Introduction

ACTION LEARNING was first developed in the 1940s by physicist-turned-human relations director Reg Revans to solve the problems of productivity and morale in the coal mines of Wales and England. Instead of turning to outside consultants, Revans wisely and astutely determined that having the coal miners work on their own problems (with their own questions and from their own perspectives), would be a better approach. And it was! The coal mines for which Revans worked had 30 percent greater productivity and much higher morale than any of the adjoining mines. He recognized that humble people "sharing what they didn't bloody know" and being willing to ask others "what does this look like to you?" would eventually lead to breakthrough problem solving.

Later, when he was the head of emergency services in East London, Revans worked on problems in the hospitals of London, where he became interested in how nurses solved complex problems at work (Revans, 1971). Revans's approach to action learning was driven by a problem-solving approach that identified underlying issues, conceptualized frames of reference for practice, and sought practical and lasting solutions to pressing issues.

Over the years, the action learning principles and practices that Revans pioneered have evolved to even better address the ever more complex and difficult problems of the 21st century. Finding appropriate, sustainable

business solutions in today's world requires insight, systems thinking, and creativity. Problem-solving strategies that may have worked in the past are no longer capable of developing the breakthrough ideas and solutions that will work in today's environment, since neither the typical individual nor the traditional problem-solving groups have the capability to fully understand today's problems, and they lack the team learning necessary to develop solutions that are powerful, sustainable, and cost-effective.

In the 12 chapters that follow this introduction, *Breakthrough Problem Solving with Action Learning* explores why and how action learning has been so successful. We briefly review the theories and research that undergird the effectiveness of action learning and point readers in the direction of related academic works that they may wish to explore. The narrative then turns to stories of how organizations have employed action learning in solving thorny and complex business problems. We use more than 30 cases to demonstrate how real-world models for how action learning can be successfully employed; we hope they provide inspiration and starting points for other businesses facing similarly difficult and complex problems.

Overview of the Book

The characteristics of breakthrough thinking and action can be derived from the integration of complex problem solving with action learning. We first examine the theories and best practices of problem solving and then explore how action learning incorporates these theories and practices in 31 action learning cases from around the world and in nine different business areas. We conclude the book by identifying the key dynamics of action learning that lead to breakthrough problem solving (see Figure I.1).

Part I—Problem Complexity and Problem Solving in the 21st Century

Part I describes the complexity and challenges of problem solving in the 21st century as well as best theories and principles. In Chapter 1, we note that the critical problems faced by organizations today are much more complicated and "wicked" than problems encountered 10–15 years ago. The 21st-century workplace's wide array of rapidly changing socioeconomic trends and markets, overnight innovation by competitors, mergers
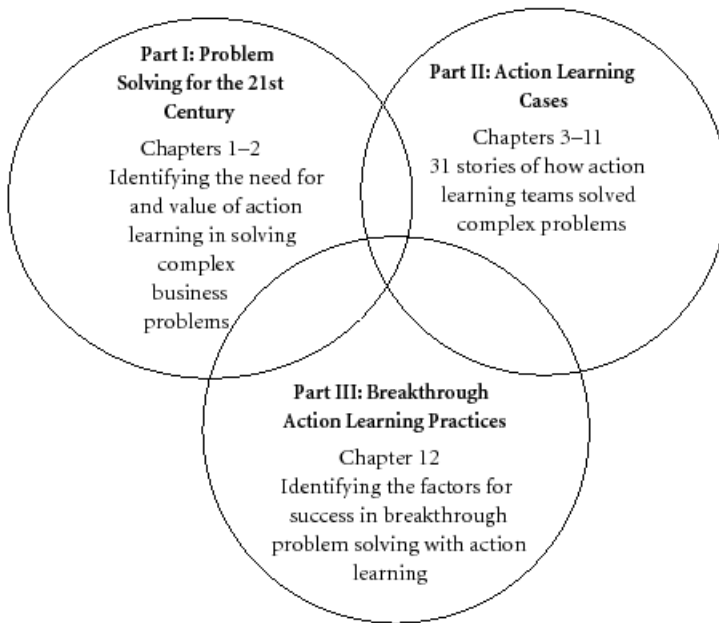
Part I: Problem Solving for the 21st Century

Chapters 1–2
Identifying the need for and value of action learning in solving complex business problems

Part II: Action Learning Cases

Chapters 3–11
31 stories of how action learning teams solved complex problems

Part III: Breakthrough Action Learning Practices

Chapter 12
Identifying the factors for success in breakthrough problem solving with action learning

FIGURE I.1. Framework for Understanding the Structure of the Book

across disparate corporate cultures and industries, new distribution channels, and the globalization of business have generated problems that are ever more difficult to solve. Twentieth-century problems were more *technical* while 21st-century problems are *adaptive* in nature and context. *Technical problems* (for which the necessary knowledge to solve the problem already exists in a legitimized form or set of procedures) are being replaced by *adaptive problems*, for which a satisfactory response has yet to be developed and no amount of technical expertise is fully adequate.

