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Action Reflection Learning™ can help managers learn transformatively, and because their learning takes place in teams that work on real organizational problems, it can lead to systems change and organizational capacity building.

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Becoming Critically Reflective Through Action Reflection Learning™

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Companies are trying to survive in a rapidly changing, turbulent environment. Managers are faced with external challenges—such as high technology, globalization, political and social reorganization—and internal challenges—Total Quality, reengineering, downsizing, flattening of the hierarchy, and participative management, for example. In the past, training and education prepared managers for a more predictable world. To manage rapid change, today's managers need new competencies such as critical thinking, the ability to question the "way things are done around here," leadership skills, continuous learning capacity, the ability to help others and the organization learn, high performance teamwork, and skill in designing innovative solutions and processes.

New competencies cannot be imparted in traditional ways because problems are so complex that one "best" solution cannot easily be advocated; managers must hone their judgment in deciding how to apply wisdom gained through experience in situations that demand answers tailored to the people and problems involved; and solutions are changing so quickly that they cannot easily be packaged and passed on to others before they themselves become obsolete.

As a result, many organizations are experimenting with new ways of developing managers. In many of these experiments, learning strategies are moving outside of the classroom and into the work site. The rationale is that managers are more motivated to learn when confronting real issues, and the competencies they gain through this kind of learning better enable them to deal with the continually changing, complex problems the environment engenders.

This chapter describes an action technology—Action Reflection Learning™ (ARL), a variant of Action Learning (AL)—that illustrates this new approach.

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In this form of action technology, the paradigm of training becomes forever changed because "training" is actually working on a problem that has strategic importance to an organization. ARL's basic characteristics include the following (Marsick, Cederholm, Turner, and Pearson, 1992, p. 64):

Working in small groups to solve problems

Learning to learn and think critically

Building skills to meet the learning needs that emerge during a program

Developing a participant's own theory of management, leadership, or empowerment—a theory that is tested against real world experience, as well as established tenets.

ARL is sometimes referred to as business-based management development. At the heart of its design is a combination of action—through project work on actual problems—and reflection—separate, specifically designed opportunities to think about what took place.

The project forms a "laboratory" for experimentation. ARL teams work on projects that are chosen based on the following criteria:

Projects are complex, overarching, and often cross boundaries and functions.

Projects are real work, that is, a problem or challenge with no known solution—not a puzzle with a known answer.

Projects are meaningful to each person involved in the program.

Solutions are those over which reasonable people can disagree.

Managers take action and think about the results, using the help of a team advisor and others on the team to see the situation in new ways. They learn from their experience as they work, taking time to reflect together about new insights into the problem and its solutions, their work together as a team, and their own learning patterns (Watkins and Marsick, 1993). Managers learn how to ask fresh questions, which is key to this type of learning. For example, rather than ask, "What is the solution to this problem?" they may ask, "Is this the right problem for us to be solving?" Also, instead of wondering, "Will this solution be acceptable to our company?" they may ask, "What's wrong with the norms of our company that we are wondering if our solution will be acceptable?" They try out new behavior and get feedback, and thus gain insight into similar problems back on their own jobs. Managers learn to act and reflect so they may learn, and they reflect on the learning so that they may act more effectively (O'Neil and DiBona, 1993).

Characteristically, managers reformulate their understanding of the problems underlying the project, and the project itself, as they uncover assumptions, misperceptions, norms, and expectations that are often hidden from themselves and others. One example of this reformulation process was an ARL group whose project assignment was to answer this question: "What should quality work be in the future and how should we measure it?" As a result of differences in background of the group members, the question moved from

The examples we use are drawn from management development in business, but ARL can be used in different settings with different types of learners. ARL's strengths are many, but the facet we focus on here is the way in which this strategy builds critical reflection in managers, and through them, in the culture of their companies.

We start by defining Action Reflection Learning™ and differentiating it from Action Learning. We describe its program design and examine its theoretical underpinnings in critical reflection. We then discuss examples from several different programs that illustrate the way in which ARL builds critical reflection that develops individuals and teams as they solve organizational problems. We conclude with a look at several factors to consider in choosing to implement ARL, given its focus on critically reflective learning.

