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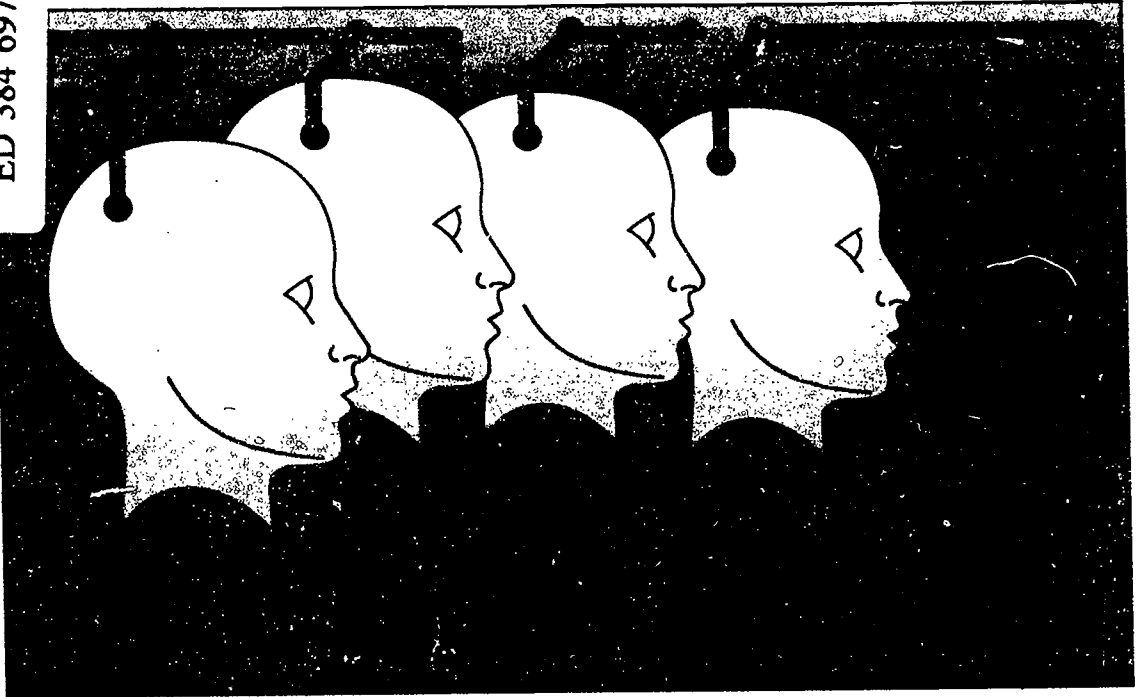
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ABSTRACT

This publication is part of the study materials for the distance education course, Adults Learning: The Changing Workplace A, in the Open Campus Program at Deakin University. The first part of the document examines the roles, skills, and methods used by facilitators of workplace learning in light of a social action view of learning. The following topics are discussed: the nature of learning (the sociological and other perspectives); learning in the workplace and a new model for learning in the workplace: learning in and out of school); human resource development (the changing workplace context, current status of human resource development in the workplace, and human capital theory); and strategies for facilitating learning in the workplace (facilitation methods, facilitator skills, interpersonal helping skills, action science, and steps in the action science process). The bibliography contains 45 references. The following papers constitute approximately 60% of the document: "Learning in the Workplace: The Case for Reflectivity and Critical Reflectivity" (V. J. Marsick); "Human Resource Developers: Producing Unintended Consequences" (K. Watkins); "A Critical Definition of Adult Education" (S. D. Brookfield); and "The Facilitator's Role in Adult Learning" (S. D. Brookfield). Concluding the document is a nine-item annotated bibliography. (MN)

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FACILITATING LEARNING IN THE WORKPLACE

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EEE700 ADULTS LEARNING: THE CHANGING WORKPLACE A
**FACILITATING LEARNING
IN THE WORKPLACE**

KAREN WATKINS



Deakin
University

This book forms part of EEE700 *Adults learning: The changing workplace A* which is one of the units offered by the School of Education in Deakin University's Open-Campus Program. It has been prepared for the *Adults learning: The changing workplace A* team, whose members are:

Richard Bates
Jill Blackmore
Mike Brown (chair)
Robin McTaggart
Helen Modra
Frances Patrick (unit developer)
John Smyth
Peter Watkins
Steve Wright

Consultants

Elaine Bernard Harvard University	Craig Littler Griffith University
Chris Bigum Deakin University	Jean McAllister University of Regina
David Boud University of New South Wales	Robert Priebe University of Regina
Sue Collard University of British Columbia	David Walker Education Centre, Sydney
Nancy Jackson McGill University	Karen Watkins University of Texas
David Little University of Regina	Michael Wolton Dalhousie University

The study materials include:

Elaine Bernard, *Technological Change and Skills Development*
Karen Watkins, *Facilitating Learning in the Workplace*
David Boud and David Walker, *Experience and Learning: Reflection at Work*
Jean McAllister, Robert Priebe and David Little, *Adult Learning in Vocational Education*

Further titles may be added to this list from time to time.

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SERIES INTRODUCTION

The nature and purpose of education in the workplace has been the subject of much debate in Australia in recent years. While the vagaries of local and international competition have led many firms to reconsider the role of their workforce and the training requirements this entails, governments have been equally keen to adapt existing education systems to the perceived needs of industry. Leading union bodies have been distinguished in this debate by their pro-active role, outlining the path by which a reconstructed industrial climate can win the nation a new place in the world economy.

The series of monographs of which this volume is a part explores the approaches to learning currently modeled within industry. In the process the question inevitably arises as to whether existing orientations and practices are in the best interests of the various stakeholders in the workplace.

The arguments developed in these monographs address themselves to a range of contemporary issues in industrial education. To date, prevailing approaches have rested upon narrow, instrumentalist notions of learning; in their different ways, the writers have set out to challenge this orthodoxy. In doing so, they highlight the silences—on questions of gender, class or ethnicity—that underpin the behaviourist outlook still dominant in the world of training.

In preparing this series of monographs, the course team has sought to address issues that are of fundamental concern to those involved in the complex and demanding field of workplace learning. It is hoped that, in its own modest way, the pedagogy we have developed can serve to exemplify a different notion of what industrial education might become.

FACILITATING LEARNING IN THE WORKPLACE

Introduction

Perhaps the largest current educational endeavour is that undertaken by individuals in organisations in an effort to improve their work-related performance (Carnevale 1984). And yet, only recently has there been an attempt to analyse and to examine the nature of learning in the workplace. Changing organisational contexts and new priorities have led to the possibility that learning will become part of the strategic initiative of the corporation, such that the knowledge possessed by employees will be seen as a critical component of that organisation's competitive edge. As this occurs, learning will increasingly need to be both formal and informal, individual and organisational, discrete and continuous. Organisations can no longer afford to leave the educational function to individuals who have little or no training. Rather, an increasingly better educated facilitator of learning in the workplace will be needed.

This monograph explores each of the key terms in the title: facilitating, learning and workplace and their relationship to each other. Definitions of learning from the behavioural to the sociological perspective are discussed in terms of their relevance to learning in the workplace. The roles, skills and methods used by facilitators of workplace learning in the light of a social-action view of learning are then presented. The nature of the workplace context, as well as the differences between learning at work rather than at school, help to distinguish learning in the workplace from other forms of learning. The field of practice of facilitators of workplace learning is currently called human resource development, a term which grows out of a human capital theory of the field. This theory is further delineated and critiqued. A definition of the field, an overview of practice and strategies to improve practice conclude the monograph.

The nature of learning

Learning has been defined by many different theorists, each ultimately reliant upon their own paradigm. This has led them to emphasise behaviour, cognitive fields and changes of insight, experiences and personal growth. Compare the following definitions of learning:

... *learning* always refers to some systematic change in behavior or behavioral disposition that occurs as a consequence of experience in some specified situation. (Estes 1975, p. 9)

This definition focuses on learning as behaviour change but also emphasises the role of experience as a trigger to learning.

Similarly, Ralph Tyler defined learning as:

... the acquisition of new patterns of behavior through experience. Behavior is used in this sense to include all kinds of reactions an individual is capable of carrying on. One can acquire a new skill, a new habit, a new interest, a new attitude, a new way of thinking, a new way of perceiving some complex phenomenon; all of these are illustrations of human learning. (Tyler 1976, p. 1)

He described learning as an instinctive, universal characteristic of all human beings, one without which we could not get through the first year of life. 'The problem of the educator is to stimulate and guide students in learning what is educationally valuable' (Tyler 1976, p. 2).

Learning is an active rather than a passive process. It is what learners do. Education is planned, self-conscious learning. Kidd (1973) emphasises that learning brings about change in the learner. The learner does something:

opens up himself (*sic*), he stretches himself, he reaches out, he incorporates new experience, he expresses or unfolds what is latent within him. The critical part of the process of teaching-learning is how the learner is aided to embark on this active, growing, changing, painful, or exhilarating experience we call learning. (Kidd 1973, p. 14)

Kidd notes that, although learning often seems to defy definition, we all know it when we see or experience it. He agrees with Smith (1982) that much of the confusion among definitions is that we use the term 'learning' to denote a product (what was learned—the outcomes), a process (how it was learned) and a function (what helps one learn, e.g. motivation).

Marsick (1987) emphasises that it is important for workplace educators to turn the focus of their attention from teaching to learning. Her argument grows out of her process definition of learning and her quarrel with a limited functional understanding of learning as a behavioural outcome of teaching. In fact, learning occurs as often despite teaching as because of it, and may include learning to resist teaching. Moreover, learning in the workplace has been predominantly defined in behaviourist terms, neglecting the cognitive field view, the interpersonal and contextual influences on what is learned, and the critical social science perspective (see Carr & Kemmis 1986). She therefore defines learning as:²

... the way in which individuals or groups acquire, interpret, reorganize, change or assimilate a related cluster of information, skills and

¹ McTaggart (1990, pers. comm.) notes that feminist literature contends that the use of the masculine pronoun in these early references may be gender blindness and yet also correct in the sense that current research, such as that on women's ways of knowing, is beginning to suggest that women may indeed learn differently. Perhaps a gender differentiated theory of learning may yet emerge.

feelings. It is also primary to the way in which people construct meaning in their personal and shared organizational lives. (Marsick 1987, p. 4)

Change is clearly central to this definition. Also by her use of the term 'the way', Marsick is signalling an emphasis on learning as a process rather than an outcome.

A view of learning which may combine process and outcome is that which evolves from an action frame of reference. Jarvis (1987) offered such a view of adult learning in the social context:

The model [his learning model] connects the process of human learning to the person, who may grow and develop as a result of a learning experience, may remain virtually unaltered, or may actually be harmed as a result of the experience of learning. ... It will also be noted that one of the outcomes of learning is a more experienced person, who might have new knowledge, a new skill, a different attitude, a changed self-concept, or any combination of these, which illustrates the complexity of human learning (Jarvis 1987, p. 24)

Jarvis conceived of learning as a process in which a person encounters a situation from which he or she may have learning reinforced but not changed; or, through practice and experimentation, the person may memorise new information, reason and reflect on the experience, evaluate it and ultimately be changed. The process may not occur in this order and may or may not result in real change or learning for the person. He defined learning as a transformation of experience into knowledge, skills and attitudes, which again emphasises process. Jarvis believes that the proper domain of interest to the educator is the process of learning; the learner is in control of the outcomes. Even this view remains individualistic, and does not yet explain the influence of the historical or social context on the consciousness of the learner.

Jarvis identified nine types of responses to a potential learning situation:

- 1 learning through the process of socialisation or presumption;
- 2 nonconsideration (when a learner is too busy to respond to the opportunity);
- 3 rejection (when a decision is made not to accept or pursue learning);
- 4 preconscious or incidental learning (learning which is accidental and tacit);
- 5 practice;
- 6 memorisation (committing new knowledge to memory with little or no reflection or evaluation);

- 7 contemplation or reflection;
- 8 reflective practice; and
- 9 experimental learning.

These types of learning may occur in isolation or in a kind of progressive sequence. All begin with an experience.

The sociological perspective, which partially undergirds Jarvis's work, is one which explains the learner or actor in terms of the socially negotiated way in which he or she makes meaning of situations or experiences. As one of the most salient features of learning in the workplace is that it is most often social or collaborative, this is an especially useful framework. The subsection which follows further defines this perspective.

The sociological perspective

In this view, organisations are seen as the outcome of the interaction of motivated people attempting to resolve their own problems (Silverman 1970). Silverman points out that people experience the world; things behave (p. 144). Meanings come to us from society and become institutionalised as shared orientations that are then passed on to later generations as fact. People also define society by reaffirming meanings in everyday actions. Through interaction, people change and transform meanings. It follows, then, that to understand human action we must determine the meanings which individuals assign to their acts. 'Man is capable of producing a world that he then experiences as something other than a human product' (Silverman 1970, p. 143). In short, the fundamental argument of the action frame of reference is that individuals are constrained by the way they socially construct reality. In terms of learning, what is learned is a direct consequence of the way the learner constructs or frames reality, a frame which is itself a social artifact.

Cohen (1968) defines social action as that which occurs when other actors are present and are taken into account when:

- 1 these others have the capacity to influence the conduct of the actor; and
- 2 the actor shares some expectations and possibly values, beliefs and symbols with them.

According to Cohen, therefore, a theory of social action consists of nine assumptions:

- 1 the actor's actions are in pursuit of goals;
- 2 action often involves determining means to achieve these goals;
- 3 actors have many goals; and actions taken in pursuit of one goal are affected by actions in pursuit of others;

- 4 this goal pursuit and selection of means occurs within situations which influence the course of action;
- 5 the actor makes assumptions about the nature of the goals and their potential attainability;
- 6 action is influenced both by the situation and the actor's knowledge of the situation;
- 7 the actor has ideas and ways of thinking which affect his or her selective perception of the situation and goal choices;
- 8 the actor has feelings and affective dispositions which affect both selective perception and goal choices; and
- 9 the actor has certain norms and values which govern the selection of goals and the ordering of them into a scheme of priorities (see Cohen 1968, p. 69).

Analysis of social action must take each of these variables into account. Individuals in organisations share meanings and the expectation that in their shared meaning will be a shared course of action. When their meanings change, the organisation changes. Thus, to move from individual action or individual learning to organisational learning is to move to an analysis of shared meanings. Of course, much organisational literature focuses on the by-products of a lack of shared meaning. Considerable learning is also found in debated meanings, in conflicting goals or priorities.

The implications of the action frame of reference for a theory of facilitating learning in the workplace include an emphasis on strategies which bring to the surface learners' understandings of their context, their learning tasks and the learning content. In recognising that shared meaning is collectively determined, the action frame of reference emphasises group and team strategies. Since actions are goal-oriented, the goals which underlie individual and collective action must be explored, and efforts to arrive at a shared vision or unity of purpose precede any attempts to make organisational changes or to learn new skills. Nevertheless, this is generally still an uneasy compromise as the needs of the organisation, the workers, women and other groups may or may not be incorporated into the vision. The goal context as well as the assumptional context within which actions are taken are significant antecedents to change. Learning from an action frame of reference is embedded in the actions learners take. Unlike behaviourism, which focuses on learning new actions or behaviours, this paradigm examines the reasoning and other antecedents which produce present behaviour, and seeks to transform the meaning of experience in such a way that new behaviour or action will result. Finally, learning in the workplace is social and much learning that is acquired is the incidental result of social interactions.

McClellan (1983) developed a social view of learning. In his view, individual learning is more social than atomistic. He cites the work of George Herbert Mead who viewed thinking as a kind of internalised conversation, and of Eric Ericson, who taught that growth depends on social exchange and mutual mirroring. He concludes that all social systems have learners and learners are social. Learners have 'lesson sets' or 'internalized ways to harmonize the elements of their experience' through which they produce society and which, in turn, are produced by society (McClellan 1983, p. 200). McClellan developed a complex depiction of the process of individual learning. He describes eight moments of interaction with others which influence the nature of the learning, particularly in terms of whether learning will alter existing knowledge or harmonise with the 'lesson set'. From interaction comes data, lessons others have learned, discussion, reality testing and communication, responses to our use of learning, the pressure of social standards which may reinforce or suppress the new learning and the opportunity to communicate the new learning to others.

What then do these views of learning have in common?

Common to most definitions of learning is the idea that something changes. Learning is something that goes on inside the learner which may be affected by what the facilitator does but not controlled by the facilitator. Learning, then, can be facilitated by encouraging learners to take action or to recall experiences which then become grist for critical reflection. Facilitation varies from that which is predominantly reflective or theoretical (as in formal academic settings) to that which is both active and reflective (as in informal or experiential learning situations) to that which is predominantly active (as in incidental learning) (see Marsick & Watkins 1990). Effective facilitation requires a sensitivity to the way in which the social context affects what is learned. Kemmis (1985) adds that reflection is also political. On the one hand, reflection is influenced by, and serves, particular social, cultural and political interests. On the other hand, reflection may actively transform the ideological practices at the basis of the social order. As such, reflection is a practice which expresses our power to reorganise social life.

Marsick and Watkins (1990) call on organisations today to focus on learning over and above training or teaching. Organisations need to function more like an organic or open system where the learning of one person or work group directly affects that of others (Mink, Schultz & Mink 1979). Learning becomes an interdependent, interactive, negotiated process. It is also frequently incidental, a by-product of interacting with others or of performing a task. This incidental learning lacks design or critical examination so skill in questioning tacit beliefs and an understanding of the historical, cultural and biographical antecedents of action are essential.

Learning in the workplace

Marsick, Mezirow and Brookfield (in Marsick & Watkins 1986) have developed a model for understanding learning in the workplace which conceptualises learning in terms of the three learning domains in Mezirow's concept of perspective transformation: instrumental learning, dialogic learning and self-reflective learning.² Instrumental learning is learning which is job focused and includes learning which is aimed at skill development or at improving an individual's productivity (e.g. training in time management). This is clearly the largest category of present efforts to facilitate learning in the workplace. Criticism of training as reductionistic or overly behaviouristic tends to centre on this aspect of learning in the workplace. Yet another perspective is that this type of learning is an essential component of any human resource development program. The problem is that it is often the only component. Moreover, it is short-sighted to assume that skills can be isolated from their cultural and biographical context.

