and later customise them in any way for future use.

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# Acknowledgements

The use of protocols in the education of educators has roots in the efforts of at least two generations of scholars and practitioners who have attempted to bring to education insights from the fields of organisational development and human relations training. We think, for example, of the work of two scholar-teachers who provided us important counsel in the last years of their lives, Don Schön and Matt Miles. More recently, David Jacobson and Emily White have helped us connect our experience within the educational field to larger perspectives. White has helped us understand that the occasional reader or user of this book who refers to protocol-based group facilitation as ‘the work’ – as well as the occasional reader or user who may be put off by such a reference – are each in their own way associating protocols with a rich vein of effort beginning in the years after World War I to enhance the effectiveness of groups and organisations, and to expand participation within them. Organisations past and present that have fostered this effort include the Tavistock Institute in London, the National Training Laboratories in the United States and the worldwide Institute of Cultural Affairs. Individual theoretical contributors range from Kurt Lewin to Peter Senge.

Within education, we count as our theoretical guiding lights some people who rarely if at all have participated in protocol-based learning, though they have inspired it: Ted Sizer, Debbie Meier, Peter Elbow, Vito Perrone, James Gray, Elliot Aronson, Terry Deal and Lee Bolman. Some pioneers of protocol-based learning and teaching whose work we draw on include David Allen, Daniel Baron, Tina Blythe, Patricia Carini, Simon Clements, Anthony Conelli, Kathleen Cushman, Faith Dunne, Paula Evans, Helen Featherstone, Janet Gless, Ronni Mann, Ruth Mitchell, Ellen Moir, Vivian Orlen, Barbara Powell, Stephanie Robinson, Steve Seidel, Gene Thompson-Grove and Viv White.

We would also like to acknowledge those educators who offered contexts that gave rise to some of the protocols described in this book: John Mauriel and Jean King of the Bush Educational Leaders Program in Minnesota, Rosa Pietanza and Robert Miller of University Neighborhood High School in New York City, the teachers and school leaders who continue to hone

the Standards in Practice work of the Education Trust, the New Teacher Center mentors who work throughout the United States, and the teachers who work together worldwide in critical friends groups.

Still others' important contributions are, sadly, beyond our capacity to trace. That is because some protocols have attained the status of lore. Still, we have attempted to document the sources of protocols (formal and informal, published or not) wherever these sources can be traced. Scholarship and courtesy demand as much, but there is learning to be gained from such documentation, too. Below the surface of attribution, the reader can trace the influence of networks and institutions that encourage and support educators educating themselves in the ways we advocate. They include national organisations like the Coalition of Essential Schools, the National School Reform Faculty, the National Writing Project, the Annenberg Institute for School Reform at Brown University, Project Zero at the Harvard Graduate School of Education, the Education Trust, the Institute for Learning at the University of Pittsburgh and the New Teacher Center at the University of California at Santa Cruz. They also include many local organisations. As New Yorkers, we especially want to acknowledge the work of the Literacy Center at Lehman College, New Visions for Public Schools, the New York City Leadership Academy and the Horowitz Center for Teacher Development at New York University. But many other local organisations deserve mention. They stretch from coast to coast (from the Bay Area Coalition of Equitable Schools to the Southern Maine Partnership), with too many in between to list here. Ultimately, the aim of this book is to advance the work of such networks and institutions – nationally, regionally and locally.

Finally, with deep gratitude for the supportive contexts they have offered us as developers, explorers, describers and promoters of protocols, we wish to acknowledge the Department of Teaching and Learning at the Steinhardt School of Education, New York University; the New York City Department of Education; New York City Leadership Academy; and Teachers College Press.

## The Basic Ideas

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In some educational organisations, protocols may at first seem foolish, their artifice an unwarranted interference in ordinary business. The more dysfunctional this business, the stronger the negative reaction may be. For example, schools or universities mired in norms of private practice, and used to ignoring the actual impact of the practice on students' learning, may not take easily to learning with protocols. Encouraged to try them anyway, however, and pressed to see them all the way through, even reluctant participants may find something refreshing about protocols. Then, urged to reflect on the nature of this refreshment, the participants may find that the protocols help them imagine alternatives to ordinary habits of working together, learning and leading.

Thus emerges the possibility of new settings for education, ones that exhibit the characteristics of what Peter Senge (1990) calls a *learning organisation*. In this chapter, we describe four basic ideas concerning the continuing professional education of educators in and for such settings. These basic ideas underpin all the protocols presented in Chapters 2 through 5, and all our advice concerning their use.