History and Definition of Action Reflection Learning™

The name Action Reflection Learning™ has been coined to emphasize the role of reflection in Action Learning. Action Learning is often credited to an English physicist, Reg Revans, who was charged with responsibility for management development for the coal mines in the 1930s during a time of industrial crisis. Revans (1982) suggested that knowledge came from action rather than the study of books. Books hold programmed wisdom from the past (P learning), whereas managers need questioning insight (Q learning), which they can only develop by wrestling with live problems and subsequently reflecting upon results. Revans aimed at a synergy of mind and body, which is not imparted by an educator or expert but is gained more appropriately through the reinterrogation of the learner's own experience and existing knowledge (Pedler, 1991).

ARL does not differ in concept from the central thrust of AL, but it does differ in application. The latter has been widely interpreted and practiced, so much so that it is sometimes hard to determine what AL really looks like. In a recent article, for example, Froiland (1994) describes the following as Action Learning: outdoor adventure learning activities; "Gap Groups" in which AT&T employees help one another address performance gaps; GE's Workout! sessions in which concerned stakeholders gather in one room to analyze a process or problem and tender solutions which they are then commissioned to enact; and global leadership conferences at Whirlpool in which participants brainstormed a list of needed projects and formed teams subsequently sent off to tackle selected projects. Revans (1982) defines AL's essence as learning from and with peers while tackling real problems; as such, his definition might hold true for all of the above examples. However, it is difficult to determine the extent to which these examples promote learning through action and the extent to which they are simply good task forces or problem solving groups. ARL holds that there must be an equal emphasis on both learning and doing, and that people do not always know innately how to learn in this way from their experience. ARL is designed to maximize the creative tension that occurs when participants strike a balance between learning and doing. Measures are taken to ensure that

dealing with technical measurements, to consideration of software solutions, to the reformulated question of "What does the philosophy and vision of the company need to be for the nineties?"

ARL Program Design

A program designed for Volvo Truck Corporation by related agencies Management Institute, Lund, Sweden (MiL) and Institute for Leadership in International Management (LIM) provides some insight into the design of an ARL program (Management Institute, Lund, Sweden, and Institute for Leadership in International Management, 1993). This program was the third in a series. Care was taken to select projects that concern real, complex issues over which reasonable people disagree. Volvo Truck Corporation looked for corporate global projects with regional implications that held actual and strategic importance. They wanted projects that were demanding, innovative, achievement-oriented, with possibility for risk taking and a likelihood of a quantifiable payoff. The projects in this program centered on benchmarking, lead times, special vehicles, and powertrain components. Participants were given some choice in selecting the project on which they would work, but teams were designed to maximize differences in function, background, company experience, and perspective so that fresh questions could be asked. A critical feature of ARL is that no one on the team functions as an expert to which others will turn for advice, consciously or unconsciously. Reliance on experts often discourages "dumb questions" that give rise to new avenues of thinking.

Four week-long residential seminars were designed to launch the projects. These seminars served as a forum for issues that arose in project work and as a means to instill the new values and attitudes needed for a unified global business focus. Each seminar had a theme: the global perspective; the business perspective; the personal or professional and team perspective; or Volvo Truck Corporation's future leadership perspective. The seminars took place in March, May, September, and November. These seminars included both work on projects and short content segments. In addition, each group spent approximately twelve less structured days between seminars on project work (Volvo Truck Corporation, 1993).

The Volvo Truck Corporation design is typical of the kind of program which MiL has been creating in Europe for over ten years. Each of MiL's programs is typically designed for fifteen to twenty managers divided into smaller teams (sets) of three to four people each. Programs are sometimes designed for many companies, sometimes for one company, and sometimes for a group of companies that choose to work together as learning partners. These programs take more time than most "training" activities because participants work on real-life problems that do not get solved overnight. For example, programs may take twenty to forty person-days spread out over six to nine months in a "sandwich" format, that is, short activities (one-half day to five days each) scheduled in between regular work, along with flexibly-planned, less structured project work. LIM mod-

els its programs on MiL, but programs in the United States are more frequently offered within companies, perhaps because of proprietary interests. Internal programs are often used to launch major organizational initiatives, beginning with senior executives and moving down through middle management.