Other types of learning identified by Marsick, Mezirow and Brookfield include learning about the organisation, particularly one's relationship to it. Thus training focused on commitment or job satisfaction, on team relationships, coaching, mentoring, role modeling or the philosophy, goals or mission of the organisation, are all examples of learning that asks individuals to enter into a dialogue with the organisation—to explore their interdependencies and shared visions. Self-reflective learning, their third level of learning in the workplace, includes all activities oriented toward understanding oneself in the workplace. Examples include learning activities which are either confidence building or undermining, competence building or undermining, involve socialisation to the organisation, deal with issues of authority, changes in personal values or beliefs and changing one's orientation toward a job (from one of putting in time, to 'my job is who I am', etc.). Those of you who are familiar with Habermas's theory of interests will have noted that this third level can be seen as a dilution of Habermas's third level which calls on us, out of the enlightenment acquired through the dialogue of the second level, to engage in political struggle. On the other hand, though not explicit, such a response might result from critical reflection on one's relationship to the workplace context. Each of these types of learning can be facilitated or can occur in an informal fashion with little reflection or scrutiny. It is interesting to note that this third level is stated in a passive form, in contrast to Mezirow's concept of perspective transformation. Marsick and Watkins (1990) emphasise that the new

² Mezirow's concept of perspective transformation grew out of his adaptation of the work of Jurgen Habermas to the practice of adult education.

workforce is increasingly calling on those who facilitate learning in the workforce to develop skill in designing learning activities which bring critical reflection to these less examined forms of on-the-job, tacit learning. As organisations make major transformations from predominantly hierarchical, bureaucratic structures, to predominantly decentralised, participative structures (which depend on an individual's initiative) centralised, formal training approaches (which emphasise behaviour alone rather than the reasoning that produces the individual's ongoing behaviour) will not be enough. Of course, current attempts to create a 'workplace democracy' are in their infancy and remain only questionably democratic. Yet, a new approach to learning in the workplace which questions and makes visible the authoritarian culture that has thus far held these workplace reforms at bay, and which teaches workers and managers how to enact a more democratic culture, may yet empower organisations to make these systemic changes.

A new model for learning in the workplace

Learning in the workplace has several unique features. First, it is usually task focused. Second, it occurs in a social context that is characterised by status differences and the risk of one's livelihood (versus the risk of short-term grades). Third, it is collaborative, and often grows out of an experience or a problem for which there is no known discipline or knowledge base. Fourth, it also occurs in a political and economic context characterised by a currency of favours and pay for knowledge. Fifth, learning in the workplace is also cognitively different from learning at school.

Learning in and out of school

Summarising the findings from a number of research studies, Resnick (1987) outlined four broad characteristics of mental activity, apart from those pursued in school, that contrast with typical school work. First, in school the emphasis is on individual cognition and achievement. Yet work, recreation and one's personal life all take place in a social context and each person's ability to function depends on what others do and on getting all of these individuals' mental and physical efforts to mesh. Thus, the emphasis outside of school is on shared cognition.

Second, pure thought activities characterise school while tool manipulation characterises out-of-school learning. The tools available shape cognitive activity. Tools enable a less well educated person to participate in activities which would otherwise be too complex and the highly educated to work well beyond their own capacity. The computer is only a more recent example of this phenomenon.

Third, contextualised reasoning, in which actions are intimately connected with objects and events, replaces the symbol manipulation found in school. Perhaps the best example of this practical reasoning is found in the work of Sylvia Scribner (1986). Scribner studied the use of mathematics knowledge by dairy workers and found that individuals used many ways of taking their knowledge of the dairy case sizes and physical space available to streamline or make their work more efficient. They would visualise the space available, use their knowledge of how many cases fill that space and add whatever number of cases remained. Similarly, de la Rocha (in Resnick 1987) observed Weight Watchers members' use of mathematics to solve problems in weighing and measuring the food portions permissible in their diets. One individual needed three-quarters of two-thirds of a cup of cottage cheese so he measured two-thirds of a cup, patted the cottage cheese into a pie on a plate and cut it into fourths, removing one slice. The individual never knew he was eating half of a cup, but he did not need to know it. In this way, rather than solving the problem using numbers and mathematical symbols, these individuals used one object within the problem context to solve the problem. Actions are thus 'grounded in the logic of immediate situations' (Scribner 1986, p. 15).

Fourth, in school, the prime objective is to teach generalised, widely usable skills while outside of school it is assumed that people must develop situation-specific competencies. Citing Morris and Rouse (1985), who found that training in electronics and troubleshooting theories provide few skills for actually performing electronic troubleshooting, Resnick concluded that:

... very little can be transported directly from school to out-of-school use. Both the structure of the knowledge used and the social conditions of its use may be more fundamentally mismatched than we previously thought. (Resnick 1987, p. 15)

Those with situation-specific skills do less well, however, than the educated generalists when the situation changes and they must learn new things. Corporate classrooms do not typically use the workplace itself as a learning environment so they share the same lack of transfer of knowledge found in schools.

Resnick calls for 'bridging apprenticeships' that use simulations such as computer simulation, tutoring, coaching and case-based teaching methods. In addition, out-of-school learning calls for special skills in learning when optimal instruction is unavailable. Work requires people to adapt when routines break down and to do this they must be able to step outside the situation. Individuals need mental models of how the whole system works in order to respond appropriately when the system breaks

down. Schools can teach people to be good adaptive learners. In her own study of effective programs to teach thinking skills, Resnick found that the better programs had features characteristic of out-of-school cognition in that they emphasised socially shared intellectual work. They had elements of apprenticeship in that they included teaching strategies which made usually hidden processes overt. They encouraged learner observation and discussion and allowed skills to evolve bit by bit, and even the unskilled participated throughout. The programs were organised around subjects rather than skills and these subjects engaged students in the construction and interpretation of meaning (see Resnick 1987, p. 18). In order to foster this out-of-school learning, a new field of education has emerged.

Human resource development

The field of practice of facilitators of learning in the workplace is called 'human resource development'. Its current title is an evolution from an earlier title of 'training' and a later title of 'training and development'. The current title reflects the movement from training as a largely short-term, skill-building, vocational function to the more human-capital notion of developing the human resources of the organisation. In this view, people are resources whose knowledge and skill add to the organisation's assets in the same way as other forms of capital in the organisation.³ This is a relatively new field that is mired in definitional controversy (Watkins 1989). Nadler (1984) defined human resource development as:

organized learning experiences in a definite time period to increase the possibility of improving job performance and growth. (Nadler 1984, p. 1.3)

Nadler differentiates between learning which is intended to improve performance in one's present job (training), learning to prepare an individual for an identified job in the near future (education) and learning for general growth not related to any specific job (development). These somewhat spurious definitions make clear Nadler's narrow notion both of the field and of education. Practitioners seldom make these kinds of distinctions and

³ This term objectifies and diminishes human potential. A more appropriate term might be 'workplace educator' or that used by David Ellerington of Esso, Canada 'capability developer'. In a few organisations, particularly hospitals, human resource developers are now called directors of education departments. Nevertheless, there is clearly no groundswell movement to change the term which may be a reflection of the prevailing human capital perspective of the field.

regularly find individuals in their training classrooms who are simultaneously preparing for a current and a future position. Nadler's definition of human resource development makes clear that, to him, the key differentiating characteristic of learning at work is its job relatedness.

Jones (1981) defined human resource development as:

the systematic expansion of people's work-related abilities, focused on the attainment of both organizational and personal goals. (Jones 1981, p. 188)

This definition suggests that human resource development should be systematic and interconnected rather than the haphazard, cafeteria-style training often found in organisations. This career development focus, which includes learning aimed at personal rather than only organisational goals, suggests a larger view of human resource development than does Nadler's definition.

In 1983, McLagan and Associates undertook a national study for the American Society for Training and Development to determine the roles and competencies of trainers. This study became the benchmark for standards of practice for facilitators of learning in the workplace. A second national study used forecasting and trend projections about those changes most likely to alter training and development practice in order to take a second look at roles and competencies (McLagan 1989). The new study defined human resource development as:

the integrated use of training and development, organization development, and career development to improve individual, group, and organizational effectiveness. (McLagan 1989, p. 7)

This definition again widens the field to now include organisational development. The McLagan study identified a 'human resource wheel' of eleven roles which together make up the human resource function in organisations:

- 1 training and development;
- 2 career development;
- 3 organisational development;
- 4 organisation-job design;
- 5 human resource planning;
- 6 performance management systems;
- 7 selection and staffing;
- 8 compensation-benefits;
- 9 employee assistance;

10 union-labour relations; and

11 human resource research and information systems.

These roles encompass both human resource development and human resource management. This distinction, however, is often academic at senior levels of practice in the field where individuals are highly likely to incorporate most of these eleven roles in their work or at least in their work histories. Moreover, the competencies identified were largely those that relate to training, implicitly suggesting that to the American Society for Training and Development, human resource development is still largely training. The 1989 study again led to a list of thirty-five competencies in four broad areas:

- 1 technical or functional competencies;
- 2 business competencies;
- 3 interpersonal competencies; and
- 4 intellectual competencies.

The competency model undergirding the study assumes that individuals have certain competencies—knowledge, skills, values and attitudes which they use to perform a variety of activities. These activities and other outputs may or may not be positive for the organisation or for learners. As a result, the study emphasised the development of quality outputs and ethical standards for practice. The model is distinctly behaviouristic in its view of learning in the workplace, with the clear implication that what a trainer does creates an outcome in a learner; a view not shared by the learning theorists emphasised here. Moreover, the subsumption of values under competencies is one of many questionable aspects of the conceptual framework of this study.

Watkins (1989) offered a definition of human resource development which again further enlarged the field:

Human resource development is the field of study and practice responsible for the fostering of a long-term, work-related learning capacity at the individual, group, and organizational level of organizations. As such, it includes—but is not limited to—training, career development, and organizational development. (Watkins 1989, p. 427)

This definition reframes the role of the human resource developer from the behaviourist mode implicit in the Nadler and McLagan definitions to a more transformative or critical pedagogy in which the human resource developer works to enhance individuals' capacity to learn, to help groups identify and eliminate barriers to learning and to help organisations create a culture that promotes continuous learning. The definition is strongly influenced by Argyris's (1970) theory of intervention. Intervention is entering

'into an ongoing system of relationship, to come between or among persons, groups, or objects for the purpose of helping them' (Argyris 1970, p. 15). Using the language of therapy, Argyris stressed that the system as a whole must always be regarded as the client, regardless of where one initially intervenes. The interventions must, over time, provide all members with opportunities to enhance their competence and effectiveness. It is this system-wide conception of the individual acts of human resource developers which produces the focus on the long-term learning capacity of individuals, groups and organisations. This, the broadest conception of the field, incorporates not just areas of practice or job-relatedness, but also 'practice toward what?'

Argyris drew on the work of his former teacher, Kurt Lewin, who taught that research should not only solve social problems but also lead to direct action. For Argyris, modern bureaucratic organisations may be unhealthy for people. In Habermas's terms, there is a false consciousness that exists under the surface, a 'theory in use' in organisations that is authoritarian and competitive. This contrasts with the espoused goals of participation in decision-making, justice and democratic forms of organisation. In order to transform organisations, this underlying ethic must be made explicit, challenged against the internal beliefs of the members of the organisation and altered to conform with the explicit ethic espoused by the organisation's members. The 'toward what' in this definition is a call to extend the learning capabilities of people and organisations. This will require a fundamental restructuring of the learning relationship toward mutuality and democracy. The changing workplace context demands a bolder view of the role of facilitating learning in the workplace.

The changing workplace context

A number of authors have studied trends and changes in work and in the workplace which affect the practice of human resource development. The McLagan study (1989) examined thirteen trends which will affect learning in the workplace:

1. Increased pressure ... to measure workforce productivity ...
2. Increased pressure to demonstrate the value ... of HRD services ...
3. Accelerated rate of change and more uncertain business environment
4. Increased emphasis on customer service and ... quality
5. Increased sophistication ... of tools, technologies ... in HRD
6. Increased diversity ... of the workforce
7. Increased expectations for higher levels of judgment and flexibility

in worker contribution ... more creativity, risk-taking, and teamwork ...

8. Increased use of systems approaches that integrate HRD systems and technology ...
9. Business strategies that concentrate on human resources and require strategic HRD actions
10. Changed emphasis in organizations from loyalty to merit ...
11. Globalization of business ...
12. Increased need for ... meaningful work, and participation
13. Increased use of flatter, more flexible organizational designs ... (McLagan 1989, pp. 13-14)

These trends represent challenges to current practice. Today, training and development tend to be a fringe benefit, with learning constituting a reward for service or for loyalty; or a form of organisational socialisation, with learning consisting of learning 'the Telecom way' (Watkins 1990). More and more, learning is essential to enable the workforce to perform increasingly complex and changing tasks in increasingly complex inter-dependent contexts. Perelman (1984) suggested that:

Virtually the entire adult population needs retraining and new learning to be economically productive. A fifth of the present adult population is functionally illiterate. Most of the rest—including skilled workers, managers, and professionals—have knowledge and skills that technological change is rendering obsolete ... The emergence of a knowledge-based economy requires a new synthesis of the functions of training, education, and other forms of communication and learning under the single umbrella of the *learning enterprise*. (Perelman 1984, pp. xvi-xvii)

Current status of human resource development in the workplace

It is estimated that in the United States more than 250 000 people work full-time as human resource developers and over 700 000 people practice training and development in the workplace part-time (Rothwell & Kazanas 1989). Total dollars budgeted in the United States in 1989 for formal training were \$44.4 billion to serve approximately 35.5 million people. Another \$9.37 billion was used for outside expenses, including seminars, computers and packaged training programs. The highest average expenditures per employee for training are in the transportation, communication and utilities industries while health services spend the least (Oberle 1989). These figures were obtained in the United States, but are probably typical of other Western, technology- and information-oriented cultures. The trend is in-

creasingly clear that learning in the workplace is a growing field of practice and that the learning of the workforce is perceived to be a profitable investment by employers. The theoretical perspective implicit in this perception is human capital theory.

Human capital theory

Human capital theory refers to:

the productive capabilities of human beings that are acquired at some cost and that command a price in the labour market because they are useful in producing goods and services. (Parnes 1986, p. 1)

Education is seen as a major means for organisations (and individuals) to increase the net worth of the workers' skills and abilities. In a trend study based on a broad sample of industries and organisations, which used econometric modeling, Carnevale (1984) found that workplace learning and formal education accounted for more growth in economic output than employee health, capital, the composition of the workforce, population size or resource adaption. In fact, he found that workplace learning accounts for eighty-five per cent of the variance in lifetime earnings.

This finding is similar to that of Lillard and Tan's (1986) Rand Study which was based on measures of reported training from the current Population Survey, three cohorts from the National Longitudinal Surveys and the Employment Opportunities Pilot Projects Survey. The study sought a comprehensive picture of who gets private sector training in the United States and to determine its effects, especially in terms of long-term earnings and employment. Lillard and Tan found that, overall, employer-sponsored training had the most significant and persistent impact on increasing individuals' earnings; an effect that persisted for over thirteen years (Lillard & Tan 1986, p. 69). But these effects differ for different groups. Women receive disproportionately less company training than men and the economically disadvantaged receive the least training, especially from employers. The themes in Lillard and Tan's research are that company training makes a clear and significant difference in an employee's earnings and employment prospects, but access to that training may be discriminatory. It is possible that older workers are retrained only when there is a high national rate of unemployment and it is more economical to retain an older worker than to train a new employee. Finally, those who work intermittently or frequently change jobs receive less training over the life cycle. It is clear that the human capital benefit of employee training is enormous and equally clear that a segment of the workforce is denied access to it.

Critics of human capital theory see this last finding as an inherent flaw

in a capitalist economic structure with its attendant structuring of advantage and disadvantage according to race, gender and social class. They suggest that these inequities may lead to lower morale and thus lower productivity despite training, or to the use of training as a vehicle for suppressing the aspirations of the disenfranchised (LaBelle 1988). These concerns suggest that those who facilitate workplace learning have an obligation to provide learning opportunities for otherwise marginalised individuals. More importantly, most human resource developers are as interested in what training can do to enhance people's morale as they are in what it can do to enhance profit. People, unlike other capital goods, are able to think for themselves and to choose learning that enhances the quality of their lives. Still, at present, most workplace educators appear to embrace the human capital framework and remain unaware of their complicity in sustaining inequity, despite an emerging fad of workshops on empowerment.

Strategies for facilitating learning in the workplace

Facilitation methods

Still the most popular format for facilitating learning in the workplace is the seminar or workshop format. In 1986, a study by *Training* magazine found that almost seventy-seven per cent of the total training effort in organisations was in the form of seminars or workshops (quoted in Rothwell & Kazanas 1989). Topics varied from new employee orientation to safety training. The five most common topics that year were new employee orientation, performance appraisal training, training to use new equipment, leadership training and time management. Least common were foreign language and reading skills training—two areas which today are considerably more common in organisational training programs with an increasing awareness that the workforce is both global and too often illiterate. However, self-instruction, which made up the other twenty-three per cent of the total training effort, had increased by seven per cent from the 1983 industry report.

Carnevale (1984) has argued that employers spend \$210 billion per year on training with a full \$180 billion on informal training or on-the-job training. Yet Jacobs (in *Training Directors' Forum Newsletter*, 1987) has illustrated that this \$180 billion may be a cost to the organisation that can be reduced by training. In a study of on-the-job training, he found that it is possible to reduce the amount of time it takes for a worker to learn to operate a new machine from twelve weeks to two weeks by developing a structured

on-the-job training program. The task for learning in the workplace is to develop new strategies to enable workers to use job experiences for more effective learning.