### EDUCATING OURSELVES

The first basic idea is that we professional educators should take charge of our own learning. That is because only we can direct it toward managing the real problems of our work, and toward meeting our students' real needs. Because these problems and needs are vastly more complex than they typically appear to others, inside perspectives are crucial to understanding them (Lampert, 2001). To say that we ought to educate ourselves, therefore, means that professional development activities for educators that are designed and conducted without benefit of inside perspectives are not worth the time and money they cost. Worse, they often involve

a kind of de-skilling inasmuch as they discount or dismiss the subtleties of dealing with real complexity. On the other hand, saying that we need to educate ourselves does not mean that we should cut ourselves off from outside sources of learning. On the contrary, we desperately need what outside expertise can offer. It is just that we cannot effectively use it except in combination with our own intimate knowledge of practice.

It is important to note the plural in the phrase *educating ourselves*. The work it describes is necessarily collective. No educator works alone, although we seem to. Yes, we make lots of private moves, and our work demands an individual capacity for spontaneity, improvisation and good judgment. But all our efforts, for better or worse, are mediated by the efforts of our colleagues. What they do matters as much to the learning of our students and the running of our programs as what we do. Thus our colleagues' values, standards and methods are our business – as ours are their business – and the problems of practice are inescapably mutual ones. For this reason, we must give up our pervasive tendency to try to manage these problems alone.

Indeed, we may even fail to see what our actual problems of practice are unless we dare to inquire about them together. This is because so much of our knowledge of practice is tacit, and becomes subject to critique only when we reflect on it in the company of others (Schön, 1983). It is also because certain aspects of practice – as we explain below – cause us to overlook the problems that inhere in it; and it is our colleagues who are best situated to help us understand this limit on our ordinary perspective. Finally, it is because the identification and analysis of problems require certain organisational components that are often absent within educational institutions. These include norms for open and honest conversation; meeting habits that support inquiry, dialogue and reflection; opportunities for those immersed in particular work to take direct action to improve it; and facilitative leadership capable of encouraging participation, ensuring equity and building trust. The only way to ensure the presence of these things within our educational institutions is through collective work on the inside. No amount of external pressure can by itself manage the task, nor can any amount of solo effort.

Indeed, we think that in moments when external pressures are greatest – for example, in our current 'era of accountability', as it is often called – the presence of efforts to educate ourselves can make the difference between resistance and accommodation, or even failure and success. We

are mindful in this regard of the history of Japanese lesson study, or *jugyu kenkyuu*. In Japan, teachers (at least at the primary school level) collaborate with colleagues in the design of lesson plans, developing and refining them carefully over time. In their 1999 book based on an analysis of video data from the Third International Mathematics and Science Study (TIMSS), James Stigler and James Hiebert describe the steps of lesson study, and several American school reformers have since adapted these steps to the US context (DeCoker, 2002; Wantanabe, 2002).

We first heard about Japanese lesson study from Professor Manabu Sato of Tokyo University, who visited the United States frequently in the early 1990s just as the passion to devise new curriculum and learning standards was beginning to wax. In those days, new standards devised by states and subject-based professional associations were often promoted as a means of saving the American economy from the onslaught of Japanese competition. In a series of papers and talks in English, Professor Sato suggested, however, that standards by themselves would likely make little difference. The success of Japanese primary schools, he claimed, has much more to do with habits of collaborative professional development among Japanese teachers – often on a voluntary basis – than it does with the imposition and control of a national curriculum. Indeed, collaborative professional development functions in the Japanese context, he argued, are a crucial counterweight to strong bureaucratic controls (Sato, 1992). Nobuo K. Shimahara (2002) usefully suggests that Lesson Study is intimately associated with two other features of Japanese schooling: the role that teachers play in what he calls the ‘cooperative management’ of schools (p. 113), and also the work of independent and voluntary national teacher networks, which focus on the improvement of practice through sharing and critiquing.

### EXPLORING STUDENT WORK

One good way for us to educate ourselves is to pause periodically in our practice to become deliberate students of our students. This is the second basic idea underpinning this book. The point is to reach a different understanding of our students than the kind we’re used to, one deeper than what is required merely to keep our teaching and their learning in sync. But this demands a great shift of energy, both practical and organisational.

Instead of pressing for student work flow as we usually do, judging quickly the value of the flow's direction, we must on a regular basis suspend flow, capture images of the work interrupted, study the images calmly and deliberately, and explore together what they may mean.