More and more of the 21st-century problems cannot be solved by a single person or leader—there is simply too much information to incorporate and too many implications to be considered. The imaginations, diverse perspectives, and talents of many people are needed in order to uncover the answers to today's dilemmas. No one person, however prescient, will be able to fully understand the problem; nor can any group composed of people with similar backgrounds and perspectives generate the innovative answers that we need.

In Chapter 2 we present the basic premises and roots of action learn-

ing. Action learning begins with the need to solve problems and builds on that imperative—the more complex and urgent, the better suited a conundrum is for action learning. The dynamic interactive process used in action learning allows the group to see problems in new ways and to gain fresh perspectives on how to resolve them. Questioning from multiple perspectives creates solid systems thinking in which the group sees the whole rather than parts, relationships rather than linear cause-and-effect patterns, underlying structures rather than events, and profiles of changes rather than snapshots. The action learning process enables the group to look for underlying causes and leveraged actions, rather than symptoms and short-term solutions. Action learning examines both macro and micro views, so as to discover when and how to best implement the proposed actions.

Action learning, in a subtle, natural, and yet synergistic way, incorporates theories and principles from an array of disciplines, including psychology (behavior, cognitive, social, humanist, and constructivist), physics (quantum rather than Newtonian), management science (e.g., motivation and leadership theories), systems engineering, and sociology. Here, we connect ideas from these disciplines to the core tenets of action learning, as described in the first part of this chapter. These principles, disciplines, and theories are integrated through the intensive utilization of reflective inquiry at each stage of problem solving, be it the reframing of problems, the development of inspirational goals, the creation of alternative strategies, or the generation of breakthrough actions.

Part II—Case Studies of Breakthrough Problem Solving with Action Learning

In the 21st century, action learning has enabled organizations around the world to achieve breakthrough solutions to a multitude of complex problems. In this section we examine nine types of problems that have been addressed with action learning. Thirty-one case studies are presented from European, African, Australian, Asian, and American companies—large as well as small, public as well as private. We explore why action learning was employed, how the action learning problem-solving teams were chosen, the critical moments during the problem-solving cycle

in which breakthrough thinking emerged, and the successful application of the action learning strategies. Lessons learned and suggested applications to other types of problems and organizations are also discussed.

Chapter 3 examines how four organizations—Nationwide Insurance, Lexus-Toyota, PepsiCo, and Bristol-Myers Squibb—used action learning to solve problems related to marketing and sales. In Chapter 4 we describe how Goodrich, Kirin Brewery, and Krones employed action learning to expand and improve the power of technology for internal infrastructure and operations as well as external customer/client support.

More and more organizations around the world have recognized the importance of being socially responsible and being concerned with not degrading and even improving the environment. Chapter 5 describes how DuPont used action learning in developing breakthrough strategies for "going green," in both the development and the delivery of its products around the world. We also relate how several Caribbean countries used action learning to create a better environment through comprehensive water management, as well as how the Downer Group, an Australian mining company, developed a road analysis control system that resulted in significant reductions in wasted materials.

Nations face tremendous challenges in responding to the economic, educational, and social needs of their people. Chapter 6 presents how action learning was used for the development of the health system in the Cook Islands, community development in Australia, and economic and social development in Wales and Kenya. Chapter 7 tells the stories of how three companies—Morgans Hotel Group, Toyota Motor Company, and Just Born Candies—used action learning to innovate and develop their products and services.

In Chapter 8 we describe how four organizations—Panasonic, National Bank of Dominica, Anglo American Mining, and Union Church Hong Kong—changed their corporate cultures and ethical practices by incorporating action learning. Chapter 9 explores how three organizations—Microsoft, National Bank of Dominica, and Boeing—used action learning for talent management and leadership development. Action learning was determined by these companies to be the most powerful and effective way to develop both current and future leaders.

As more and more problem-solving teams work virtually, more and more organizations are employing the practices and principles of action learning to make these teams more effective and efficient. Chapter 10 describes how Hewlett-Packard, Kanbay-Capgemini, Virtual City–Kenya, and George Washington University are using action learning to improve virtual work and learning. Chapter 11, the final chapter of Part II, shares how three organizations on three different continents—Constellation Energy in North America, Deutsche Bank in Europe, and Kentz Engineers & Constructors in South Africa—used action learning to solve problems related to one or more of these forms of organizational learning and restructuring.

Part III—Principles and Strategies for Using Action Learning for Problem Solving

In Chapter 12 we bring together the 10 elements that were found to be essential to the success of action learning in the cases described in Part II, in particular how the questions, the diversity of the groups, the learning, and the urgency of the problems resulted in breakthrough thinking, strategies, and actions. We also describe how learning while solving problems enables groups to become masters at solving complex problems.

It has been said that the greatest and most significant learnings and achievements in history have occurred when individuals, teams, organizations, communities, and nations faced seemingly overwhelming problems and unreachable challenges. The action learning approach turns such problems and challenges into powerful learnings and actions. We encourage the readers of this book to test this approach in their own organizations. We are confident that action learning can help all organizations achieve great solutions to seemingly unsolvable problems.