One study of how executives learn from experience is that conducted by McCall, Lombardo and Morrison (1988) of the Center for Creative Leadership who suggest that the breadth of experiences available for learning can be consciously extended. They found that managers learned most from hardships, challenging assignments and from other people. Marsick and Watkins (1990) also found that mistakes are especially potent learning experiences as are novel or unique experiences. On the other hand, when experiences look or feel like previous experiences or childhood memories, learning is often suppressed and automatic and 'here we go again' responses are triggered. Strategies to enhance informal and incidental learning in the workplace should include not only ways to encourage the breadth of work experiences (e.g. taking on difficult projects or systematically widening and deepening one's personal network), but also ways to create low-threat opportunities to use past mistakes as learning opportunities. Informal learning can also be enhanced by groups of peers coming together to inquire critically into the effectiveness of their practice and to consider alternatives to their habitual responses.

Facilitator skills

What are the skills required of facilitators of workplace learning? Mink and Watkins (1981) assert that there are two kinds of skill: first, those which are related to the role and which have been well researched by the American Society for Training and Development (as well as by many other groups) and second, those which cause the facilitator to be competent in each of the other roles (McLagan 1983 & 1989). These causal competencies are the most important skills to develop. They identified two causal competencies for facilitators of workplace learning: interpersonal helping and change agent skills.

Interpersonal helping skills

These skills have been studied by a number of different scholars. Sidney Fine (in Short 1976) identified a number of skills in adapting to others which characterise effective facilitators of learning:

- 1 having appropriate relationships with authority;
- 2 giving and receiving feedback clearly and cleanly;
- 3 the ability to state one's emotional states accurately and non-defensively;

- 4 awareness of one's impact on others; and
- 5 congruence between one's words and actions.

Five clusters of behaviourally grounded competencies were identified in another study of effective teachers and mentors in degree programs for adults (Schneider, Klemp & Kastendiak 1983). Most significant among their findings were that those who were perceived as highly effective saw themselves as facilitators of student learning rather than as experts transmitting information. All of those rated highly effective had a high level of positive regard for students both as people and as learners, while the single most important characteristic of those rated less effective was the expression of negative attitudes toward students or groups of students. Interpersonal empathy and positive regard appear to characterise effective helpers.

Action science

One of the most comprehensive theories of interpersonal helping is the theory of interpersonal action developed by Argyris (1970 & 1983) and Argyris, Putnam and Smith (1985) known as action science. Action science merges interpersonal helping and change agent skills. It evolved from action research as developed by Kurt Lewin. Both action research and action science are organisational development approaches aimed at bringing about organisational change. Action research grew out of the assumption that developing data (the facts of the context) would lead to a destabilisation of the dynamic equilibrium present in people, groups and organisations. By collecting data around a social or organisational problem, and then feeding it back to the organisation, the need for change would be created while the direction of that change would also be self-evident. Reflection on problems in groups that include members of the client organisation, the collection of data around these problems, group analysis and group feedback, group-designed interventions to solve the problem and an iterative process of intervening followed by further reflection and the design of new interventions are hallmarks of the Lewin-invented action research team.⁴

More common in Australia, Great Britain and Scandinavia is another variant of action research—action learning. Action learning is used very often as a management development activity in which managers work on real problems in organisations to learn to challenge their assumptions and to enhance their skills. The methods are similar to those in action science, but the emphasis is clearly more on learning. In action learning, there is an

⁴ For a much fuller discussion of action research, see Kemmis and McTaggart (1988), *The Action Research Planner* and Kemmis and McTaggart (1988) *The Action Research Reader*.

assumption that what prevents people from changing is a lack of the necessary skills, especially those required in challenging pet assumptions and through critical reflection. According to Revans (1982), such skills are best developed by 'unfreezing' individuals by placing them in situations that most action researchers are in—that is, situations in which they must solve real problems in real contexts and in which the success or failure of their efforts is known and highly visible (i.e. public). Group reflection is again a hallmark. Action learning teams often add an element of strangeness to heighten critical reflectivity by letting groups solve problems for departments and organisations of which they are not a part and of which they have little prior knowledge. This type of group is quite different from action research in that it is largely a problem-solving group. As such it lacks the defining characteristics of action research that come from Lewin. Carr and Kemmis (1986) note that Lewin's concept of action research included not only a cyclic process of planning, acting, reflecting and generalising, but also was characterised by participation, a democratic impulse and a simultaneous contribution to social science and to social change.

Action science adds the idea that we can have a science of interpersonal action which Argyris depicts as 'Model I' and 'Model II'. In other words, there are things we know about human interaction that are repeatably true and thus generalisable, and some of these characteristics create barriers to the implementation of change. Model I is a control or win-lose oriented approach which leads to single loop learning. Model I values include defining goals and trying to achieve them, maximising winning and minimising losing, minimising generating or expressing negative feelings, and being rational. This stance leads to unilateral strategies of control and self-protection which tend to solve only immediate problems. Model II is a learning or collaborative approach which permits long-term problem solving. Model II values, according to Argyris, are seeking valid information, giving free and informed choice, and seeking internal commitment to the choice coupled with constant monitoring of its implementation. The characteristics depicted as Model I are learned, highly skilful responses to threats and are intervenable by action scientists. The values and strategies characterised by Model II can also be learned. They reflect the underlying ethic of medicine and psychology and suggest that change is most effectively introduced when these ethical standards or norms are maintained through strategies of mutual inquiry, creating situations in which people have influence, joint control and reciprocity. Moreover, in learning to intervene in a way that transforms people and organisations so that deliberate ongoing change is possible, we are also adding to the knowledge base and may create a new science or theory of interpersonal action.⁵

⁵ Argyris stresses that change is often introduced in a manner that makes it less likely that future changes will be successful. Effective change facilitation is that which increases the change-making and problem-solving capacity of a system.

Action science begins with the sociological perspective offered earlier of human beings as designers of their actions in the service of achieving consequences. They make sense of their surroundings by constructing meanings, both cultural and individual, of their environment. It is these constructed meanings which, in turn, guide action. In this vein, behaviour is evaluated for consistency and validity against those internalised belief and meaning systems that individuals hold.

Designing action requires that a person to develop a set of personal causal theories to describe and predict their world. These causal theories are termed theories of action and there are two types. Espoused theories are those which individuals claim to follow and theories-in-use are those which can be inferred from action. Thus, people hold two sets of theories: one set about what they say they do and one set they actually use. The espoused theory and theory-in-use may or may not be consistent, and an individual may or may not be aware of the inconsistency. While the espoused theory is conscious, the theory-in-use is most often tacit. A goal, then, of action scientists is to discover theories-in-use, particularly ones which inhibit or promote learning.

The general model of action science is depicted in Figure 1.

Figure 1

Governing Values —————> Action Strategies —————> Consequences

Governing values are those internalised values held by individuals and by cultures. *Action strategies* are used in order to enact governing values, and they have *consequences* for learning. When consequences are unintended, there may be a mismatch between action strategies and governing variables. Action science espouses two types of responses to mismatches. The first is single loop learning, in which action strategies are adjusted or changed. Admittedly, much of human behaviour is single loop learning; individuals search for different behaviours or strategies in order to cope with perceived failure. Single loop learning is associated with a win-lose orientation, short-term gains and a desire to control. Often failures will continue because the solutions are based upon these undiscussable control-oriented governing values which are counterproductive and a kind of false consciousness. Action science suggests that it is the attribution that people will not change or that situations are immovable without public inquiry and testing of these assumptions that leads to single loop learning.

Double loop learning involves the examination and questioning of governing values, not merely the adjustment of behaviour. Thus, double loop learning incorporates critical reflection upon one's values and beliefs. The goals of double loop learning are to facilitate free and informed choice, valid information and high internal commitment. A skill of the facilitator of

workplace learning, then, is learning how to enact the norms of double loop learning. In addition to acquiring skills of reflection, the action scientist must be willing and able to communicate his or her learning. It is public reflection on dialogue which creates an environment conducive to double loop learning.

Steps in the process of action science

Action science holds that talk is a basic and important form of social action. It is the raw data for the action scientist—the primary window into people's actions, values and beliefs. The first step in action science is to collect data in the form of cases (involving dialogue and the thoughts and feelings of the case-writer which were not expressed in the problematic interaction—see the Kingsley case in Reading 2). These are then presented to a learning group. The group's task is to identify the feelings and thoughts of participants as they process the case and to discuss the impact they make on the actor in the dialogue. They identify attributions and evaluations made by participants in the case (if they are present) as well as any expressed in the process of working through the case material. The facilitator of an action science group has to learn to slow the process down and to stay in the here-and-now. The focus of analysis is on the inferential leaps participants make in drawing conclusions from the data. They gradually work from the directly observable data (dialogue), to agreed cultural meanings of the dialogue (including other possible interpretations of what was said), to theories of action held by the case writer. The themes in the case are expressed in a map of the social action which includes the values that appear to govern the action strategies seen in the case. The map depicts governing values, action strategies and consequences. Action science is a form of action research which is particularly useful not only as a strategy to use within organisations to bring to the surface problems which impede efforts to bring about change, but also as a form of critical reflection which can greatly enhance the facilitator's capacity of learning to improve his or her own practice.

Conclusion

This monograph has presented a brief overview of an emerging field of practice. There are now over two hundred graduate programs offering degrees in human resource development. As the field grows, our knowledge of effective practice has also grown. This monograph has offered both an overview of the field, and a number of tenets about effective practice for facilitators of workplace learning. A summary of these principles follows:

- 1 *The workplace is a social context.* The workplace as such calls on the learning facilitator to emphasise group or team strategies for learning and to explore socially determined learning.
- 2 *Learning from an action frame of reference is embedded in learners' actions.* Skill in bringing to the surface the implicit meaning of learners' actions and understandings of the learning situation is essential.
- 3 *Learning is an internal process which facilitators may influence but not control.* Learning must be more of an interactive, dialogic process, negotiated and collaboratively designed with learners.
- 4 *Learning in the workplace is cognitively different.* As a result of this difference, facilitators of workplace learning may want to use strategies which are more like apprenticeships, coaching and case strategies.
- 5 *Facilitators of workplace learning need to take a long-term view of their role.* Rather than focus on strategies which change behaviour, but do not challenge the reasoning which created the previous behaviour, facilitators need to explore approaches which allow them to help individuals, groups and organisations increase their learning capacity.
- 6 *Learning in the workplace increases individuals' value both personally and organisationally.* Facilitators must ensure that everybody in the workplace has access to these learning opportunities, particularly those who have been traditionally marginalised.
- 7 *The task for facilitators in a turbulently changing workplace is to make learning continuous.* Strategies which use job experiences for learning will be especially effective.
- 8 *Learning facilitators should incorporate both formal and informal strategies.* Formal strategies are predominantly seminars and workshops. Informal strategies range from self-instructional materials, to on-the-job training, to creating low-threat opportunities to learn from mistakes.
- 9 *Interpersonal helping skills are the core of effective practice.* Interpersonal empathy and learner-centered, positive regard characterise effective facilitators of learning in the workplace.
- 10 *Action science is an effective process to improve continually one's practice as a facilitator of workplace learning.* Through a process of critical reflection, individuals learn together to examine continually what they say or do that may impede learning. Similarly, the same process allows them to work with others in the organisation to look at how they may be inadvertently impeding efforts to bring about change.

Of course, this is not an exhaustive list, yet the principles do suggest an agenda for action. In the end, there is no formula that will make an effective helper, but it is clear that what a helper believes about people, about learning and about power is at least as important as what he or she does. In these pages, I have explored the idea that the context in which that learning occurs is equally significant. One is left with an understanding of the facilitation of learning in the workplace as less a matter of strategy or method and more a matter of beliefs.

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READINGS

LEARNING IN THE WORKPLACE: THE CASE FOR REFLECTIVITY AND CRITICAL REFLECTIVITY

V.J. MARSICK

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ABSTRACT

Learning in the workplace has traditionally been understood primarily in terms of behaviorism, a perspective compatible with the machine-like design of organizations when training and development emerged as a field of practice. Adult educators have not challenged the desirability of that perspective directly, although various theorists suggest its modification through greater learner participation, problem-centeredness, experience-basing, and concern for different learning styles. This article raises questions about the universal valuing of behaviorism in workplace learning based on a review of trends in organizations in the post-industrial era and analysis of theorists within and outside the field who emphasize the importance of reflectivity and critical reflectivity in learning. The author then describes emerging characteristics of a new paradigm for understanding workplace learning and concludes with a discussion of its limits.

Workplace training and development is a field of practice that is rapidly moving toward an identity of its own. The American Society for Training and Development (ASTD) (1986) notes that "employee training is by far the largest delivery system for adult education" (p. 7). ASTD estimates that approximately \$30 billion is spent annually by employers for formal training and \$180 billion for informal training, while the Government spends an additional \$5 billion for training.

While adult educators often lay claim to the professional preparation of trainers, many such programs are based on theory from a variety of disciplines other than adult learning (ASTD, 1981). If any discipline has dominated theory-building in training, it has been psychology, particularly the school of behaviorism (Goldstein, 1980). This article questions this continued primary reliance on behaviorism. It argues that behaviorism does not foster the reflective abilities needed to assist people at all levels to learn in the workplace, particularly in their informal interactions, although such training might successfully develop specific skills.

The article begins with a brief description of how behaviorism manifests in workplace training as well as a discussion of some modifications by adult educators. The next section is a review of trends in organizations that suggest the need for a new paradigm for understanding workplace learning in the post-industrial era. Scholars concerned with learning that emphasizes reflectivity and critical reflectivity are then examined in terms of their "fit" with workplace learning. Finally, the author discusses the emerging characteristics and limits of a new paradigm for workplace learning.

VICTORIA J. MARSICK is assistant professor, Adult and Continuing Education, Teachers College, Columbia University.

BEHAVIORISM AND SOME MODIFICATIONS

Most descriptions of, and prescriptions for, workplace learning are based in a behavioristic paradigm. The term "paradigm" is here used to mean a fundamental world view that influences the way in which its adherents define reality and locate and solve problems within it. Behaviorism, while interpreted somewhat differently by its adherents, is defined as that educational philosophy which emphasizes environmental conditioning of responses. Marsick (1987) summarizes characteristics of the current behavioristic paradigm for workplace learning as follows:

1. It is behaviorally-oriented with performance outcomes that can be observed, quantified and criterion-referenced.
2. Personal and work-related development are separated.
3. The organizational ideal for which training is designed is a well-functioning machine with clear, hierarchical lines of authority, jobs that do not overlap, and rational systems of delegation and control.
4. Training is designed to meet needs of individuals, not groups.
5. Learning is designed on a "deficit" model that measures individuals against standard, expert-derived norms.
6. Problem-solving emphasizes objectivity, rationality, and step-by-step procedures.
7. Training typically consists of classroom-based, formal group activities.
8. Trainers focus on "pure" learning problems, with support provided to the organization to manipulate the environment to sustain outcomes. (pp. 1-2)

Some training models depart from this purely behavioristic paradigm. Two examples are andragogy and experiential learning. Andragogy (Knowles, 1980) departs from the behaviorist paradigm in that the learner takes a more active role in controlling learning objectives and the means to attain them. Andragogy is increasingly used in workplace training design, although there is, to date, little empirical evidence assessing its usefulness in business and industry. Another modification is experiential learning theory with its concern for differences in learning style (Kolb, 1984). Kolb's work also departs from behaviorism in that it is first concerned with the experience of the learner, not the intent of the experts designing the activity. Knowles and Kolb have substituted a degree of learner-centeredness for the expert control of behaviorism. However, the trainer using these models seldom advocates substituting learner preferences for those of the organization.

The behavioristic models of practice developed as the field emerged to meet the needs of organizations after World War II were based on a production orientation unlike today's service economy, an educational level of the workforce far below today's norm, and technology considered primitive by today's standards. Much of the early theory came from military experience prior to guerrilla warfare, and was well-suited to organizations whose predominant mode of operation might be described by the metaphor of a machine (Morgan, 1986). Characteristics of the social organization of the workplace included logic, rationality, linear cause-effect relationships, clear demarcation of responsibilities, hi-

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erarchical control, and forged unification of the movement of parts into a whole which minimized duplication and overlap. In tandem, training was developed to prepare people for machine-like work according to their levels in the hierarchy much as in an assembly line. Workers' deficits would be systematically filled or fixed as they passed along the organizational conveyor belt until they reached the point where the organization decided they could go no further. They had either acquired the prescribed skills to fill the prescribed slot or were matched to a different line to which they were considered more suited.

Two points must be made about the behaviorist paradigm before proceeding with a discussion of an alternative viewpoint. First, there are times when behavioristic training is entirely appropriate to the task at hand, particularly when workers are learning a precise technique that allows no variation. As will be argued later, however, even in these cases there are often good reasons for mediating this instrumental focus. Second, alternatives to the behaviorist paradigm have always existed, particularly in management development or organization development (OD) where answers are not as clear-cut (e.g., interpersonal communications, team building, decision making in a turbulent environment, group dynamics). OD has based much of its learning design on the action research strategies of Kurt Lewin, a philosophy of pragmatism grounded in John Dewey's experiential learning, and on a systems approach. However, trainers have never fully adopted these strategies for learning, perhaps because their mandate does not typically extend beyond instruction to the wider-scale organizational interventions advocated by OD.

Behaviorism has thus become a dominant force in workplace training. The next section reviews changing trends in organizations that challenge this perspective in the post-industrial era.

CHANGES IN ORGANIZATIONS

A group of popular writers have examined trends and pockets of innovation in successful businesses: entrepreneurship and intrapreneurship, decentralization, networking, participatory management, flattening of middle management, and a culture of empowerment (Kanter, 1983; Naisbitt & Aburdene, 1985; Peters & Waterman, 1982; Toffler, 1985). While each holds a somewhat different focus, these authors collectively call for new forms of organization if business is to survive and flourish in this post-industrial technological era. At the heart of their arguments is concern for *intangible* factors not always factored into the bottom line: human values, new forms of social interaction, commitment, a service orientation, risk-taking, independent thinking, integration among units within the organization as well as in external interfaces, and creativity. These authors essentially argue that productivity must be redefined; short-run profit taking must be mediated by a longer-term perspective on productivity that capitalizes on the creativity of its human resources.