Along with a broad alliance of teachers, school leaders, teacher educators and reform-minded educators with many other job titles, we often refer to this great shift of energy with the simple phrase "looking at student work" (Allen, 1998). Here, however, we acknowledge that the looking we advocate is simple in the deep and disciplined way that Thoreau's looking was simple at Walden Pond and Annie Dillard's at Tinker Creek. Simple but elemental. Simple but difficult.

We read students' work closely and collectively for two reasons. One is to learn more about the students' learning – to gain clues about their strengths and weaknesses, their misconceptions, their proximity or distance from a conceptual breakthrough, their progress with respect to some defined standard, or their unique ways of thinking and working. We also read students' work closely as a text that captures the efficacy of our own work. This text is where our moves as educators and their impact on students are most traceable (McDonald, 2001, 2002). It is where the strengths and weaknesses of our practice – individual and collective – become most apparent. Thus our efforts to explore student work *together* are crucial to our efforts to revise and improve the collective work of our educational institutions. For these reasons, however, looking at student work – particularly looking together at student work – can be threatening. This is why protocols are useful. They protect us from what we may perceive as social danger, even as they teach us habits we wish we already had.

## PROTOCOL-BASED LEARNING

The third basic idea underlying this book concerns our use of the word *protocol*. It may seem at first an odd fit with our purpose. In diplomacy, protocol governs who greets whom first when the President and Prime Minister meet, and other such matters. This usage was most on the minds of those who created the first Tuning Protocol in 1991. As we explained in the Preface, they were trying to ensure that a certain group of people might communicate with one another successfully and productively although they didn't know one another, were coming from two different cultures

(schools and IBM), had a lot at stake, and were at once dependent on and wary of one another.

But diplomacy was not the only association in play even then. The one that probably comes most to readers' minds today – namely the association with information technology – was present also. (After all, it was an IBM-sponsored event.) Protocol is what enables computers within distributed networks to 'talk' successfully with one another. Alex Galloway (2004) describes the function in an analogy:

To help understand the concept of computer protocols, consider the analogy of the highway system. Many different combinations of roads are available to a person driving from point A to point B. However, en route one is compelled to stop at red lights, stay between the white lines, follow a reasonably direct path, and so on. These conventional rules that govern the set of possible behavior patterns within a heterogeneous system are what computer scientists call protocol. Thus, protocol is a technique for achieving voluntary regulation within a contingent environment. (p. 7)

Meanwhile, the word is ubiquitous in other scientific domains also. Protocols are regimens that ensure faithful replication of an experiment or medical treatment; they tell the scientist or doctor to do this first, then that and so on. And in social science, they are the scripted questions that an interviewer covers, or the template for an observation.

But in the professional education of educators? One could argue that elaborate etiquette, communicative precision, faithful replication and scripts would prove counterproductive here. Don't we best learn from one another by just talking with one another? No, we claim. Sure, *just talking* can be enormously productive when it happens offline, so to speak. John Seeley Brown and others studying worklife inside the Xerox Corporation in the 1980s and early 1990s documented the learning power and productivity boost of work-focused but off-task conversations among repair mechanics hanging out together (Wenger, 1998). One of us studying the efforts to replicate a small secondary school found the same advantage among teachers having some beers together at a bar on a late Friday afternoon (McDonald, Klein, Riordan & Broun, 2003). But in formal settings, just talking can be counterproductive. Emily White (2006) points out, for example, that meetings called to address serious problems frequently fail because of underregulated talking. Often those leading the meetings talk too much, and often they let others talk too

much. Together the talkers choke off real listening, and the kind of distributed and beyond-your-comfort-zone learning that solving serious problems usually requires.

### Making Our Work Transparent

Educators in particular may need the focused conversation of protocols. The reason is an occupational hazard we face. Belief in the efficacy of our efforts is a principal tool of our trade. Even when our students seem resistant, it is partly our persistence in believing in the possibilities of their learning that gives them in time the faith they need to perform well. We learn early on the job that we must project confidence in the directions we offer our students, or they lose faith in these directions. But our unconditional believing can hurt our capacity to revise our practice when needed. It may encourage us to hide the real complexities of our work from our students, and inadvertently even from ourselves. We may project such confidence in the directions we set that we conceal the choices, hunches and inescapable uncertainty and arbitrariness that underlie them. Over time, this habit can insulate us from the gaps and faults of our own expertise, and seal us off from new expertise. Dangerously for both our students and ourselves, it can also mask the real dynamics of learning.