MiL programs typically have three parallel tracks: projects (experience and reflection seminars); workshops and seminars on issues that arise from project work, scheduled as appropriate; and discussion of back-home concerns that arise as participants reexamine concerns from their daily work in light of new learning. The art of ARL rests, in part, on the weaving together of these three strands into an integrated whole. Often a central theme is used to unify tracks, such as global leadership in the Volvo Truck Corporation program. A central feature of both MiL and LIM programs is a personal development component to help managers understand themselves better in relationship to the demands being placed on them by new work. The timing of this component is important: if scheduled too early, the managers have not yet received enough feedback through their project work, and thus, do not recognize its value; if scheduled too late, there is not enough time to try out new behaviors and attitudes based on self-insight gained in these activities.

MiL and LIM program designs are very dependent on the skills and abilities of the Project Team Advisors (PTAs), especially in the initial stages of the program. This feature differentiates ARL from AL, where facilitation may well be left to the skills of those in the group, or if provided, may not be as clearly focused on reflection to assist learning. PTAs in ARL help project teams learn the following:

How to frame and reframe the problem or challenge accurately, since complex issues are seldom what they first seem

How to identify, clarify, and test one's personal insights and "theories" about the problem or challenge

How to reflect on the way in which problems and challenges are formulated, tested, and solved

How to continually learn how to learn, both individually and when naturally interacting with others in groups and teams

How to use the issues that arise in project work to understand and manage similar issues that are faced back on the job.

By acting as a challenger, questioner, and mirror of the team's actions, the PTA helps participants dig below the surface and reflect on the values, expectations, norms, and beliefs that shape the way in which they understand the problem. Through this type of activity, the basis is laid for critical reflection.

Critical Reflection: Definition and Examples

Mezirow (1991) unpacks the meaning of the word "reflection," which is often used but undoubtedly with different meanings. Drawing on John Dewey, Mezirow points out that reflection involves attending to the grounds of one's

beliefs and, by extension of some theorists, of one's feelings as they contribute to the validity of one's thinking. Dewey was interested in reflection as it related to problem solving, which is the focus of much workplace learning. Mezirow points out that Dewey did not differentiate types of reflection: that which focused on the nature of the problem itself, that which focused on the process of problem solving, and that which focused on the premises or presuppositions that lie at the foundation of one's definition of a situation. Mezirow does make these distinctions, and in doing so, points out that "The critique of premises or presuppositions pertains to problem posing as distinct from problem solving" (p. 105).

Problem posing involves raising questions that open up new dimensions of thinking about the situation, whereas in problem solving, a person often looks primarily at solutions without questioning whether or not the initial assessment of the situation is the only one, or the best one, that is possible. For example, during an ARL meeting facilitated by Marsick, one manager questioned whether or not others really agreed that they had been learning quite a lot in the session, or whether they simply fell into the trap of pretending they agreed. Managers were asked to go around the table to share what each felt he or she learned. This led to a discussion of the culture of their workplace with respect to telling the truth. Each manager had a story to tell about being truthful. This eventually led to an exploration of whether or not basic norms in the institution had changed, as evidenced by the way in which truth was rewarded or punished through budget cuts or appropriations, career boosts, and other tangible or intangible proof that truth was or was not valued. This kind of problem posing is quite typical of the discussion that occurs in ARL programs. As a result, the group's understanding of a problem frequently gets reframed.

Another example comes from an ARL group whose focus was employee satisfaction that began with an investigation of extrinsic rewards. An analysis of Total Quality and its links to employee satisfaction led to the awareness that meaningful work in a Quality culture might be a stronger motivator than extra pay or benefits. As this group explored the concept of a Quality culture, they realized that a key characteristic was respect. One indicator of a lack of respect was that employees were often interrupted, albeit with stated apologies, in the middle of phone calls or closed-door meetings by others who demanded immediate information or attention. Of course, the interrupters were likewise being pushed by their managers or clients. Such behavior did not feel respectful, nor did it result in high quality work because attention was diverted to multiple uncompleted tasks. Problem posing began with extrinsic rewards, moved to meaningful work, and ended with the way in which the company could create a culture of respect.