Pressures to change come from both the external world of business, particularly the technological revolution and the increase in international competition, and the nature of the workforce itself. Carnevale and Goldstein (1983) highlight some of these factors: the impact of the baby boom and of women entering the

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market in large numbers, a larger pool of both more highly-educated white middle class workers and less well-educated minorities and immigrants, and the mid-career glut.

Change, however, requires far more than tinkering with the latest management fad, re-writing policies and procedures, or providing a training course in techniques, as both advocates and critics learned with respect to Japanese models of management. Change requires a fundamental shift in thinking. Lincoln (1985) suggests that, in fact, a paradigm revolution is taking place in almost all fields of human endeavor. She draws on the analysis of Schwarz and Ogilvy (1979) of many formal disciplines to highlight the following characteristics of such a shift: from simplicity to complexity, from hierarchy to heterarchy, from a mechanical model to a holographic one in which people can play multiple roles (just as the whole can be recreated from any of its parts in the laser-created photograph called a hologram), from predictability to ambiguity, from direct to mutual causality, from planned assembly of complex systems to their spontaneous creation through interaction, and from objectivity to an awareness of multiple perspectives.

To summarize, organizations are changing rapidly due to changes in the external environment, technology, and the workforce. New models are required to understand, function within, and learn in today's organizations. These models suggest a move away from the mechanistic orientation which fostered and encouraged tightly controlled behavioristic learning. In order to develop a new model for understanding workplace learning in the organization of today and/or tomorrow, the next section reviews learning theorists who advocate reflection and critical reflectivity in practice.

LEARNING THEORY AND THE WORKPLACE

Carr and Kemmis (1983) also analyze paradigm shifts, their focus being teaching and learning. They identify a dominant technical paradigm based on logical positivism. Practitioners under this paradigm are urged to master and apply an objective body of knowledge, developed over time through controlled experiments and theory building. Education under this paradigm emphasizes transmission of pre-defined knowledge and skills. The role of the educator is to select the best technology to meet these ends.

One alternative to this technical emphasis is the interpretative paradigm, derived from humanism and phenomenology, in which learning is seen as a process of interaction leading to a better understanding of the meaning of experiences. From this viewpoint, education is a practical art in which the educator makes judgments based on his/her experience about how best to facilitate learning in personalized situations. While Carr and Kemmis find this paradigm more suited to learning in today's organizational contexts, they develop a third paradigm that goes one step further: the strategic paradigm, influenced by the critical social science of Habermas. Habermas (1971) suggested people learn differently when they pursue tasks than when they learn social norms or try to understand themselves. Key to learning in this paradigm is understanding the way in which social, cultural, historic, and economic forces shape meaning, and through this understanding, becoming empowered to act on these forces.

Yet training frequently emphasizes job-related knowledge and skills as if it is possible to divorce them from the rest of the worker's life. However, for learning to be effective, one must consider two deeper levels in which job skills are embedded: the social unit that shapes the individual's reactions at work, i.e., the organization and the immediate work group; and the individual's perception of self vis-a-vis the job and organization. Thus, learning for organizational productivity cannot be separated from learning for personal growth, as is often done. Nor can the burden of change be placed primarily on the individual in isolation from the organization.

Mezirow (1981, 1985) has developed a theory of learning, based on the critical social science of Habermas, that simultaneously accounts for the need to develop job skills and the fact that this learning is intertwined with learning about the organization and the self. Mezirow differentiates among three domains of learning: instrumental, dialogic, and self-reflective. He notes that instrumental learning refers to task-oriented problem solving, dialogic learning to the way in which people come to understand consensual norms in society, and self-reflective learning the way in which we learn to understand ourselves. Instrumental learning is what commonly takes place when people learn how to do their job better, and is thus frequently the focus of technical learning. People identify a problem, formulate a hypothetical course of action, try it out, observe the effects and assess results. Learning is generally prescriptive.

Dialogic learning, however, takes place in work settings when people learn about the culture of the organization or when they interpret policies, procedures, goals and objectives. Self-reflective learning, in turn, is directed at personal change. Its emphasis is critical reflection about oneself as a member of larger social units in order to ask fundamental questions about one's identity and the need for self-change. This change usually involves a transformation in "meaning perspectives," which are integrated psychological structures having dimensions of thought, will, and feeling, and which represent the way a person looks at self and relationships.

Instrumental, dialogic and self-reflective learning cannot easily be separated in any given situation. This is perhaps most obvious in managerial training. Technique, while very valuable, cannot be slavishly followed when dealing with people and "psyching out" unspoken norms and rules that influence applications. Here, the manager must balance the technically correct solution with the humanly viable one. While it is true, for example, that managers need skills in delegating tasks, frequently the reasons for non-delegation are embedded more deeply in the culture of the organization that rewards individual achievement and visibility or in the individual's personal working style.

People become most aware of the connections among learning in all three domains when they become critically reflective; that is, they bring their "assumptions, premises, criteria, and schemata into consciousness and vigorously critique them" (Mezirow, 1985, p. 25). Critically reflective learners are continually sensitive to why things are being done in a certain way, the values these reflect, the discrepancies that exist between what is being said and what is being done, and the way in which forces below the surface in the organization shape actions and outcomes. Critically reflective learners will not automatically follow

an "expert's" recipe for solving what has been defined for them as a problem. They will determine whether or not they see the problem and proposed solution in the same way, probe the organizational context to ferret out facets of the culture that influence action, and attempt to understand how suggested solutions fit with their own image of themselves.

To summarize, all workplace learning cannot be explained by the technical paradigm. Some learning is best facilitated through interpretative strategies to assist people in understanding the meaning of their experience or through the strategic paradigm with an emphasis on changing consensual norms. By becoming critically reflective, people can better see the way in which task-related learning is often embedded in norms that also impact on one's personal identity. The next section further explores this concept of reflective and critically reflective learning from the perspective of workplace theory, particularly as it relates to the dynamics of informal learning.

INFORMAL LEARNING: REFLECTION-IN-ACTION

Being critically reflective means that one probes for assumptions, values and beliefs underlying actions. All learning in the workplace does not call for this depth of analysis, nor is it always encouraged or even tolerated. At the least, however, learning calls for some level of simple reflection, that is, the regular examination of one's experience to assess its effectiveness. While training can include reflection and critical reflection, it may be easier to examine these phenomena where they more naturally occur, that is, through informal learning while on-the-job. Training and education are delivery systems. By contrast, learning is the way in which individuals or groups acquire, interpret, reorganize, change or assimilate a related cluster of information, skills and feelings. It is also primary to the way in which people construct meaning in their personal and shared organizational lives.

Carnevale and Goldstein (1983) point out that a large percentage of learning takes place on-the-job (p. 37). A Honeywell study (Zemke, 1985) found that 50% of the ways in which managers learned to manage came from challenging job experiences, 30% from relationships with others in the organization, and only 20% from training (pp. 50-51). While important, training was helpful primarily when it was specifically timed to meet pressing job demands and because it increased the development of significant relationships with colleagues. These findings are reinforced by Kaplan, Drath, and Kofodimos (1985) in a study of effective executive self-development and McCauley (1986) in a literature review of managers' development.

There is less information on how people actually do learn informally. Schon's (1983) analysis of "reflection-in-action" sheds some light on this process. Schon critiques the relevance of scientific problem-solving models centered around "technical rationality" to the world of practice he calls "the swamp." In this world of practice, more attention must be paid to problem setting, an interactive process of naming the focus of our attention and framing the context in which a problem is understood. Schon depicts this process of problem setting as a reflective conversation with the situation in which the practitioner draws

his or her experience to understand the situation, attempt to frame the problem, suggest action, and then re-interpret the situation in light of the consequences of action.

Schon has worked with Argyris (1974, 1978) to develop the notion of single and double loop learning to explain what happens when people fail to produce desired results. In single loop learning, a person continues to try out the same strategy or variations on it, and continues to fail because his or her solutions are based in a set of undiscussible governing values that frustrate success, such as remaining in control and avoiding what are perceived as negative feelings. These values are tied to the culture of the organization and are counterproductive in part because they prevent critical inquiry into the reasons for failure. To get out of this bind, a person must get past the single loop into a double loop of learning—that is, become critically reflective and dig below the surface for the unstated values, assumptions, judgments, and attributions that govern one's actions and create the learning block. One must also become skilled at communicating this information to others as the basis for dialogue. Double loop learning is thus based on the generation of valid information, free and informed choice, and internal commitment to outcomes.

For example, a woman may find she typically fails to make her opinions heard in group meetings with male colleagues. She might conclude that the problem is a sexist attitude on the part of her colleagues. She may attempt to correct the problem in a single loop by asserting the authority of her position, but finds she still fails to achieve desired results. While the problem may indeed be her colleagues' attitudes, it may also be the result of other factors. Typically, however, neither party in the situation will explore the meaning of such an interaction. As Argyris and Schon note, in these situations, feelings are kept hidden and rationality invoked, in part out of embarrassment, and someone attempts to keep the situation in control so he or she can win. The result is a closed environment in which people cannot learn because too many strong feelings and opinions are kept undiscussible.

Single loop learning does not involve critical reflectivity, while double loop learning does. The latter also typically draws on all three learning domains described by Mezirow. In single loop learning, reflection takes place on the surface level of means and ends. In the above example, the woman learns instrumentally and in a single loop when she counters being ignored by asserting the authority of her position. Reflection in dialogic learning involves intersubjective agreement. The woman learns dialogically by attempting to understand norms governing the conversation, the most obvious of which might be gender roles. However, perhaps she has less seniority or is a non-engineer in a company of engineers. Self-reflective learning does not always cross over into the dialogic domain, but it is more powerful when it does because assumptions may be based on internalized, unexamined social norms. In the above example, colleagues might point out that her language is laced with question marks at times when she wishes to convey certainty or that her quietness is interpreted by some as an attempt to control. Self-reflection in the workplace, frequently prompted by unsuccessful behavior, is often linked to changes in instrumental action. In the above example, the woman might both watch her own style of delivery as well as

begin to inquire into the data behind assertions made by her colleagues in order to move the meetings more toward the ideal of exchange of valid information.

In summary, many training solutions are only partially successful in solving learning problems. Training may be divorced from the context in which people work. Even when steps are taken to assist in transfer of learning to the job, people are left much on their own to figure out how these skills relate to real-life problems. Workers need more than a set of techniques; they must be able to analyze a situation to determine the nature of the problem being addressed and derive their own solutions to these problems, often on-the-job. The next section builds on the above learning frameworks to address this need.

A NEW PARADIGM

If behaviorism is being challenged, what are the elements of a contrasting paradigm for understanding and designing workplace learning? This author suggests that a new paradigm is emerging that includes some of the following characteristics: a broadening of the instrumental focus of learning, integration of personal and job-related development, an organizational model that functions as a learning system, a focus on group as well as individual learning, a concern for critical reflectivity and for problem setting as well as problem solving, emphasis on informal learning, and development of the organization as a learning environment.

To elaborate, work-related learning includes instrumental action for which behavioral models are often suited, but goes beyond it to include dialogic and self-reflective learning. Individuals are most productive when they can participate fully in negotiating meaningful contributions to shared organizational goals and norms. It follows that personal development is not considered either as separate from the job, antagonistic to it, or an "add-on" that is nice but not essential. Persons learn best about the job when their own identity and growth are recognized as integral to that learning.

To facilitate this kind of learning, the organization cannot function strictly as a machine. One option would be the holographic model in which all employees are encouraged to learn many aspects of the work, participate jointly in appropriate decentralized decision making, and continually monitor actions and results to keep the organization flexible. The holographic model may go too far in the direction of participation for many organizations. However, learning in today's era cannot easily take place when employees are confined to individual, pre-determined actions that are collectively orchestrated to minimize overlap or any duplication of abilities or functions.

When looked on in this manner, it is clear that the unit for learning is not only the individual, but groups within the organization joined together to create their working goals and relationships. The emphasis is on teamwork, not solely to meet pre-defined goals, but to modify these and create new goals. A new paradigm would acknowledge that learning takes place at many levels, from the individual on up through groups to, at times, the entire organization. To fully understand learning under a new paradigm, one would look at the way in which individual learning is shaped by and contributes to collective learning, and vice versa.

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Learning design under a new paradigm would encourage reflectivity and critical reflectivity. The organization should provide a clear picture of its desired outcomes, but training would not solely consist of a lock-step process of inculcating these pre-defined objectives. Individuals would be encouraged to develop a habit of reflectivity in both formal and informal learning modes in which they continually probe their experience to determine why they are or are not effective and how they can learn to become so. Through such reflection, problems would be continually reformulated as old data are re-evaluated. Participation in setting the problems thus becomes as important in this paradigm as is finding and implementing the best solutions. Problem setting is a creative, non-linear process of probing that can be aborted by a demand for closure before participants have reached consensus on the nature of the problem.

This paradigm emphasizes informal learning because so much of today's formal training is focused on behaviors and skills alone. Informal learning is an opportunity for reflection-in-action. Formal training would still be needed under a new paradigm, some of which would still be aimed primarily at productivity in the instrumental domain. However, training would be designed to link learning in all three domains and timed by the individual in consultation with the organization to take advantage of those turning points in which individuals are more naturally reflective. Self-directed learning, coaching, mentoring and group learning would be encouraged. The organization thus becomes a learning environment for the growth of individuals and groups vis-a-vis work, not primarily a factor to be manipulated to produce desired behavior. As a learning environment, it must provide opportunities for experimentation, risk-taking, dialogue, initiative, creativity, and participation in decision-making.

Limits of a New Paradigm

There are limits to who can best learn under this new paradigm and to the conditions within an organization that facilitate or impede it. These are discussed in the following terms:

1. Workplace learning will always be governed to some extent by an instrumental focus because the primary purpose for such organizations is productivity.
2. All individuals are not ready to participate more fully in decision-making and self-directed learning.
3. Organizations cannot always change conditions such as hierarchy and centralized decision-making even when they wish to do so.

First, workplace learning is informed by its instrumental focus. A number of implications follow. Learning in the dialogic and self-reflective domains must take place primarily for purposes of productivity. However, productivity needs to be redefined in longer-range terms so that the current emphasis on short-term results does not force continual sacrifices in individual and collective learning that require time before results appear. While emphasizing the critical importance of organizations as learning environments, a balance must be maintained between time for learning and time for producing or else the organiza-

tion will go out of business. Finally, while learning must acknowledge the legitimacy of self-reflection and personal growth, the organization cannot take on the role of therapist. This does not mean that organizations should de-value the importance of personal growth nor should they drop financial or other allowances to facilitate therapy when obviously needed. However, learning under a new paradigm can acknowledge and work with feelings associated with personal identity and growth without, for example, becoming a substitute for psychoanalysis.

The second set of limits deals with individual readiness for this kind of learning. The new paradigm depends on increased participation of all individuals in decision-making and in dialogue about shared goals, norms, values, and procedures. Central to the new paradigm on an individual level are autonomy, initiative, independent judgement, self-direction, and a reservoir of experience and knowledge appropriate to the tasks being faced. Many workers are quite happy with jobs that are clearly defined and that do not require ongoing reflection. Reflection, whether simple or critical, requires extensive dialogue and personal change that might not be desired by the individual or feasible in many organizational contexts.

The third set of limits are organizational. The new paradigm suggests that a structure must be evolved that allows for participation and empowerment without sacrificing its primary purpose for existence. In some businesses, hierarchy and centralized decision-making are probably essential. Kanter (1983) sums up the dilemmas of participation around initiating such programs, managing them, choosing issues on which to focus, working on teams, linking teams to their environments, and evaluating success. She concludes that "managing participation is a balancing act" (p. 275).

The organization develops and reflects conditions and a culture that facilitates or impedes learning. Managers are often allowed greater leeway in such learning than are workers at the lower end of the hierarchy, perhaps because managers must exercise judgment under ambiguous conditions. Currently, judgment is frequently limited the further down one goes in the hierarchy as the nature of work becomes increasingly dependent on carrying out the decisions of others and on complex interaction among groups and work units. Learning likewise is often increasingly limited to routine procedures and prescribed behaviors. Hence, rapid and total change in the direction of a new organizational paradigm may not be desirable or feasible. Likewise, people cannot be expected to learn autonomy and autonomously overnight.

CONCLUSION

Training has been dominated by behaviorism. This article reviews trends in organizations that suggest a new paradigm for understanding and facilitating workplace learning in the post-industrial era and discusses learning theories that contribute to this conceptual framework. Reflectivity and critical reflectivity are at the heart of these perspectives. The framework addresses both formal and informal learning, but encourages a stronger emphasis on informal learning.

Instrumental learning about the job is not separated from relevant dialogic or self-reflective learning. Since this kind of learning assumes a level of employee participation that is seldom found, productivity under this framework must be redefined and conditions within the organization re-examined if such learning is to take place.

Both organizations and unions are faced with crises that call for a different way of doing business. Such changes will probably come slowly. Nonetheless, some organizations are experimenting with new ways of involving employees in decisions about goals and work procedures. A perspective on learning in the workplace that helps employees engage differently in setting and solving problems seems helpful in these circumstances. All learning does not necessarily involve the dialogic and self-reflective domains. However, a theory of learning in the workplace should include provisions for helping adults understand and interpret the meaning of the full range of events that occur in that setting.

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HUMAN RESOURCE DEVELOPERS: PRODUCING UNINTENDED CONSEQUENCES

K. WATKINS

K. Watkins, 'Human resource developers: Producing unintended consequences', excerpted and adapted from V. Marsick & K. Watkins, *Informal and Incidental Learning in the Workplace*, Routledge, Kegan Paul, London, 1990.