Peter Elbow (1986) argues that the educator must learn to temper what he calls *methodological belief* with methodological doubt – systematically subjecting ideas, plans and output to both impulses, giving each its due. This idea was a source of inspiration for the design of the Tuning Protocol, with its alternation of ‘warm’ and ‘cool’ feedback. Another source of inspiration was the practice of the National Writing Project (NWP) of juxtaposing in its summer workshops for teachers three risky opportunities. The first involves sharing drafts of their own writing with one another. The second involves sharing examples of their teaching of writing with one another. And the third involves learning about the teaching of writing from experts and expert texts (Lieberman & Wood, 2003). In facing up to the first two risks – and thus gaining the benefits they offer – NWP teachers become open to understanding the comparable risk of the third and thus gaining its benefit, too. Of course, teachers hear from experts all the time – for example, in professional development workshops – but they gain real

benefit from such encounters only when they dare to put their own expertise at risk (McDonald, Buchanan & Sterling, 2004).

Protocols force transparency by segmenting elements of a conversation whose boundaries otherwise blur: talking and listening, describing and judging, proposing and giving feedback. Many protocols also do this by balancing and separating Elbow's methodological belief and doubt – or warm and cool. The balance as well as separation make warm comments credible and cool comments tolerable. Meanwhile, protocols call attention to the role and value of both kinds of feedback in learning, and may also make the steps toward understanding and solving a problem, or designing an intervention, visible and replicable.

In forcing transparency, protocols again teach us habits that we wish we already had: to take the time to listen and notice, to take the time to think about what we want to say, to work without rushing, to speak less (or speak up more).

### Enriching Learning

When protocols are used in teaching, the transparency they lend to interactions carries the same benefits to our students – for example, pressing everyone to speak and to listen, to diagnose and to speculate, and so on. They can also disturb privacy and certainty by interrupting the ordinary flow of conversation. Some of them force the raising of questions, the suspension of judgment, and the withholding of response – all of these useful to learning at certain times. Importantly, they may also help students gain metacognitive skill. Nancy Mohr once worked with teachers from the Packer Collegiate Institute in Brooklyn, New York, who were learning to use protocols to explore their students' work. Over the course of several months, the teachers also adapted many of these protocols to use with the students themselves, and were impressed with the quality of the work that resulted. One adapted a protocol to help her students identify whether they were predominantly visual or auditory learners, and then to reflect on what this means. The students came up with powerful lists. They were in Year 1. Another teacher used a protocol to help his students explore their own artwork in the same way that he and his colleagues had done.

Protocols may also encourage an environment for learning (by educators *and* their students) that presumes the social construction of knowledge. It is an idea well supported by research that encounters with other people's understanding enable learners to gain and deepen their own understanding (Bransford, Brown & Cocking, 2000; Donovan, Bransford & Pellegrino, 1999). Along with John Dewey, we believe that such learning environments also foster democracy as well as cognition. They encourage learners – whether they are in Year 1, graduate students or colleagues in professional education – to appreciate the value of diverse ideas and deliberative communities (Glickman, 1998; Greene, 1988; Oakes & Lipton, 1999).

Like their counterparts in diplomacy, technology, science, medicine and social science, the kind of protocols we describe and promote in this book constrain behaviour in order to enhance experience. Some protocols enable enemies to sit at the same table and make peace. Others enable us to communicate instantaneously worldwide. Still others permit scientific advancements and medical cures. The ones we write about help educators and their students to exercise their descriptive powers, intensify their listening, enhance their qualities of judgment, and facilitate their communication with one another.

### **A DIFFERENT WORKPLACE FOR EDUCATORS**

The fourth basic idea informing this book concerns the consequences of taking the other ideas seriously – educating ourselves, exploring student work together and gaining experience in the facilitation of protocols. These can lead, we believe, to the development of a different workplace for educators. This is one where the power to assess outcomes and to take action to improve them is distributed throughout the organisation, and where the people who do the work are able, willing and even eager – in consultation with their colleagues – to make changes as needed in order to make the work more effective.

Management theorists call this a *high-performance workplace* (Applebaum, Bailey, Berg & Kalleberg, 2000; Ichniowski, Levine, Olson & Strauss, 2000). Eileen Applebaum and her colleagues outline its components within the manufacturing sector of the economy against the backdrop of the traditional workplace: