operating assumptions move to the surface where they can be explored, clarified, modified, and potentially owned by the group. Peter Senge (1990) calls this process reciprocal inquiry. Advocacy is well served by embedding positive presuppositions within your statements of assumption. For example, "Given our focus on improving the writing skills of all of our students, my assumption is that we should include the special education teachers in the planning process."

When group members embrace this intention, they move from attempting to "win" the argument to a desire to find the best argument with the most compelling data to support that position. When we attempt to win, we tend to use data selectively to confirm our position. By balancing our advocacy with inquiry into the ideas of others, we open ourselves and the group to the power of disconfirming and discomforting data. This individual and collective rethinking opens possibilities for fresh perspectives and novel approaches to problems.

Table 2.5: Skilled Advocacy

IS	IS NOT
stating assumptions	declaring passions
describing reasoning	staking of positions
describing feelings	getting lost in emotions
distinguishing data from interpretations	making generalizations from little data
revealing perspectives	assuming there is only one viewpoint
framing issues in wider contexts	getting lost in details
giving concrete examples	avoiding the practical
offering points of confusion	confusing confidence with clarity

Adapted from Ross and Roberts, 1994

believe in all that has not yet been spoken.

—Rainer Maria Rilke

The Book of Hours: Love Poems to God

DIALOGUE

Dialogue is one of the most ancient forms of human communication. Our tribal ancestors gathered around their fires crafting humanity and community with stories, songs and conversations. By learning the processes of dialogue we restore the patterns of our elders and embrace habits still practiced by indigenous peoples across the planet.

Many of these communication and thinking patterns were set aside during the development of western culture as the early Greek philosophers and later European thinkers shaped language and listening models for logic, reasoning and persuading. These habits of mind molded our culture as we now know and experience it, producing the technological, social and political structures that make us who we are today.

By embracing the processes and patterns of dialogue, we do not deny other ways of interacting. Dialogue is an important addition to individual and group repertoire. It extends personal and collaborative capabilities by supporting speaking and listening behaviors that link people and ideas. This collective search seeks connections, not fissures, and wholes, not parts. At the most fundamental level, dialogue is a process of listening and speaking to understand each other's ideas, assumptions, beliefs and values. To understand others does not imply agreement or disagreement with their viewpoints. Dialogue seeks and explores the layers of meaning within ideas.

The physicist, David Bohm, brought consciousness to dialogue in its more modern form, promoting it as an intentional communication process to develop deeper forms of collective thinking. He combined knowledge of quantum physics with understandings influenced by his work and association with the Indian philosopher, Jiddu Krishnamurti. Bohm sought patterns of thought in individuals and patterns of thought in society. From his studies with Krishnamurti, he learned the value of observing his own internal stream of consciousness and extended this to the value of observing the ways in which collective thought unfolds during purposeful conversations.

"Dialogue comes from the Greek word dialogos. Logos means 'the word', or in our case we would think of the 'meaning of the word'. And dia means 'through'—it doesn't mean two. A dialogue can be among any number of people, not just two. Even one person can have a sense of dialogue within himself, if the spirit of dialogue is present. The picture or image that this derivation suggests is of a stream of meaning flowing among and through us and between us. This will make possible a flow of meaning in the whole group, out of which will emerge some new understanding. It's something new, which may not have been in the starting point at all. It is something creative. And this shared meaning is the 'glue' or 'cement' that holds people and societies together."

—David Bohm

On Dialogue

Bohm's work in turn influenced the work of William Isaacs, and his colleague, Peter Senge, at the MIT Center for Organizational Learning. Isaacs (1999) calls dialogue a conversation with a center, not sides. It requires a full commitment as a listener to understand others and a full

commitment as a speaker to be understood by others. Like a magnetic field, the practice of dialogue gives a shape and structure to a spirit of sustained collective inquiry within and between people.

Within this container, we find the psychological safety to talk about the hard to talk about things that matter. To craft this container requires a blend of internal and external quiet so we can hear ourselves, hear others and hear ourselves hear others. "Our conversations organize the processes and structures which shape our collective future" (Isaacs, 1999, p. xi). This thinking together, in itself, is a value and an outcome. The process is also the product.

Dialogue is an adaptive force when used within groups and organizations. The practice of dialogue develops self-organizing systems that clarify and maintain core identities. Given the nonlinear nature of systems and the forces around systems, planned actions and interactions are often difficult to predict with clarity and confidence. Dialogue helps us to find connection and meaning within the noise.

SKILLED DISCUSSION

Skilled discussion couples with skilled dialogue to support clarity of thought and commitment to action. For discussions to be productive, group members and groups need to be clear about the purpose of their interactions. While dialogue is about open exploration of ideas and perspectives, skilled discussion seeks focus and closure on a set of actions. This process, in turn, requires group members to balance advocacy for their ideas with equal energy inquiring into the ideas of others. Skilled discussion also depends upon healthy norms of critical thinking to allow groups to sort and analyze data, information and proposals. Lastly, skilled discussion is not possible without group member clarity about the decision-making processes that will focus actions, and the implications and consequences of those decisions.

Data-driven dialogue and data-driven discussions have much in common. They each require the full attention of participants, careful listening, linguistic skills and the intention to separate data and facts from inference and opinions. The defining characteristics of each are in Table 2.6.

DATA-DRIVEN DIALOGUE VERSUS DATA-BASED DECISIONS

Dialogue that leads to collaborative planning and problem solving is not the same as what is commonly presented as data-based decision-making. Data-based decision making does not always assume collective processes. Leaders and specialists often analyze data sets and then attempt to explain what the numbers mean to others who must first own the problem before they can move towards solutions. In the worst cases, decisions about such things as curriculum, instruction,

Table 2.6: Dialogue and Discussion

Dialogue	Discussion
thinking holistically	thinking analytically
making connections	making distinctions
surfacing and inquiring into assumptions	surfacing and inquiring into assumptions
developing shared meaning	developing agreement on action
seeking understanding	seeking decisions

scheduling, and student groupings are imposed upon people who do not yet understand the underlying problems such innovations attempt to solve. In some settings, well intended processes short circuit when groups lack maps and tools for collaborative inquiry, problem-solving and planning.

In contrast, data-driven dialogue is a collective process designed to create shared understandings of issues and events using information from many different sources. Well-crafted dialogue honors the emotional as well as the rational components of problem-finding and problem solving. The processes of data-driven dialogue both require and develop changes in the working culture of many groups and many organizations. It separates inquiry, analysis and problem finding from the rush to decide and the rush to act.

In too many schools we find groups lurching from problems to programs as they seek the comfort of action over the discomfort and the messiness of collaborative inquiry and investigation of root causes. Data-driven dialogue presses the pause button, inviting group members to reflect and inspect current results arising from current practices and beliefs about learning, teaching and engaging in common cause.

In the next chapter we present a model for structuring and guiding collaborative inquiry—data-driven dialogue. The model applies to group work with all types of data, from student work samples to teacher made tests to criterion-referenced and nationally-normed examinations.