USING ACTION SCIENCE TO ENGAGE CRITICALLY REFLECTIVE LEARNING

We begin with a case from a trainer in which the trainer offers dialogue from an incident in her practice that she would like to explore in the hope of changing her practice. It is her desire that such incidents would either not happen or be better handled in the future. Her goal in reflecting on this case is actually to increase her control of the training session in order to decrease the incidences of conflict. The intent of the interventions which follow is to aid her in inquiring into the incident so that she can first see the ways in which her actions might have produced this incident and then to help her reframe her practice in such a way that she will be able to design her actions to be more congruent with the goal of producing learning. She is *not* seeking to give up control, but to better control the group process. In the dialogue between the case writer and the action science interventionist, the interventionist hopes to help her come to recognize that the goal of producing learning may require not increasing her control, but rather to learn to *share* control with the learners.

In the case which follows, an individual has shared a frustrating, difficult interaction in a training session. It is in some ways more dramatic than most learner-trainer conflicts, but it is clearly in the same genre as many. This case has been used in numerous training sessions with trainers and teachers of adults and these individuals invariably find that it is one that they "recognize." The case is being used here to illustrate the action science case format developed by Chris Argyris of Harvard University and a number of types of interventions which Argyris developed to aid reflective learning. The case is written in the individual's own words, with dialogue and events as he or she remembers them. This is important, because it fosters a sense of personal responsibility for the case, its outcomes, *and* for implementing any alternative strategies or responses suggested by the analysis of the case. This sense of personal responsibility is essential if unfreezing is to occur. Unfreezing is Kurt Lewin's term

(in Argyris, 1952) which refers to a process in which an individual goes from a kind of equilibrium to a sense that things are out of balance. This unfreezing is a process of experiencing dissonance and anxiety which creates readiness and even a goal-directedness toward learning. Without it, individuals are less likely to engage in the difficult and sometimes painful process of exploring their beliefs and working to develop alternative actions. Unfreezing may occur in individuals listening to others' cases, or even when discussing future or hypothetical cases. The critical ingredient is the individual's *belief* that the case accurately portrays a problem in their practice. Thus, an individual may also construct a case that will not lead to unfreezing if it is one that the person no longer feels needs resolution or if the person remains convinced that others are responsible for producing the outcomes of the case.

Since most individuals retrospectively rationalize events in ways that favor them and tend to believe that situations and/or people are not changeable (Argyris, Putnam, Smith, 1985); there is a considerable demand for expertise on the part of the facilitator of action science group processes during the unfreezing process. Individuals also vary in their sensitivity to using mistakes for learning (their "psychological brittleness"), particularly when this learning occurs in public in a group. Yet, Argyris points out that our proclivities for retrospective rationalization and for holding ourselves blameless for our actions make it especially necessary that this learning occur in a group or in a public setting where others will help us deal with what really happened. Given these conditions, it is clear that the model II values of ensuring that learners have free and informed choice, mutual control of the learning process, and mutual responsibility for the learning outcomes must be enacted if learners are to take the risks necessary to unfreeze.

To engage the reflective learning process, the learner must first reframe his or her role from that of passive recipient to that of an active agent responsible for his or her own learning. Learners will need to reframe mistakes and errors in their practice from sources of embarrassment which they seek to hide or cover up to the raw material for learning which they must expose to understand. In order to reflect on these experiences, learners must make their reasoning public so that the private understandings and meanings that they assigned to the events and statements of the case can be critically examined by others from many viewpoints. The left hand column of the case which follows surfaces the thoughts and feelings which underlay the actions in the right hand column. Figure 4-3 presents the trainer's case.

Figure 4-3: *The Kingsley Caper*

THE CHARACTERS

- One erstwhile, sincere, professional, female trainer, hereinafter referred to as T.
- One reluctant, resentful, professional M.D., male participant, hereinafter referred to as K.
- One co-trainer, seated in the back of the room, silent.

THE SETTING

The third day of a three day training session, the purpose of which was to teach interpersonal communication skills, and techniques for dealing with the public to a group of 40 medical professionals employed by a federal program. Many complaints had been received regarding the way these individuals interacted with their clients, their younger peers, and other federal employees in the building. Most complaints centered around the medical staff who were described as "rude, abrupt, condescending, unfeeling, and generally acting above everyone with whom they came in contact." All individuals in the class were required to be there by federal mandate. The four participants with the most seniority were the ones most resentful and vocal about "wasting their time in another useless training session." The ring leader of this gang of four was Kingsley (K). He had spent the first two days of the training session sitting in the back row with his briefcase open, working on paperwork. The only time he participated was to disagree with the trainer or to ridicule one of the newer staff member's contributions to the class. The trainer had done her best to minimize his negative impact on the class by ignoring his paperwork and by responding in the most positive way she could to whatever he said, using humor, trying to engage his attention and to take the edge off of his comments. The trainer had just given directions for completing a questionnaire on behavior styles and was passing out the questionnaire when the following conversation took place.

WHAT WAS THOUGHT OR FELT AND NOT SAID	WHAT WAS SAID
<p>Don't mess with me you silly fool. I've already had to deal with a bad situation back home this morning & I am in no mood to put up with any more of your harassment. I just want to get this training session over with so I can go home where I'm really needed.</p>	<p>K.I refuse to participate in this stupid exercise (spoken, as usual, not to anyone in particular).</p> <p>T. Come on K., lighten up. You might accidentally learn something.</p>

I'm warning you K., I'm about to lose it. I just do not have the psychic energy or patience to deal with you any more. You have been goading me for two days now. Enough is enough.

Oh no...I am going to cry. I should have taken some time to myself to calm down before coming into class this morning. I will not let that so-and-so see me cry. Real trainers don't cry in class.

Dear God, somebody make me shut up. I should not be talking to him this way. What kind of example is this to set for the others in the class? What will they think of me? What will my co-trainer think of me? I have lost it completely. I am a horrible trainer. I hate being a trainer. I'll never get another job with these people. If I start crying now, I'll never stop.

Source: K. E. Watkins

The action science strategies to be illustrated in the sections which follow are designed to help the learner recognize the gap between what he or she intends (their espoused theories) and what they actually do (their theories-in-use). The specific strategies to follow are the use of language analysis to determine the meanings in the dialogue and the relative use of facts (directly observable data) over inferences and

K. Unless you can give me, and I am certain you cannot, quantifiable data verifying the validity and reliability of this "instrument," then it's garbage pop psychology and a total waste of any sane person's time.

T. Well actually, K., there is reliability & validity data available for this instrument. I don't have it with me; it's not something anyone has ever asked for before. Tell you what, if you participate in this exercise, I promise to mail it to you.

K. It doesn't matter anyway. I sincerely doubt there is *anything* useful YOU can teach me that I didn't learn in medical school.

T. (Placing both hands flat on the front row of tables and leaning forward as far as possible, fixing K. with a look that has been known to stop Mack trucks)

K. let me tell you something. Let me explain the facts of life as far as responsibilities in this classroom go. You and you alone are responsible for your learning. You can learn or not, as you choose. I'm responsible for providing the environment and the opportunity for you to learn, should you choose to do so. So it's up to you. It's no skin off my nose if you don't learn anything. I get paid no matter what you do.

attributions, the ladder of inference, theory-in-use propositions, mapping, and puzzle interventions. Each of these strategies is described in *Action Science* (Argyris, Putnam, Smith, 1985).

Language Analysis. One of the most pervasive problems in interpersonal interactions is the frequent discrepancy between what a communicator intends to communicate and what others hear. This problem can be thought of as a natural consequence of the view that meanings are in people. Yet, some types of language convey more universally shared meanings than others. Facts in the form of illustrative details, observable events, what was actually said or done, are more objective than statements that offer our inferences about the facts. By illustrating for individuals the ways in which their communications with others are more inferential than objective, they can begin to see the ways in which they contribute to poor communication and encourage others to bring *their* own interpretations to the events. An illustration from the above case in Figure 4.4 may illustrate the usefulness of this approach.

Figure 4-4: Language Analysis of Kingsley Case

What the Trainer Said

"Come on Kingsley, lighten up. You might accidentally learn something."

"Tell you what, if you participate in this exercise, I promise to send it to you when I get back to my office."

Inferred Meanings

The trainer is coaxing K. to relax, to let the trainer continue. The trainer believes that K. will not learn intentionally.

The trainer wants to strike a bargain with K. to regain control of his participation.

Source: K. E. Watkins

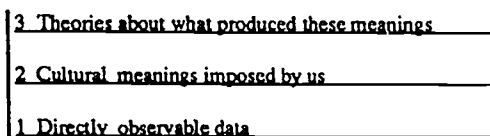
Similarly, we can examine the case for examples of the attributions that K. and the trainer make about each other. In this case, we would quickly observe the predilection of both people for making attributions without illustration and for advocating their position without inquiring into the other's responses or reasoning. For example, K. says "I refuse to participate" which is advocating a position and "in this stupid exercise" which is an attribution about the exercise that is neither illustrated nor supported. On the other hand, the trainer says, "You might accidentally learn something" which attributes by implication that K. can't or won't learn intentionally but again does not illustrate this view. The trainer also states, "You and you alone are responsible for your

learning." This statement advocates a position but does not inquire into K.'s view of the learning situation. Moreover, there has already been some evidence that K. has a different view "I sincerely doubt there is anything useful *you can teach me* that I didn't learn in medical school." In fact, the context itself has also already been described by the trainer as one in which the doctors were required to attend this session by the federal program that is sponsoring it, which suggests that the learner may not be totally "responsible" or in control of his learning in this instance.

These techniques help to diagnose the nature of the interpersonal dilemmas faced by both the trainer and the learner. The highly inferential nature of the language in the case and the lack of inquiry into each other's reasoning in a manner that promotes shared meaning leads to an escalation of both individuals' attempts at asserting control over the other person's behavior. Paradoxically, both espouse, albeit with some sarcasm, a goal of having a meaningful learning experience.

The Ladder of Inference. For further insight into the reasoning which would produce the opposite results from that which both parties intend, it is useful to examine a possible "ladder" of inferences drawn by the trainer. The ladder of inference heuristic, illustrated in Figure 4.5, consists of levels of abstraction:

Figure 4.5. *The Ladder of Inference*



Source: Based on Ladder of Inference in C. Argyris, R. Putnam, and D. M. Smith, *Action Science*, San Francisco, Jossey-Bass, 1985, p.

For example, from the Kingsley case, Kingsley asked for validity and reliability information about an instrument to be used in the workshop. Kingsley's reasoning, and that of the trainer, can be described using the ladder of inference, as illustrated in the top two diagrams in Figure 4.6. By examining the reasoning of both parties, individuals can begin to see the potential validity and invalidity in both people's reasoning. In addition, with public scrutiny there is also an opportunity for others to suggest alternative views, as seen in the third diagram in Figure 4.6. In fact, in the learning process, many alternative conceptions are typically offered. For the case writer, this reinforces the fundamental idea that meanings are in people and that no one of us holds a patent on the one official "true meaning" in a situation. What also becomes clear is the way in which

these two individuals acted in ways that prevented the sharing of meaning (e.g. "Unless you can give me, *and I am certain that you can not*").

Theory-in-Use Propositions. Propositions in logic are if-then statements which offer cause and effect explanations of a phenomenon. Similarly, theory-in-use propositions are if-then statements which convey the "if-I-do-this,-then-this-will-happen" understandings of actors which are embedded in the logic of their actions. Unlike retrospective rationalizations which often explain actions as we would like to have constructed them, these propositions attempt to convey the logic which produced the gap between what the person intended and what they actually did in a given situation. A "formula" for identifying possible theory-in-use propositions was developed by Oscar Mink to aid new action scientists. A feature of this approach is that it attempts to capture the puzzling and often paradoxical nature of our reasoning processes. Figure 4.7 depicts the formula.

Figure 4.6: Possible Ladders of Inference in the Kingsley Caper

Kingsley's Ladder of Inference

- 3 Pop psychologists use invalid instruments which insult my intelligence and my medical training. _____
- 2 Without validation, the results of this instrument will be meaningless pop psychology. _____
- 1 "Is this instrument valid & reliable?" _____

The Trainer's Ladder of Inference

- 3 Participant's who question my methods must be controlled or handled if I am to be credible & professional _____
- 2 He's questioning my credibility & professionalism. _____
- 1 "Is this instrument valid & reliable?" _____

An Alternative Ladder of Inference

- 3 It is my professional responsibility to use only those reliable instruments I am trained to use and interpret and participants have a right to be concerned about this issue.
- 2 The participant wants to be assured that I have chosen a "safe" instrument.
- 1 "Is this instrument valid & reliable?"

Source: K. E. Watkins

Figure 4-7 Theory-in-Use Propositions

When _____ happens,
triggering situation
I am afraid that _____ will happen,
what I don't want to happen
So I _____
what I do
Which guarantees that _____
what I don't want to happen
will happen.

Source: O. Mink, University of Texas, Austin, Texas.

This format helps individuals see the self-reinforcing quality of their reasoning. For example, in the Kingsley Caper, the following might be one of many theory-in-use propositions one could derive from the trainer's actions:

Whenever a learner challenges my actions,
I am afraid that I will lose control and my credibility,
so I use humor or sarcasm, bargaining, and aggressive
confrontation to control the learner, which guarantees
that I will lose control and credibility.

Such propositions differ from logical propositions in that they are often blatantly illogical. Yet, they should also be testable. The trainer should be able to reflect on her practice to see to what extent she has responded to learner challenges in this fashion and with these results. She should also be able to experiment in future training situations with either the same actions to see if they produce these results or alternative actions to see if they produce different results.

Maps. Like theory-in-use propositions, Argyris uses "maps" of individuals' reasoning both as a form of data display and as an intervention to spur reflection. A map is again a causal depiction of the underlying logic in an individual's or an organization's actions. A map consists of at least three columns--1.) the underlying values of the individual or group; 2.) the action strategies observed which follow from this value; and 3.) the possible unintended consequences of these action strategies or the consequences for learning. A map illustrating the Kingsley caper is depicted in the top part of Figure 4.8. In the figure, a fourth column has been added to contrast the single-loop framing orientation which is self-protective with the double-loop framing orientation which is reflective.

Maps are often fairly strong portrayals of the ways in which constructive values may lead to dysfunctional outcomes. They are also too inferential to use effectively without the detailed analysis of the actual data of the case given in the preceding sections. One of their most effective uses is to portray the reasoning of a large group of individuals in a way that is sufficiently generic that human resource development professionals could look at the map above and think of examples in their own or in the practice of other trainers which would validate the map. Maps are most powerful when they are accompanied by an alternative map which suggests a double-loop or Model II reframing of the case. An alternative map for the Kingsley caper is depicted in the bottom part of Figure 4-8.

Puzzle Interventions. Puzzle interventions are used to convey the inconsistencies in a person's reasoning and behavior. They include directly observed behavioral data from the learner coupled with the cultural meaning the interventionist assigns to that data, a terse description of the learner's actions or strategy, followed by a description of the way in which this violates the learner's stated values or goals. Finally, the interventionist inquires about the learner's reactions to this intervention. The puzzle intervention is particularly useful as a part of the unfreezing process, but this also means that this intervention can be quite unsettling. Consider this intervention for the Kingsley Caper: When you say "I refuse to participate in this stupid exercise unless you can give me... valid quantifiable data about the validity of this instrument" and at the same time you say you are certain that I can not give it to you, I infer that you have already decided that there is either no reliability or validity data or that I do not have it. Am I making a correct assumption?

In effect, the trainer asks the client to be accountable for his or her logic. But this can only be accomplished by modeling this action. The trainer must make explicit the data (i.e. what the other said and did), then share his or her inferences about that data. The trainer must then inquire into the correctness of these inferences and be open to the possibility that Kingsley has a valid perspective. In effect, the trainer is open to the possibility that the training design will not work while at the same time sharing her

reasoning with Kingsley regarding why she thought the exercise or instrument would contribute to learning about communication. Such an exercise in sharing meaning is itself an excellent demonstration of effective communication. Clearly an important injunction for individuals engaging in this type of reflection is to go slow.

Figure 4.8 Two Maps of the Kingsley Caper

The Kingsley Caper: Single-Loop Learning Map

FRAMING ORIENTATION	VALUES	ACTION STRATEGIES	UNINTENDED CONSEQUENCES
P R O T E C T I V E	Remain in control of the training event to ensure learning.	Design Activities for learners without their input.	Little learning will occur.
		Ignore challenges to the design.	Participants may "learn" that they are expected to participate & "behave," but not to learn.
		Use interpersonal control strategies to manage participants.	

The Kingsley Caper: Double-Loop Learning Map

FRAMING ORIENTATION	VALUES	ACTION STRATEGIES	CONSEQUENCES FOR LEARNING
R E F L E C T I V E	Share control of the learning process.	Jointly design learning experiences	Both trainers and learners are more likely to learn.
		Explore challenges to the learning design as hypotheses to be tested, as potentially helpful alternatives.	Learners and trainers will feel equally responsible for the learning and non-learning outcomes.

Source: K. E. Watkins

Taking the dialogue further, the action science interventionist might look at the impact of Kingsley's actions on the system as a whole that the trainer was supposed to affect. Since this workshop was designed to address communication problems between doctors and those with whom they work in this clinic, K. has just illustrated the kind of behavior that triggered the federal program personnel into calling for this workshop in the first place. At a more macro level, however, if the federal staff and the patients and other staff did not communicate their concerns directly to the doctors, but rather let them come to this workshop to find out what they were doing wrong, then the larger system is replicating the dysfunction that others perceived in the doctors in the sense that the administrators are treating the doctors in a rude and condescending way by not dealing with them directly and honestly and by requiring them to attend the workshop. At yet another level, the trainers might also be thought of as replicating similar communication problems. Since the co-trainer for the workshop stood in the back of the room and let T. handle K.'s concerns alone, we might suspect that the co-trainer, like the patients and the clinic staff, is letting T. find out what she's doing wrong from someone else.