Mezirow calls reflection on basic premises that underlie thinking by the name of "critical reflection" (p. 105) and points out that, although it takes place less frequently than reflection on the content or processes of problem solving, critical reflection has the potential to transform thinking because it is directed

at our basic understanding of the experiences that we have. In premise reflection, people recognize that their perceptions may be flawed because they are filtered through uncritically accepted views, beliefs, attitudes, and feelings inherited from one's family, school, and society. Such flawed perceptions often distort one's understanding of problems and situations. Managers point out that taking time to reflect in even a surface fashion is highly powerful because they have a natural predilection to action that is reinforced by the nature of their work—putting out fires and solving problems quickly—and by a perception of urgency because of shortened product cycles and the real threat of extinction in the marketplace. Critical reflection is even more powerful because attention is directed to the root of the problem. Why spend time moving the deck chairs if the Titanic is sinking?

There are many strategies available to encourage critical reflection, a number of which are described in Mezirow and Associates (1990). ARL is one such strategy; it promotes critical reflection in several ways. First, project teams are designed so that managers will ask questions of one another that don't normally get asked because of the diverse perspectives that they bring to the situation. Managers are often truly surprised when they learn of the different interpretations others hold of a common experience. They often proceed on the assumption that everyone holds the same understanding as they do, and as a result, each is attempting to solve a very different problem even though everyone uses the same vocabulary. Second, the project team advisor (PTA) creates a climate that encourages dialogue, critique, and reflection by stopping the action periodically in order to help participants dig below the surface of their comments and behavior—with respect to the question under discussion, the dynamics of the group, or individual statements and actions. Third, the PTA often introduces tools and methods, in a just-in-time learning format, that can help to support and encourage critical reflection. For example, after a group has begun work on their project, group members often encounter difficulties in the process due to the fact that they are not all working with the same set of shared assumptions. Once the group has reached this juncture, the PTA will intervene with some just-in-time learning in which he or she explains the process, and value, of surfacing and discussing participants' assumptions about their project work. Fourth, ARL promotes real-time feedback from the PTA and peers about events that arise in the group. One way in which this is done is through fishbowls in which PTAs discuss observations, hunches, and perceptions in a circle in the center of the remaining participants, followed by dialogue with participants to check out viewpoints and test the validity of their observations. Real-time feedback makes discussable the many perceptions that people hold, but seldom disclose, and yet act upon. This helps managers begin to reflect on premises that shape the way they think about problems and solve them. Fifth, ARL encourages action to test out individual and collective beliefs, hunches, and solutions. The outcome of a project is not typically an extensive report that will sit on shelves. For example, a project team might conduct focus

with the individual taking responsibility for, and expressing, his or her thoughts, feelings, and wants. A behavior that helped to demonstrate that ownership was the use of "I" language (Short, 1991). The process one of the teams went through during the personal development part of their program also illustrates the continuous learning cycle. This team came to understand that behavior, which they and their organization had supported, produced counter-productive, time-wasting results.

From the outset, there was resistance from the team regarding the appropriateness of using "I" instead of "we" in their discussions within the team. They thought that using "we," as was the custom in the organization, better demonstrated support of the team environment in which they worked. During the ensuing discussions, the PTA asked if it was really possible to have a "we" until the voices of the "I's" that made up that "we" were known. This question helped the team to start to *reframe* their roles as team members in both the ARL program and back on their job. After the opportunity to practice this new behavior during the ARL program, team members agreed that they would try to use the behavior back on the job. There continued to be concern about others' reactions to this perceived non-team behavior, so the participants agreed that they would choose opportunities in which they felt a degree of safety.