Puzzle interventions help individuals reframe a situation from the perspective of the other actors in that situation. An alternative intervention with the trainer might ask her to reflect on the dilemmas and double binds she may have created for Kingsley. Interventionist to Trainer (T.):

T., when you say, 'I get paid no matter what you do,' I infer you to mean that you are doing this training session in order to get paid and whether or not Kingsley learns is unimportant. This statement could be interpreted as rude and condescending which are the qualities attributed to the doctors which you were paid to address in this workshop. How do you respond?

In the hall of mirrors of human action, we often replicate each other's actions and find ourselves in a single-loop. The trainer and the doctor may actually share dysfunctional theories of communication and thus will not be able to break out of this cycle until they recognize this aspect of their behavior. Another intervention might examine the similarity between the criticism of the doctors as "unfeeling" and the belief of the trainer that "Real trainers don't cry." Or, the interventionist might question the trainer's belief that she is "really needed at home." Does this mean that she does not believe that she is needed or helpful in this training session? Might this not inadvertently mirror K.'s belief?

The case technique offers a way for learners to delve deeply into the tacit, taken-for-granted assumptions which guide their actions. It can be used as a form of guided practice in reflection which, when coupled with attempts by learners to reflect in action and to try new double-loop learning strategies in action, is an extraordinarily effective way to

improve learners' ability to surface tacit incidental learnings and to learn from work experiences. When skills in facilitating reflective learning via action science are added to the training skills human resource developers already possess, they will be better prepared to include the nonroutine learning situations in the organization in the province of the human resource development area. This would, however, require a reframing of current attitudes to suggest that training *is* professional work.

3

A CRITICAL DEFINITION OF ADULT EDUCATION

S.D. BROOKFIELD

S.D. Brookfield, 'A critical definition of adult education', *Adult Education Quarterly*, vol. 36, no. 1, 1985, pp. 44-9.

Adult education as a field of academic inquiry is currently bedeviled by a stultifying academic orthodoxy regarding the conceptualization of what passes for appropriate practice without our field. Since educational practice springs from the taken-for-granted, common sense assumptions enshrined in textbooks and manuals, any coherent attempt to state the essential nature of adult education must first begin by jettisoning uncritically accepted orthodoxies. The orthodoxy currently afflicting adult education, and which ensures that educational practice becomes an apolitical, acurricular reactive enterprise, comprises three assumptions concerning the teaching-learning transaction.

The first assumption is that the purpose of adult education is to meet the felt needs of learners. This means, in effect, that the sole responsibility for determining appropriate curricula is in danger of being ceded entirely to learners. Educators who dare to contemplate the possibility that learners might be thinking and acting from within narrow and constricting paradigms, and that these adults may now always be in possession of full knowledge regarding a range of possibilities from which they can choose their own learning needs, may be condemned as arrogant or authoritarian.

Underlying the above programmatic assumption are two other assumptions regarding the nature of adult learning. The first of these is that adults are naturally self-directed learners, so that the educational task becomes one of assisting adults realize their already half-perceived self directedness. In the name of a democratic, person-centered humanism we declare that since adults are self-directed our task as educators is to facilitate a non-directive release of latent learning potential so that adults can realize learning goals they have set for themselves.

The other assumption regarding learning is that it is a joyful, wholly fulfilling experience in self-actualization, in which educator intent and learner needs are matched in a marriage of perfection.

Restated briefly, then, the orthodoxy reads as follows; adults are self-directed learners in whom lies a partly realized, innate potential for learning. Our tasks as adult educators are therefore to assess as accurately as we can those learning needs which learners perceive themselves to possess and to engage in a warmly humanistic facilitation of learning in which these needs are met. This facilitation is one in which teacher and learner grow together in a satisfying, joyous and bountiful release of latent learning potential.

STEPHEN BROOKFIELD is an associate professor of adult education, Teachers College, Columbia University, New York, NY.

This orthodoxy has much to commend it and is certainly inestimably superior to the earlier behaviorist orthodoxy which maintained that total authority for defining appropriate learning goals (usually specified in terms of performance behaviors) rested with the educator. The task of this paper is to save the felt needs/self-directed facilitation orthodoxy from becoming an acurricular, apolitical rationale from which is excluded any mention of conflict or disputation of appropriate learning goals. This rationale is essentially reactive, adaptive and pragmatic. It is a consumer oriented approach to education with the educator cast in the role of marketing expert and technician of teaching-learning. The educator's role becomes to determine as accurately as possible the felt learning needs of adults and to plan effective educational formats to meet those needs. There is an abdication of the educator's responsibility for contributing to a discussion of appropriate curricular choices, so that courses on fascism, peace education, aerobics, creative divorce, and using computers for career development come to exhibit a curricular isomorphism; if these all meet felt needs, so the argument runs, they should all be in the adult education curriculum. Neither is there any suggestion that learning is anything other than a joyous and fulfilling release. The possibility that significant personal learning may involve anxiety, pain, self-doubt, and ambiguity, or that prompting adults to consider ways of thinking and living alternative to those they have uncritically accepted might be disturbing, threatening and met with considerable resistance, is rarely countenanced.

Viewing adult education solely as the design and management of effective learning as defined by others, denudes the field of any philosophical rationale, future orientation, or purposeful mission. There exists no philosophical yardstick in terms of criteria of success, notions of purpose or appropriate curricula against which we might measure the adult educatedness of our activities. Furthermore, acceptance of this pragmatic rationale means that our priorities, purposes and primary functions are determined by others. Our curriculum becomes devised in response to demands by those who can attract our attention, who can use existing channels of communication to press their suit with vigor, and who are most articulate in presenting their case. In such instances the curriculum of adult education becomes formulated in response to the demands and wants (that is, the felt needs) of those groups powerful enough to argue their case loudly and effectively.

To counter this danger of adult education becoming solely a service-oriented, responsive and reactive field it is important that adult educators develop a philosophical rationale to grant their practice order and purpose. Such a rationale would allow us to judge whether a particular activity was exemplifying dimensions of adult education. "Adult educatedness" should be regarded as a variable which can be realized to a greater or lesser extent at different times, in different settings, with different groups of learners. Even within one class session the extent to which the adult education rationale can be realized will vary according to the nature of the learners concerned, the activities pursued, and the educator's conduct. To insist that the rationale be fully exemplified in every instance is clearly unrealistic and inappropriate and would intimidate practitioners to the extent that the rationale would lose credibility in their eyes. Nonetheless, it

is essential that a clear rationale be elaborated so that practitioners possess a clear benchmark against which they can judge the extent to which their activities exemplify adult education purposes and principles of practice.

A CONCEPTUALIZATION OF ADULT EDUCATION

Adult education, according to the rationale proposed within this paper, is that activity concerned to assist adults in their quest for a sense of control in their own lives, within their interpersonal relationships, and with regard to the social forms and structures within which they live. Assisting adults to develop a sense of autonomous control in their lives is not to be equated with an atomistic isolation; rather, such a sense of control is realized in the creation and renegotiation of personal relationships, and in the sphere of socio-political behavior, as well as in the realm of intellectual exploration, judgement and discrimination.

In adult education it is proposed that all involved assist each other to identify the external sources and internalized assumptions framing their conduct, and to be ready to assess these critically. Such critical awareness will involve a realization of the contextual, provisional and relative nature of supposed "truth," public knowledge and personal belief. When a disjunction become evident between adults' aspirations and the socially transmitted codes, value frameworks and belief systems informing their behaviors, then autonomy is reflected in a jettisoning of received assumptions. Endemic to this abandonment of assumptions perceived as irrelevant and inauthentic will be the transformation of individual and collective circumstances. Such a transformation will be manifest in the renegotiation of personal relationships, in the attempt to re-create the conditions of work so as to imbue these with some sense of personal significance, and in an engagement in the alteration of social forms.

Adult education, then, is concerned with facilitating adult learning of a particular kind. It is distinguished from adult training, in which a set of previously defined skills, knowledge and behaviors are transmitted to trainees in a manner previously defined by the trainer. In training (which is, incidentally, a necessary activity in many spheres of human existence) the emphasis is on acquiring and demonstrating the previously defined skills, knowledge and behaviors in as correct a manner as possible. For a training course to be regarded as an example of adult education it would have to have at its curricular and pedagogic heart a willingness to consider alternatives to the popularly prevailing or organizationally prescribed norms governing proper professional behaviors. Learners on such courses would have to be skeptical of definitive principles of practice offered by leaders, and they would have to be encouraged to view conventionally accepted wisdoms, and apparently exemplary work behaviors, as relative and provisional.

In adult education, however, the internal change in consciousness which results from participation in teaching-learning transactions has at its heart the fact of critical reflectivity. A central feature of adult learning resulting from adult education is that the adults concerned come to appreciate the contextual and contingent nature of public and private knowledge. They realize that the belief systems, value frameworks and behavioral prescriptions informing their conduct

are culturally constructed, not divinely ordained. Endemic to this cognitive and affective change is the awareness that the world is not composed of fixed and unchallengeable givens of beliefs and conduct, but that it is malleable and open to continuous re-creation. Following from this awareness is the realization that individual circumstances can consciously be altered and that adults can, in concert with others, engage in a collective changing of cultural forms. Such forms comprise attitudinal sets, role expectations, stereotypical conventions and folkways, as well as social and economic structures.

Developing in adults a sense of their personal power and self-worth is seen as a fundamental underpinning to this concept of adult education. Only if such a sense of individual empowerment and self-esteem is realized will adults possess the emotional strength to engage in that form of personally significant learning which is seen as the outcome of adult education; that is, to challenge values, behaviors and beliefs which have been uncritically assimilated by learners and which may be publicly accepted by a majority as common sense. The task of educators, according to this rationale, becomes that of encouraging that form of learning involving the perception of the relative and contextual nature of previously unquestioned givens. The educator assists the adult to reflect on the manner by which values, beliefs and behaviors previously deemed sacrosanct can be critically analyzed. Through presenting alternative ways of interpreting the world to adults, the educator prompts individuals to consider ways of thinking and living alternative to those they already possess. For some this consideration of alternatives will lead to a renegotiation of personal relationships; for others it may entail engagement in some form or political action designed to alter forms and structures. At the very least a consequence of this re-creation of personal and social worlds is a developing sense of control and autonomy in the adult.

CRITICAL PRACTICE IN ADULT EDUCATION

It is naive to presume that because adults are gathered together in a class that critical adult learning is being facilitated. A mass lecture to an audience comprised of adults in which there is no opportunity for discussion, no time for questions, no chance of collaborative exploration of differing viewpoints, and no attempt to make some connections between learners' experiences and the subject under consideration, does not qualify as adult education. It might be better to conceive of such activities as mass instruction, not adult education. Simply because individuals who are legally and chronologically adult are in attendance does not make a gathering an automatic example of adult education. If we view adult education as the facilitation of adult learning (as defined earlier as including a critically analytic component), then mass teaching excludes those dimensions of collaborative interpretation and reflection on experiences which are at the heart of adult education. By extension, teachers who coerce adults into attending, who abuse them publicly or in evaluative comments, who keep criteria of success private and require learners to guess the covert agenda governing the educational encounter, and who manipulate learners in ways injurious to, and unperceived by, these learners, are clearly not behaving in an adult educational manner.

Six principles of critical practice in adult education are derived from the conceptualization of adult education advanced in this paper:

1. Participation is voluntary; adults are engaged in learning as a result of their own volition. It may be that the circumstances prompting this learning are external to the learner (job loss, divorce, bereavement), but the decision to learn is that of the learner's. Hence, excluded are settings where adults are coerced, threatened, bullied or intimidated into learning.
2. Respect for self-worth; an attention to increasing adults' sense of self-worth underlies all educational efforts. This does not mean that criticism is absent from educational encounters. Foreign to adult education, however, are practices or statements which belittle others or which involve physical or emotional abuse.
3. Adult education is collaborative; teachers and learners are engaged in a cooperative enterprise in which, at different times and for different purposes, leadership and facilitation roles will be assumed by different group members. This collaboration is seen in needs diagnosis, objectives setting, curriculum development, in methodological aspects, and in generating evaluative criteria and indices. This collaboration is continuous, so that adult education involves a continual renegotiation of activities and priorities in which competing claims are explored, discussed and negotiated.
4. Praxis is at the heart of adult education; participants are involved in a constant process of activity, reflection on activity, collaborative analysis of activity, new activity, further reflection and collaborative analysis and so on. "Activity" can, of course, include cognitive activity so that adult education does not always require participants to do something in the sense of performing clearly observable acts. Exploring a wholly new way of interpreting one's work, personal relationships or political allegiances, would be examples of activities in this sense.
5. Adult education fosters a spirit of critical reflection; through education learners come to appreciate that values, beliefs and behaviors are culturally constructed and transmitted, and that they are provisional and relative. Adult educators are concerned, therefore, to prompt adults to consider ways of thinking and living alternative to those they already inhabit.
6. The aim of adult education is the nurturing of self-directed, empowered adults; such adults will see themselves as proactive, initiating individuals engaged in a continuous re-creation of their personal relationships, work worlds, and social circumstances, and not as reactive individuals, buffeted by the uncontrollable forces of circumstance.

Adults are frequently enclosed within their own self-histories. We assimilate and gradually integrate behaviors, ideas and values derived from others until they become so ingrained that we define "ourselves" in terms of them. Unless an external source places before us an alternative way of thinking, behaving and living, we are comfortable with the familiar value system, beliefs and behaviors. Teachers who rely on the same exercises and notes for year after year, managers who employ the same techniques of production organization, spouses who treat each other as did their parents, or educational programmers who run

the same courses over and over again, are not going to question these practices simply of their own volition. A central task of adult education, therefore, is a prompt such questioning.

The learning which results from such questioning will frequently be regarded as some of the most significant we have undertaken, though initially the anxiety prompted by this activity may cause individuals to be resistant. As anyone who has renegotiated an intimate relationship, confronted a parent, or attempted to change the patterns of relationships and activities in the workplace knows, to examine critically the validity of the assumptions under which they and others have been living, and to be made to alter some part of one's own behavior or to change the habitual activities and responses of others, is not always joyous, releasing and exhilarating. We may conclude after this act of learning that the anxiety and self-doubt were worthwhile, since they have resulted in our living lives which are more fulfilling and stimulating. But as we are forced to undergo this re-examination of values, beliefs and behaviors of ourselves and those around us, we may find this activity to be unsettling, as glimpses of insight alternate with confusion, uncertainty and ambiguity.

It is not enough for educators to say to learners "do what you want, learn what you want, in however a manner you wish." This resembles a conversation where one partner agrees with whatever the other says. Such conversations may be initially agreeable, but eventually one begins to suspect that the listener who responds to one's every comment and suggestion with enthusiastic agreement is not really listening at all. A conversation is, after all, a transactional dialogue, where the comments and contributions build organically on each other's views, and where alternative views, differing interpretations, and criticism are elements essentially to the encounter.

We may think of adult education also as a transactional dialogue between participants who bring to the encounter experiences, attitudinal sets, differing ways of looking at their personal, professional, political and recreational worlds, and a multitude of varying purposes, orientations and expectations. Central to this transaction is the continuous negotiation of goals, methods, curricula and evaluative criteria. Adult educators are not blank ciphers through whom are uncritically transmitted the demands and wishes of learners, but neither are they authoritarian ideologues who prescribe curricula and methods which are to be considered fixed and immutable. In a fully adult educational encounter all participants learn, no one member is regarded as having a monopoly on insight, and dissension and criticism are regarded as inevitable and desirable elements of the process.

4

THE FACILITATOR'S ROLE IN ADULT LEARNING

S.D. BROOKFIELD

S.D. Brookfield, *Understanding and Facilitating Adult Learning*, Jossey-Bass, San Francisco, 1986, pp. 123-46.

The concept of the facilitator of learning now exercises something of a conceptual stranglehold on our notions of correct educational practice, and to talk of the role of the teacher, or of teaching as a function, is unfashionable and distasteful to some educators of adults. Such talk calls to mind authoritarian classrooms, heavily didactic procedures, and overly directive instructors. Teaching is an activity inevitably associated by many with the world of elementary and secondary schooling; it conjures up images of an individual standing at the head of rows of desks and talking at a captive audience. Because educators and trainers of adults are usually at pains to contrast the emotionally congenial aspect of their practice with what they regard as the rigid and conformist nature of schooling, they frequently avoid using the term *teacher*. This is partly why the terms *facilitator* and *resource person* are in such favor.

As the previous chapters point out, however, it is all too easy to see the job of the facilitator as one concerned solely with assisting adults to meet those educational needs that they themselves perceive and express as meaningful and important. Educators who profess to be facilitators and not teachers are generally at pains to stress the democratic and student-centered nature of their practice. In their terms, facilitators do not direct; rather, they assist adults to attain a state of self-actualization or to become fully functioning persons. Similarly, a resource person is usually not seen as someone whose task is to

suggest alternatives, point up contradictions, draw attention to relationships of dependence, or prompt painful, critical scrutinies of assumptions, value frameworks, or behaviors. Instead, a resource person is often seen as someone who assists adults to locate individuals and material resources in order that they may complete learning efforts that they, as learners, have defined. This view emphasizes the primacy of the learner, grants a substantial measure of control to learners, and places learning directly in the context of learners' own experiences.

The problem with accepting this as the sum total of the educator's responsibility is that it assumes a high degree of self-knowledge and critical awareness on the part of adult learners. To act as a resource person to adults who are unaware of belief systems, bodies of knowledge, or behavioral possibilities other than those that they have uncritically assimilated since childhood is to condemn such adults to remaining within existing paradigms of thought and action. It is misconceived to talk of the self-directedness of learners who are unaware of alternative ways of thinking, perceiving, or behaving. Such learners can indeed express felt needs to educators, but such needs often will be perceived and articulated from within a narrow and constrained paradigm. The felt need of a drug addict is for greater, cheaper, and purer quantities of the chosen drug. The felt need of an insecure lover may be for greater and more uncritical amounts of approval from the partner. The felt need of the domineering parent may be to assert authority over children who are trying to express their independence.

In all these situations it is possible to detect what might be called "real" educational needs. The drug addict needs to be weaned away from physical and psychological dependency. The lover needs to develop a sense of separateness and inner strength. The parent needs to recognize the child as a separate and growing being. We call these real needs because each individual will become more fully adult if such needs are fulfilled. In this belief is contained the explicit judgment that some states of being are better than others.

As educators, then, we cannot always accept adults' definitions of needs as the operational criterion for our develop-

ment of curriculum, design of programs, or evaluation of success. There are occasions when we may feel impelled to prompt adults to consider alternatives to their present ways of thinking and living. Adults caught within constrained relationships, unsatisfactory jobs, and closed political systems often cannot imagine other ways of conducting relationships, earning a living, or being a citizen. The task of the teacher of adults is to help them to realize that the bodies of knowledge, accepted truths, commonly held values, and customary behaviors comprising their worlds are contextual and culturally constructed. Through being prompted to analyze their own behaviors and to consider alternative ideas and values, adults can come to an awareness of the essential contingency of their worlds. Such an awareness is the necessary prelude to their taking action to alter their personal and collective circumstances.

The teacher of adults, then, is not always engaged in a warm and wholly satisfying attempt to assist adults in their innate drive to achieve self-actualization. Analyzing assumptions, challenging previously accepted and internalized beliefs and values, considering the validity of alternative behaviors or social forms—all these acts are at times uncomfortable and all involve pain. A facilitator who accepts adults' definitions of need can avoid this pain and be involved in an apparently creative, unthreatening, and satisfying encounter. But teaching involves presenting alternatives, questioning givens, and scrutinizing the self. The outcome of these activities may be a more satisfactory level of self-insight, but these experiences may induce pain and feelings of insecurity. As teachers, we are charged with not always accepting definitions of felt needs as our operative educational criteria. We are also charged with the imperative of assisting adults to contemplate alternatives, to come to see the world as malleable, to be critically reflective, and to perceive themselves as proactive beings.

This kind of teaching is to be sharply differentiated from that in which children are the learners. The pain and insecurity induced by a challenging of beliefs and behaviors can be more easily accepted in adulthood than in childhood. Children or adolescents may reject the notion of the world as contingent and

malleable. They seek a degree of security and safety in their family structures and a degree of stability in their role models. It is in adulthood that the propensity for critical scrutiny exists, and it is in analyzing and reflecting upon the contingency of the world that adults realize their adulthood. Teaching that is centered on prompting an awareness of the contextuality and contingency of beliefs and behaviors is, therefore, a uniquely adult form of teaching.

It will often be the case, of course, that adult learners will react quite negatively to a teacher's attempts to make them more critically reflective. In such cases, teachers should respect the learner's individuality and remember that adult education is a collaborative, transactional encounter in which objectives, methods, and evaluation should be negotiated by all concerned. The danger arises when the teacher is unaware of any philosophical rationale underlying his or her activities, not when that rationale is contested by some learners. Teachers who are proselytizing ideologues are really not teachers at all; they measure their success solely by the extent to which learners come to think like them, not by the learner's development of a genuinely questioning and critical outlook. Deviation from the "party line" of the teacher's received truth is equated with intellectual incompetence.

Models for Teaching Adults

The teacher new to the education of adults will find no shortage of practical handbooks designed to help him or her work with adult classes. Typical of such handbooks are *How to Teach Adults* (Adult Education Association of the USA, 1955); *How Adults Can Learn More--Faster* (Warren, 1961); *Tested Techniques for Teachers of Adults* (National Association for Public Continuing and Adult Education, 1972); *When You're Teaching Adults* (National Association for Public Continuing and Adult Education, 1959); *The Second Treasury of Techniques for Teaching Adults* (Warren, 1970); *Guide to Teaching Techniques for Adult Classes* (Snyder and Ulmer, 1972); *You Can Be a Successful Teacher of Adults* (National Association for

Public Continuing and Adult Education, 1974); *Teaching Adults* (Dickinson, 1973); *Teaching Adults in Continuing Education* (Bock, 1979); *The Easy-to-Use Concise Teaching Handbook for Part-Time Non-Teachers* (Coren, 1983); and *How to Teach Adults* (Draves, 1984). These handbooks generally provide some brief elaboration of adult learners' characteristics and then proceed to cover the range of techniques that might be used in teaching adult classes. Other general references on methods of teaching adults, all of which ground pedagogic principles in a more extended analysis of research into the conditions of adult learning, are Stephens and Roderick (1971), Knox (1980), Bergevin, Morris, and Smith (1963), Bergevin, McKinley, and Smith (1964), and Robinson (1979). These analyses tend to emphasize two conditions for effective teaching: that the teaching-learning transaction be built upon adult learning patterns (Bradford, 1965) and that adult teachers have at their disposal a spectrum of styles (Leahy, 1977).

Educators of adults who have considered the concept of teaching tend to stress its pluralistic nature. Bryson (1936) urged that the teacher of adults entice students to engage in further learning, inculcate principles of rational skepticism, and take on the role of leader. In his discussion of inculcating a rational skepticism, Bryson comes close to the concept of facilitation advocated in the present work. Bryson advised teachers to assist adults "to stand firmly against the winds of doctrine" (p. 64) and declared that "a constant and stubborn effort to help those students who work with him to acquire a more alert attitude toward their already accepted and verbalized beliefs, and toward all new things offered them, is the hallmark of a fit teacher for grown men and women" (p. 65). As a consequence of encouraging such skepticism, however, the teacher was likely to encounter the dislike and ridicule of society and its leaders. Because rational skepticism served as a corrective to the simplistic solutions and propaganda offered by political leaders, teachers who encouraged this attitude would open themselves to public criticism.

Lawson (1983) and Barton (1964) have both offered analyses of teaching that emphasize its pluralistic nature. Bar-

ton proposes "ordered pluralism" as an action plan for teaching, and Lawson declares that there are numerous valid objectives, methods, and subjects in adult teaching. Apps (1979) identifies a range of possible teacher roles—trainer, conditioner, counselor, model, resource, guide—that can be performed in individual, group, or community settings. Ruddock (1980) recognizes eight major roles for teachers of adults—resource person, expositor, demonstrator, promulgator of values, taskmaster, assessor, helper, and group manager. Hostler (1982) and Lenz (1982) both view the teaching of adults as an art. In Hostler's words, teaching can never be reduced to a set of comprehensive rules that can be routinely applied in various situations. Miller (1964), however, protests against arbitrary use of this artistic metaphor to describe the teaching process. He argues that "no artist ever became successful without an enormous amount of rigorous training in his art and continual submission to very tough criticism from his peers and mentors" (p. 4).

However, to emphasize either the plurality of teaching methods or the essentially artistic nature of teaching is to obscure the central question of what should be the purpose of teaching. There may indeed be a plurality of methods available for the achievement of a particular goal, and the pursuit of that goal and the use of these methods may indeed require art. But this does not remove the necessity of developing a clear philosophical rationale to guide practice. If we are to say that teaching involves activities other than merely satisfying learners' declared needs and wants, then we must specify the criteria we have adopted to judge whether or not a particular activity is an instance of true, correct, or proper teaching of adults.

Learning Styles and Teacher Behaviors

Research into the teaching of adults has concentrated on four themes: (1) the awareness by teachers of adults of the need for a style of teaching different from that used with children, (2) the pedagogic implications that can be derived from analyses of adult learning theory, (3) the factors contributing to instructional effectiveness most commonly identified, and (4) learners'

perceptions of the qualities of successful teachers. For example, Beder and Darkenwald (1982) surveyed 173 public school and college teachers who taught adults and preadults and recorded an awareness among teachers of the differing learning styles of these two groups. Adult learners were perceived as more motivated, serious, and self-directed than preadult students, and teachers were prone to adjust their teaching methods in response to this. They took account of adult learners' prior experiences and reduced the controlling and structuring behaviors used with preadults. These differences, however, were not large, and Beder and Darkenwald concluded that "they do not warrant the inference that classroom practices differ sharply as a function of age" (p. 153).

Gorham (1984) reported a similar perception of adult students as essentially different from preadults among the 115 university, community college, and public school teachers she surveyed. These individuals also claimed to be less directive and structured when teaching adults than when teaching preadults and to provide more emotional support to adult learners. In her follow-up analysis of 15 teachers whose classroom behaviors were observed, however, she did not find that these perceptions of the uniqueness of adult learners were reflected in altered teaching behaviors. For example, teachers of adults were as directive with these learners as with preadults, although the direction would take subtler forms. And while teachers were willing to make alterations in classroom management within a set paradigm of appropriate teaching behaviors, they were not willing to generate a new paradigm to govern their interactions with adults.

Discussions of the chief findings of adult learning theorists regarding characteristically adult styles of learning, and the implications of these for the teaching of adults, have been undertaken by Dubin and Okun (1973), Mackie (1981), Even (1982), and Moore (1982). Dubin and Okun's review could offer no conclusions regarding the appropriate teaching behaviors to be used with adults, since they could find no one theory of learning that seemed to possess a high level of explanatory power where adults' learning styles were concerned.

Mackie (1981), more optimistic regarding a possible synthesis of research, outlined ten pedagogic principles derived from a review of writings by behaviorist, cognitive, and personality theorists (these principles were also recognized by Williams, 1980, and used in his training of adult tutors for teaching roles): the learner must be motivated to learn, the learning format should allow for individual differences in ability and style, new learning should build on the learner's current knowledge and attitudes, learning should be reinforced, opportunities for practice should be available, the learner should be an active participant, material to be learned should be organized into manageable units, guidance should be given in developing new responses, new skills and knowledge should be generalizable, and the material to be learned should be meaningful to the learner (Mackie, 1981).

Even (1982) has drawn attention to the discrepancies that may arise when field independent teachers are working with field dependent learners (or vice versa). Since field independent learners do not require either a great deal of structure or a friendly and caring atmosphere, teachers who exhibit this style will not emphasize group process and will be unworried by a lack of clear structure in their teaching. But such an approach will be markedly unpalatable to certain field dependent learners. A review of the Adaptive Style Inventory constructed by Kolb (1980) and its relevance for adult teaching styles has been undertaken by Moore (1982). Moore matched the Kolb inventory with Brostrom's (1979) Training Style Inventory (TSI) and concluded that certain of the learning styles identified by Kolb called for certain of the teaching styles outlined by Brostrom. Hence, diverger learners were best suited to humanistic teaching styles, accommodators were best served by functionalist teachers, converger learners responded to a structuralist teaching style, and assimilators benefited most from a behaviorist teacher.

It is clear, then, as Dubin and Okun, Mackie, Even, and Moore all acknowledge, that a great deal more thought needs to be devoted to the question of appropriate teaching behaviors in groups containing adults with widely varying styles of learn-

ing. Universal prescriptions concerning *the* method that is applicable to all situations are not helpful and ignore the existence of multiability, multiethnic groups of learners who exhibit a broad diversity of learning styles.

The characteristics of successful teachers have occupied the attention of a number of researchers. Pratt (1979b, 1981) developed an instrument to measure appropriate adult instructional processes with 146 adult students in a range of settings (business, community colleges, and universities). Five clusters of valued characteristics deemed appropriate as role components for a teacher of adults were identified: developing adult-to-adult working relationships, developing understanding of and responsibility for instruction, dealing with closure and ending (summarizing learning accomplishments and indicating future learning), establishing role clarity and credibility, and guarding the contract (keeping instruction within the agreed boundaries). In a review of research on teacher effectiveness, Pratt (1981) deplored the simplistic search for qualities that all teachers should possess. Such a search is doomed to failure given the enormous complexity of adult learning and teaching interactions. Wilson (1979), however, devised a model that might be used to recognize the competencies necessary for successful performance of an adult teaching role. He proposed five broad categories of competence; thus, the teacher should be a content resource person, a learning guide, a program developer, an institutional representative, and in command of expressive competencies. According to Wilson, his model provides a theoretical base by which instructional competencies appropriate to adult learners can be identified.

The final cluster of research studies having to do with the teaching of adults—that of learners' perceptions of valued teacher behaviors—forms an interesting counterpoint to the research on instructor effectiveness just discussed. Solomon and Miller (1961) identified a number of variables of good teaching after interviews with teachers and a review of research. These variables were then used by Solomon, Bezdek, and Rosenberg (1963) to study twenty-four teachers of evening courses in American government whose behavior was recorded on tape, as

well as by students and trained observers. Profiles of effectiveness were constructed, and these suggested that precision and clarity in presenting information, along with high teacher animation (generation of excitement, use of humor), were the qualities that contributed most to increases in factual knowledge, to growth in comprehensive understanding, and to high learner evaluations.

McKeachie (1970) reviewed the literature on psychological characteristics and instructional methods regarding adult learners and offered a number of broad conclusions. Sociable learners were found to perform better in discussion classes; field independent learners, not surprisingly, preferred modes of independent study; learners of high intelligence developed their critical thinking skills best when allowed to participate in classes, and highly motivated learners did well in independent study. Interestingly enough, however, independent study did not strengthen learner independence; it merely served to confirm that characteristic.

Three recent studies of adult teachers' styles have built upon these earlier studies and reviews to explore the connection between adults' learning styles and preferred teacher behaviors. In a recent administration of PALS, Conti (1984) measured teacher behavior in a collaborative teaching mode. The scale was administered to twenty-nine teachers in southern Texas who worked with General Educational Development (exam) (GED), ESL, and basic education students. GED students were found to learn more in a traditional teacher-centered environment, whereas basic education students and ESL learners responded better to participatory teaching practices and the development of a warm and supportive classroom environment. Zerges (1984) surveyed 248 continuing education students enrolled in business courses to explore the link between student personality type and valued instructor behaviors. These students rated, in order of importance, the following instructor behaviors as the most valued: competent knowledge of up-to-date materials, clear statement of expectations and objectives, sequential organization, and prompt and fair evaluation. The favored interpersonal qualities of instructors (responsiveness,

animation, humor, friendliness) were regarded as less valuable than the behaviors already mentioned.

Finally, Schmidt (1984) investigated the learning styles of adult students returning to the University of Wisconsin at Madison. These adults were found to prefer working independently, though under teacher direction. They did not like competitive class activities, and they did not especially wish to develop warm social relations with their instructors or peers. They viewed course membership as providing an opportunity for reflecting on the relationship between theory and practice. Classroom encounters were seen as comfortable settings for the testing of new ideas and the challenging of the viewpoints of peers and teachers. A supportive social environment was not deemed to be particularly important.

Teaching Adults: Exemplary Practices

In view of the admonitions of the researchers just discussed to avoid characterizations of the "good" teacher, an attempt to outline exemplary practices in teaching adults may seem absurd. But characteristics of good teachers of adults are offered by a number of writers. Apps (1981) lists eight exemplary instructor characteristics derived from a review of humanistic psychology. Thus, exemplary instructors are concerned about learners, are knowledgeable in their subject, relate theory to practice and their field to other fields, appear confident, are open to different approaches, present an authentic personality in the class, are willing to go beyond class objectives, and are able to create a good atmosphere for learning.

Exemplary characteristics of teachers of adults offered by other writers are that they like people and act intelligently toward them; they are courteous, good humored, tactful, fair, energetic, articulate, imaginative, and adaptable (Stephens and Roderick, 1971). Heath (1980) profiles five role models of successful teachers of adults as measured by positive student evaluations. She does not offer a set of exemplary qualities held by all such teachers, but she does observe that the five teachers surveyed shared similar attitudes toward their work. All were

said to possess great sensitivity, warmth, and genuine regard for their students. To Draves (1984) teachers of adults should love their subject, be desirous of sharing the intellectual joys that studying that subject brings, and be knowledgeable. He identifies general skills and talents that are necessary for good teaching and are replicable in different contexts. Good teachers should be good listeners, they should instill confidence in insecure learners, they should avoid punitive actions, they should establish a supportive learning climate, and they should use humor.

Despite the evident dangers of specifying too closely any general principles of method, a number of educators have been as ready to do this as others have been to offer sets of exemplary teaching skills. Although we may question the empirical validity of such claims, they do have the virtue of helping to concentrate teachers' minds on the rationale underlying their practices.

In his analysis of the types of interactions occurring within adult classes, Jensen (1963) outlined a total of twenty-nine guiding principles for adult instruction. He identified certain sociopsychological conditions for effective formal instruction; these centered chiefly on the need to establish a group climate that would encourage problem solving and task interactions. Jensen advised teachers to spark disagreement among group members as a way of discouraging patterns of dependency and to grant to adults' experiences a full measure of credibility. Hendrickson (1966) places a similar stress on collaborative patterns of teaching-learning in his specification of ten principles of good teaching. Among other things, such teaching recognizes the importance of emotional atmosphere to learning, it encourages involvement on the part of learners, it provides frequent evidence of success to learners, it uses adults as a prime teaching resource, and it takes into account factors of fatigue and motivation unique to adult learners. Finally, Apps (1981) offers eight exemplary teaching principles for teachers working with adults returning to college. Teachers are advised to know the biographies of their students, to use learners' experiences as class content, to integrate theory with practice, to provide a

climate conducive to learning, to offer variety in format and technique, to provide feedback, to help learners acquire resources, and to be available to learners for out-of-class contacts.

Such advice as has been offered, then, is silent on the question of curriculum. Good adult teaching is generally seen as the ability to set a certain emotional climate, to use learners' experiences as educational resources, to provide plenty of evaluative information to students, and to encourage collaboration and participation. Jensen deals with the development of critical and analytic capacities, but he does not identify the curricular components for producing such abilities. Thus, process skills are strongly emphasized over command of any particular content area. The criteria of success regarding good teacher performances relate to techniques of effective group management rather than to the prompting of critical awareness on the part of learners.