At the next ARL session, with the PTA's guidance, the team spent time reflecting on, and discussing, the results of their new behavior. They realized that the *assumptions* they had held about negative reactions and lack of support from others were unfounded. After some initial reactions of surprise and some discomfort, other members of the organization expressed that they thought the new behavior helped to clarify the work and make the teams more productive. To further assist the ARL team with their learning, the PTA also asked them to reflect on questions that dealt with their previous behavior in team meetings, and the results of that behavior. As a result of that reflection, combined with the earlier discussion on their current behavior, the team was able to see that there had been a *mismatch between their theory-in-use and their espoused theory*. They espoused wanting to be members of productive, supportive teams, yet their behavior engendered confusion and lack of ownership and support. Some of the *unintended consequences* they discovered were wasted time due to lack of clarity, public support and private disagreement, and team members who were uncommitted to decisions to which they felt they had never agreed.

This next example illustrates an ARL team in which some of the members used critical reflection to help break through a mindset that said that, in order for them to be successful, they had to "be told" exactly what the organization expected of them. This team had a very slow start in their work because they felt they needed to get greater clarity from the client about their project. During a reflection stop in this time period, the PTA asked them to think about why they were not progressing with their work. The team members' response was that they could not proceed with their work until their client was clearer with expectations about the project. At this point, one of the team members asked "why" and changed the way the team looked at their lack of progress.

groups, implement a customer opinion survey, pilot test a solution, or create and screen a video to dramatically illustrate some aspect of the problem in order to catalyze discussion.

Watkins and Marsick (1993) use the concepts of reflection and critical reflection to develop a model of continuous learning that builds upon the problem-solving cycle discussed by John Dewey and later by Argyris and Schön (1974) in their work on action science. The model consists of concentric inner and outer circles that represent layers of learning. In the middle of the circle are the challenges one experiences at work. The inner circle represents the simple steps of the problem-solving cycle: experience the problem or challenge, examine alternative solutions, produce the solution, and plan next steps. A level of learning is attainable by reflecting on the nature of the problem and on the problem-solving process itself that enables a person to (1) see the challenge as a learning opportunity; (2) open him or herself to a variety of ways of thinking about solutions; (3) identify what is needed and learn about what one does not know to implement the solution; and then (4) subject the results to a rigorous examination to learn from the experience for similar future challenges.

There is also a deeper level of learning that is attainable by reflecting on the premises that underlie one's understanding at each step in this cycle. At the first step, one can dig below the surface to examine the beliefs, feelings, and past experiences through which one subconsciously filters an encounter with a new situation. This conscious level of awareness helps one to avoid habitual responses and remain open to a fresh assessment of what will be encountered. However, to do so requires some way of breaking out of our usual frame of reference. We can be helped to do so in many ways, for example, through the questions of people unlike ourselves or the surprise we experience in situations unfamiliar to us. At the second step, one can delve more deeply into the context in which the problem is embedded so that new alternatives can be identified. What assumptions do we make about what we can and cannot do, what will or will not be supported, who will react in what ways? Are there steps that we can take to test our assumptions before automatically acting upon limiting beliefs? At the third step, one can stop and think while implementing a solution in order to see the gaps that exist between what we think we do (our espoused theory) and what we actually do (our theory-in-use). We all have blind spots that prevent us from being effective, yet others may be unwilling or unable to give us the feedback we need to see these blind spots or we may be unwilling to hear feedback when given. Moreover, Argyris (Argyris and Schön, 1974) maintains that we are often highly skilled at our incompetence, and therefore, cannot easily unlearn years of practice even when we want to act in new ways. Finally, at step four, we can look for the unintended consequences along with the intended ones. To do so often requires distancing ourselves from what we expected to see and speaking to those who hold opposing views.

An illustration of this cycle comes from a program that O'Neil managed. Personal development is an integral part of the MiL and LIM program designs. In one such program, a component of that personal development dealt

Table 2.1. Selected Principles for Action Reflection Learning™ Interventions

<i>"Nutrients" That Support Success</i>	<i>"Killers" That Contribute to Failure</i>
Top leadership acts in accordance with the vision and values of program.	Top management is not committed.
The power people structure, learn, and change.	The intervention is not interrelated with "the system."
The environment is one of trust, not one of fear.	Risks and mistakes are not tolerated.
The intervention engages participants' hearts, heads, and guts.	There is inconsistent, part-time participation.
The intervention supports authentic behavior in line with participants' values and beliefs.	The intervention is seen as a passing fad; that is, as "this too shall pass."
The program maximizes and respects diversity of all kinds through the mix of participants.	People who do not conform to the "right" corporate image are excluded.
Projects are built around real tasks of importance to the organization.	Projects are not seen as important to the business.
Facilitation is vital to the process.	The culture does not tolerate feedback.
A sponsor or champion is vital to the process.	Champions are not intrinsically motivated or are displaced.
The design team and participants are clear about the purpose of the intervention.	The intervention is seen as "stuff," separate events, not steps in a process, not strategically linked.
The company expects a curve in excitement, learning, and support.	Key players do not take the time to reflect, evaluate, redesign, renew.

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example, a brand of beer that was popular with consumers but produced by a competitor. Headquarters was distressed by the newly practiced autonomy of the store owners. The PTA helped the project group and Headquarters to examine the "waves" created and to see the gap that had to be closed between the perceived and actual intentions of Headquarters' framing of the problem.

The "waves" can come from individual action as well. At the start of any ARL intervention, there is a core of participants who begin to pave the way for those who will follow. These individuals sometimes take great personal risk as they begin to push against the system. A participant of one such team described

The ensuing discussion brought to light that some team members were unprepared to deal with ambiguous situations. Although the organization espoused an environment that supported risk taking, the reality, as perceived by those team members, was that of punishment for straying from the status quo. This disclosure prompted other team members to begin to examine the unintended consequences of this theory-in-use. Not only was it stopping progress on their ARL project, but they realized that it would hinder the organization in finding new and innovative solutions and initiatives. As a result of this critical reflection, these team members recognized that they needed to explicitly encourage, acknowledge, and reward risk taking in their peers and subordinates.

Factors to Consider in Choosing ARL

The continuous learning cycle that we describe here is the basis of several of the action technologies that embody critical reflection (O'Neil, 1992). In ARL, the focus is first and foremost on the development and learning of participants. This focus differentiates ARL groups from task or problem-solving groups. However, tangible gains such as money saved or as innovative solutions to difficult challenges frequently result from project work, in part because the emphasis on learning encourages new insights as projects are reframed and seen in fresh perspective. In selecting ARL, an adult educator would be interested in a task-based intervention that involves a group of people in a real project of relevance to them all that could also be used as a springboard for learning about themselves, the learning process, team work, and organizational change.

Table 2.1 lists some of the factors that MiL and LIM have found to be key principles for ARL interventions. Some of these probably hold true for any change intervention. Others are unique to ARL, in part because of the critically reflective dimension of these programs, in part because ARL is aimed at systems change as well as individual development. Critically reflective managers are likely to challenge norms, which companies may not welcome, even if they have said that they desire such challenge, as Brooks (1989) found in her research. Adult educators who work with ARL programs—whether internal managers, human resources staff, or consultants to the organization—must be prepared to stand firm when an ARL program "makes waves." "Making waves" is, in a sense, its purpose. An ARL project group is a laboratory for larger-system change, which cannot take place without such challenges.

An example comes from a MiL project with a consumer cooperative that focused upon decentralization of authority to retail units. "Headquarters had framed the problem in terms of a lack of courage on the part of retail store owners, but the store owners said that . . . (mandated procedures, for example, budgets and regulations) did not allow them to take full control" (Marsick and Watkins, 1990, p. 62). The project group designed an experiment in which they stopped following mandated procedures that they believed were not cost-effective. They also ordered products that Headquarters frowned upon—for

a meeting in which she spoke out about her disagreement regarding an issue. The unspoken norms in the organization were to never disagree in an open forum. Her manager later confided in her that he felt the same way, but felt that he simply couldn't have said it. Her action at the meeting, small though it seems, helped to begin the ripples that eventually became waves. Neither the learning, nor the behavior change that can result from that learning, can take place if the environment is not perceived as a place that will be supportive.

As discussed earlier, an important differentiation of ARL is the balance between learning and doing. The doing side of the equation gets played out in the selection of the project work. In an ARL team that was part of a program O'Neil managed, the commitment of some members of a project team was negatively impacted when they perceived the project their group was working on was not of sufficient importance to the organization. The ARL program manager, and the PTA working with the team, spoke with the client about the concerns being voiced. The client responded with written and verbal support and assurance. Some of the doubts remained, however, and impacted the level of success achieved by the team. ARL works best when the client and organization understand the value that learning from "real," critical work provides to both participants and the organization, and are able to effectively relay their commitment to the projects to the participants.

Conclusion

ARL is an action technology that creates impact at many levels—the individual level, the team level, and the organizational level. At the individual level, it helps build competencies that enable business managers, and leaders in other settings, to address and solve complex problems in ambiguous environments. These individuals learn how to learn from the work in which they are involved on a daily basis and create their own management theories to deal with their changing worlds. At the team level, ARL provides competencies that enable individuals to effectively work in teams as both leader and member, competencies like the art of dialogue and the ability to provide constructive, meaningful feedback. At the organizational level, ARL teams solve strategic business problems, and through the competencies that participants gain at the individual and team level, they can positively change and shape their organizations. Although not always, companies often achieve significant gains to their bottom line as a result of ARL project team work. For example, one of the Mills client organizations uses ARL as its primary management development tool and funds the entire management development budget from project results.

Even more significant gains are realized when critical reflection is involved. As we have shown, individuals learn how to surface, examine, and question the beliefs and assumptions that influence their actions and decisions. They learn to value the power of reflection on action in order to learn and shape future actions. They recognize that in their constantly changing, com-

plex environment, it is no longer possible to know all the answers, but ARL helps them to learn to ask the right questions.

As a member of a team, through critical reflection, the ARL participant learns that other individuals may hold different assumptions and beliefs. This knowledge creates an awareness of the power of that diversity, and ARL provides the team with the competencies to help ensure these diverse opinions are raised and appreciated. At an organizational level, critical reflection in ARL provides the competencies to question and begin to effect changes in organizational norms. It provides participants with skills to compare actual behavior in their organizations against professed organizational norms, recognize when discrepancies exist, and take action to try to rectify the situation. Critical reflection helps to begin changes in organizational culture.

ARLs main focus early in an initiative is at the individual and team level. At these levels, individuals, and the teams in which they participate, are helped to gain the new competencies needed for their new environments. In addition, we believe that as ARL initiatives continue to mature, we can expect to see even greater impact at the organizational level.

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This chapter describes a Scandinavian form of action research that highlights co-researcher participation in design and decision making. This is a radical departure from traditional researcher-controlled research design and knowledge dissemination.

Democratizing Action Research at Work: A Scandinavian Model

Max Elden, Reidar Gjersvik

Programmatic action research (AR) aimed at democratizing working life in Norway began over three decades ago in the early 1960s, and with subsequent developments in Sweden and Denmark we can see the outlines of a Scandinavian model of action research. Originally the model was built on basic elements of action research as it was known in the United States. But it also incorporated other elements that reflect the focus on democratization, working life, and the Scandinavian context. Furthermore, in the last thirty years it has evolved substantially into something quite different from what it was in the early 1960s. While there was substantial similarity between the original model of action research in Norway and what is more generally known as action research, the new Scandinavian approach to democratizing action research at work has led to new research roles and methods.

The Scandinavian approach of "democratizing action research" at work cuts two ways. First, it explicitly and publicly aims at democratizing work life. In contrast to the United States where work life improvements are generated primarily from short-term profit motives, in Norway action research has directly supported and contributed to laws and national policies aimed at democratizing working life. Second, and more important for our theme, for action research to have a democratizing effect, the research process itself may have to be democratized. If the objective is to empower people at work, the way action research is done may be as important as whatever substantive findings are produced.

To explore these ideas, we must first clarify what we mean by action research and how it was practiced in the Norwegian Industrial Democracy Program (NIDP) in the 1960s. Despite the success of the NIDP's first four field