Discussion Method Irreplaceable

It is to achieve this goal of encouraging adults to undertake intellectually challenging and personally precarious ventures in a nonthreatening setting that has caused teachers of adults to devote so much attention to the discussion method. A peer learning group can exhibit undesirable tendencies, such as the exclusion and silencing of deviant opinions, but it can also be a powerful support for adults who wish to experiment with ideas, opinions, and alternative interpretations and to test these out in the company of others engaged in a similar quest. As therapy groups of all kinds have illustrated, adults are prepared to admit to doubts, anxieties, and inadequacies, provided that they feel themselves to be in the presence of peers who will listen to their testimonies in a supportive, nonjudgmental manner.

It is also in the context of such groups that some of the most challenging and exciting personal adventures in learning occur. Groups can act not only as powerful motivators to, and reinforcers of, learning; they can also provide the occasion and setting for vigorous debate and exploration of vividly contrasting positions. There is a limit to the extent to which any indi-

vidual can engage in self-scrutiny without the stimulus that fellow learners can supply. Lectures, demonstrations, independent study, and programmed learning are all useful techniques by means of which information can be assimilated and a grasp of fundamentals can be acquired. But it is when one's nascent, inchoate ideas and concepts are tested out in the company of others that a certain creative tension comes into play.

This creative tension can be inhibited, however, by economic factors. Emphasizing process to the total exclusion of either curricular content or a fundamental rationale is a position that few would explicitly advocate but into which it is all too easy to fall given the need to maintain high enrollment levels. Teachers may be so concerned to ensure that learners' experience of adult education is satisfying and pleasant that they downplay the more intellectually demanding and challenging aspects of a subject for fear of threatening learners to the point where they will leave the group. Adults will often be quite unwilling, for example, to consider the contextuality of their situations and to view their beliefs, behaviors, and values as culturally created and provisional. Such an activity can be personally threatening and disturbing, and teachers may well (with good reason) presume that adults are not prepared to pay to belong to a class in which they are challenged to examine their most fundamental beliefs.

Nevertheless, teachers of adults cannot simply function as process managers, resource persons, and technicians of learning. What teachers must strive to do, and what is perhaps the most difficult of all pedagogic balances to strike, is to prompt adults to consider alternatives and to encourage them to scrutinize their own values and behaviors, without making this scrutiny such a disturbing and personally threatening experience as to become a block to learning. There is no point in a teacher rigorously pursuing the critical examination of group members' dearly held beliefs, if that process is so anxiety producing for participants that they feel they must leave the group to protect their self-esteem.

Shor (1980) has identified a number of roles for the discussion leader—convener, facilitator, advocate for missing per-

spectives, adversary of oppressive behavior in class, lecturer, recorder, mediator, clearinghouse, and librarian. Drawing heavily on Freire's thought, Shor regards the teaching function as "an animation of consciousness" focused upon learners' "extraordinarily experiencing the ordinary" (p. 93). Critical teaching is seen as a way of assisting adults to escape from immersion in mass culture. The liberatory classroom becomes a "separate zone for consciousness change" (p. 99), with the ideal outcome being the "withering away of the teacher" (p. 100). The teacher assumes an oscillating stance, at times "provoking conceptual literacy in the critical study of a subject area" (p. 101), at other times retreating from discussion to allow the group members to come to their own points of critical consciousness. The overall function of the teacher is to provoke students' separation from mass culture and then to assist in a critically aware reentry into that culture.

Emphasis on the unique suitability of the discussion method for the development of adult learners' critical faculties recurs throughout the history of adult education. In an early handbook of adult education, Essert (1948) claimed that membership in a discussion group was a substitute for the spirit and form of the neighborly *gemeinschaft* community that had been lost in the process of urbanization. In the writings of Lindeman (1926, 1930) the discussion group is regarded as the pedagogic setting uniquely suited to adult education because it allows for collaborative reflection on the meaning of group members' experiences. Lindeman also believed (1945) that in the postwar era the neighborhood discussion group was essential for political literacy. Such groups provided the finest available medium for the discussion of controversial issues. They combatted propaganda, allowed for the development of flexible modes of thought, and encouraged the development of natural leadership.

In other countries the discussion method has been accorded a similar status as the adult education method par excellence. The Danish folk high schools, the Swedish study circles, and the Canadian Farm Forum experiment are all examples of mass educational initiatives that used the discussion method as their chief teaching medium. In Britain, the WEA and Extra-

mural tutorial group (a noncredit, university-level class for adults) constitute a distinct tradition in adult education that still exerts considerable contemporary influence. Elsdon (1975) points out that discussion is the major tool used in the training of prospective educators of adults, and Paterson (1970b) notes that a declaration of the importance of discussion forms one of the chief articles of the catechism in which novices to liberal adult education are expected to verse themselves. Indeed, in practically every movement dear to the hearts of educators of adults the discussion group has constituted the methodological heart. The particular form of discussion, however, varies considerably in each of these initiatives. Hence, blithe declarations regarding the importance and value of discussion are meaningless, since they tell us nothing of the actual processes occurring in the groups concerned.

A review of discussion methods (Osinski, Ohliger, and McCarthy, 1972, p. 4) concludes that definitions of discussion are often static, arbitrary, trivial, replete with hidden agendas, and within the realm of fantasy. There does seem, however, to be a continuum of definitions of discussion characterized by the degree of teacher control exercised over content and process. At one end is an open, collaborative quest for meaning of the kind advocated by Lindeman (1930), Paterson (1970b), and Bridges (1979). At the other end is the idea of guided discussion, in which the direction of discussion is under control of the teacher (Bligh, 1972).

Two definitional features are central to most conceptualizations of discussion. First, discussion is seen as directed conversation on a topic of mutual interest (Brunner and others, 1959), as purposeful conversation and deliberation (Bergevin, Morris, and Smith, 1963), and as a conversation with a purpose (Brown, 1975). The second characteristic of discussion often mentioned is participation. Guley (1965) declares that all or most members of a group must participate if there is to be a true discussion. Legge (1971) nominates as the first criterion of an ideal discussion that all members talk freely and easily.

Central to the notion of discussion are two features that may be either complementary or contradictory. Discussion ses-

sions can be judged successful to the extent to which they pursue certain cognitive ends or to the extent to which all members offer verbal contributions of approximately equal length. In a critique of discussion behaviors (Brookfield, 1985b), I have examined the way in which discussion groups can become arenas of psychodynamic struggle and fields of emotional battle. Many adults were schooled in competitive settings in which the pursuit of knowledge was obscured by the quest for grades and examination success. It is hard for such individuals to accept openness of discourse and to tolerate diverse opinions. Since discussion sessions are invested with emotional significance, any disagreement may well be interpreted as a personal assault. Additionally, groups tend to place high value on cohesiveness and to exclude deviant opinions. But as Fawcett-Hill (1977) maintains, it is important that groups tolerate deviant opinions. Such divergence guards against intellectual stasis.

Bridges (1979) has specified certain epistemological underpinnings of discussion. All members (including leaders) should have respect for each other, and all should be skeptical of their own, as well as of others', authority. (This is close to Bryson's notion of rational skepticism as the desired outcome of adult teaching.) Bridges also prescribes a moral culture for group discussion; it includes six ethical principles that participants should accept as the tacit assumptions underlying their discourse: reasonableness (openness to divergent perspectives), peaceable orderliness, truthfulness, freedom, equality, and respect for persons. Discussions conforming to the epistemological principles and moral culture outlined by Bridges would be characterized by openness of content, membership, and learning outcomes. Participants would set aside their own prejudices to entertain imaginative speculation.

Paterson (1970b) proposes discussion as the educational activity par excellence. It is an educational end in itself, requiring no extrinsic justification. To Paterson, adults commit and discover their whole beings in the process of presenting for group consideration their interpretations of their experience. He writes that "to address others in discussion . . . is to bear witness to one's attempt to reconstruct one's experience mean-

ingly, and it is at the same time to invite others to share this reconstructed experience" (p. 37). In this way participation in open discussion becomes a characteristically human activity of the most intimate and fundamental kind. Since openness is an essential characteristic for discussion, the concept of guided discussion must be discarded. In Paterson's words, "True discussion cannot be directed, or even guided, for to attempt to do so is in effect to opt out of the discussion, to close one's consciousness to alternative interpretations of the phenomenon under discussion before these alternatives have ever been stated" (p. 47).

To participate in this authentic form of mutual address, in this collaborative search for meaning, requires personal courage and analytic ability of a high order. It requires adults to be willing to examine the cultural origins of many of their beliefs, to be aware of how many of the assumptions that inform their conduct have been acquired from external sources and authorities such as parents, schoolteachers, and peers, and hence to view their dearly held meaning systems as provisional and relative. In this sense to participate in discussion—in the collaborative externalization, exploration, and critical analysis of personally significant meaning systems—is to realize one's adulthood to its fullest extent.

Four conditions can be identified that, if they are met, are likely to increase the chance that productive discussions will occur. The first of these is for group members to devise an appropriate moral culture for group discussion. This requires the group to arrive at a set of procedural rules for achieving equity of participation. Second, discussion leaders can give some thought to the materials that are to form the substantive focus of group discussions. The questions to be discussed should not be too factual or too uncontroversial, and they should not be answerable in the course of preparatory reading by the group. Third, the leader should be well versed both in the subject matter to be covered during the discussion and in the principles of group dynamics. Only someone skilled at dealing with the problems caused by apparent isolates, pressures to silence deviants, and those adults who attempt to use the group as a means of

bolstering their self-esteem can be said to be an effective discussion leader. Fourth, discussion participants should be prepared for discussion not only through the generation of a moral culture for discussion sessions but also through the development of reasoning skills (so that inconsistencies and ambiguities in argument can be detected) and the improvement of communication abilities (so that ideas can be accurately articulated). In providing a forum for the pursuit and realization of these reflective analytical skills, as well as in requiring participants to evolve a democratic, moral culture governing group discourse, the discussion method is uniquely suited to facilitating critical adult learning.

Although collaborative discussion is now seen as an effective mode of facilitating learning, the literature that deals with instructional methods is still based mainly on the work of Tyler (1949), and the task of teaching adults is frequently seen as a subcategory of the general task of program development. Teaching is relegated to step three or four in different models of program development, including those of Houle (1972), Knowles (1980), Verner (1964), Lauffer (1977), and Boyle (1981). In fact, teaching is generally not referred to as "teaching" at all, but rather as management of learning experiences, instructional management, or implementation of the instructional plan.

As will be argued further in Chapter Ten, however, this view is only one of a number of approaches to teaching adults. The Tylerian model of objectives-oriented program development in which learners acquire skills and knowledge specified in advance by the teacher and in which success is measured by learners' performance of predetermined behaviors is often constraining and overly restrictive. The model *does* have some utility, but chiefly in the area of psychomotor skill acquisition. Tyler developed his work to assist schoolchildren acquire specific, predetermined skills and knowledge of an unambiguous, technical kind. In some training contexts where it is a question of acquiring technical skills (in industrial or nursing settings, for example), the sequenced, objectives-oriented nature of the model is highly satisfactory.

The problem is that some facilitators of learning have

taken this model as the paradigm suitable for encouraging all kinds of adult learning. Much of the most significant adult learning, however, is of a nontechnical kind. It is concerned with the resolution of moral difficulties, with the development of self-insight, with acquiring the capacity to explore the world views of others, with reflection on experience, and with the evolution of personal ethical codes. One mode of teaching and learning highly suitable for these forms of learning is the discussion method. It is striking just how frequently the educational activities organized by adult learners themselves (rather than by professional educators) take this form.

For example, collaborative discussion is typically found in groups organized by single parents, the recently bereaved, divorcees, homosexuals, newly arrived immigrants, drug abusers, and feminists. These groups are composed of individuals who are seeking a reinforcement of their sense of self-worth. Their members are engaged in a redefinition of self and in a reinterpretation of their past actions and relationships from a newly realized psychological vantage point. They are also all seeking to set forth their experiences, to understand and explore others' experiences, and to heighten their self-awareness through this process of collaborative interpretation. The leadership of such groups is typically rotational. At different times, various individuals within these groups will take the responsibility for encouraging others to contribute to the discussion and will attempt some kind of analysis or interpretation of the experiences that have been voiced.

The adults in these groups are attempting to create new meaning systems. They are reinforcing each others' dormant, half-perceived feeling that there is some massive disjunction between their present ways of living and thinking, on the one hand, and the kind of existence they ideally envisage for themselves, on the other. At times these support and experience exchange groups transform themselves into activist groups that work to change oppressive external conditions. For some groups (such as feminist groups, homosexual support groups, and single-parent families) a common pattern will be a form of praxis in which analysis of common experiences alternates with

public advocacy and demonstrations. The very act of participating in a public demonstration in support of gay rights or to demand changes in housing and welfare policies to benefit single parents will serve to strengthen and reinforce these adults' newly adopted and newly created identities. For groups of drug abusers, divorcees, newly arrived immigrants, or the recently bereaved, however, it will often be enough for members to meet regularly for support, for the presentation and analysis of typical problems, and for the gaining of practical assistance in negotiating the changed circumstances of their lives.

Teaching Outcomes

We have emphasized that the concept of facilitation should be broadened to include activities in which adults are encouraged to consider alternative ways of thinking and living and in which they are prompted to scrutinize critically the extent to which supposedly universal beliefs, values, and behaviors are in fact culturally constructed. But if we prompt adults to consider these questions, are we not really engaging in a form of amateur psychotherapy? Asking people to reflect on their experience, to consider the motivations underlying their actions, and to try to appreciate the way in which their behaviors are perceived by others sounds dangerously close to playing at therapist. This argument deserves to be taken seriously. There are many adults who suffer from clinically diagnosed conditions that range from schizophrenia to severe depression. For an educator to presume to treat them effectively is folly indeed.

There are, however, many adults who are troubled, frustrated with circumstances in their personal or occupational lives, insecure concerning their abilities, and seeking ways to develop more productive relationships with others. Such adults may be disturbed at certain aspects of their personal lives, but they are in no sense clinically "disturbed." There are very few readers of these words, I would venture, who are not disturbed at some aspect of their personal worlds or occupational lives, and it is precisely these adults who frequently form the clientele of adult classes. One of the great tragedies of contemporary life is the

overprofessionalization of all aspects of human interaction. We are getting dangerously close to believing that we can engage in thoughtful self-reflection only if we are sanctioned by some professional to whom we pay a fee for the supervision of our self-reflection. Those who accept the argument that adults can undertake reflection on their past actions and current relationships only under the guidance of a skilled psychotherapist are doing nothing more than supporting the professional power and prestige of therapists.

One of the most valuable inquiries into methods of helping adults become critically reflective was initiated by Perry (1970) and pursued by Weathersby (1980), Weathersby and Tarule (1980), Boud (1981), and Cameron (1983). Instead of talking in a general way about the development in learners of critical awareness and the realization of the contextual, subjective aspects of the world, Perry sets forth nine intellectual stages, which he terms *positions*. These positions are not meant to be rigidly sequential, nor to be mutually contradictory. Additionally, they do not include all the intellectual orientations possible in adulthood since they are derived from a series of intensive interviews with undergraduate students at Harvard. They do provide a useful analytical structure, however, that can be applied to understanding the development of critical reflectivity in adults, without in any way presuming them to be inevitably followed in every case. Indeed, with his undergraduates Perry freely admits that students become frozen at different stages of passive detachment or dualist absolutism.

Put simply, Perry's nine positions represent a move from an initial dualist perspective in which the world is perceived as comprised of black and white, mutually exclusive polarities to one in which the individual has come to a realization of the contextuality and relativity of the world and has then gone on to make a conscious commitment to one of many possible identities. In their exploration of these ideas on ethical growth and intellectual development as they relate to adulthood, the Syracuse Rating Group (Cameron, 1983) has also distinguished nine stages in adults' intellectual and ethical development. The final stage of "developing commitments" is distinguished by an

awareness of the effects that individual behaviors have on others and by a continuous search for new challenges. This search is undertaken with full knowledge that these challenges involve risks to one's self-esteem and that this final stage is never really "final" (in the sense that one achieves a static and unchanging life-style). In leading up to this final stage, adults typically pass through stages in which they begin to view knowledge as contextual and become able to take on the perspective of others. This recognition of the contingency of knowledge inevitably brings about an appreciation of the socially created nature of knowledge. Immediately prior to stage nine are those stages in which adults realize that only through making a commitment will a sense of individual meaning and responsibility for the creation of their personal worlds emerge.

As Boud (1981) has noted with regard to the Perry scheme, "It is [therefore] helpful for the teacher to have in mind that within the same class there will probably be students with radically different outlooks on what is taking place, who will be reacting in very different ways" (p. 31). An early application of the earlier stages of this framework to a sample of adult students at a community college identified dualist, multiplist, and relativist positions among the adults studied (Cameron, 1983). The study noted that faculty in community colleges typically teach content in the same manner, regardless of the intellectual development of class members, and that faculty need to be more flexible in their pedagogic roles to take account of the diversity of intellectual stages present in any class.

The Perry scheme represents an interesting area of future speculation for theorists of adult learning. Perry's contribution has been to posit an initial framework in which the transition from dualism to relativism to critically aware commitment has been clearly outlined. If these stages can be translated into specific outcomes, with sufficient flexibility of interpretation so that widely varying settings can be included, this might provide adult teachers with a means by which they could recognize the diversity of stages reached by different members of learning groups. Alternatively, and in a more inductive manner, the framework provides an analytical construct that one can

apply to many different educational initiatives as a way of coming to understand the teaching-learning transactions occurring therein.

There is little doubt that didactic pedagogic procedures in which learners are viewed as receptive repositories eagerly awaiting the deposits of experts are not likely to result in the development of critically aware commitment as outlined by Perry. Rather than looking to concepts of teaching drawn from research on traditional teaching methods, therefore, it might be more fruitful to consult concepts and practices drawn from related fields such as community development or community action. The concept of the animateur (Kidd, 1971; Blondin, 1971) is one such idea, and UNESCO has explored the manner in which training schemes to develop animateurs might be established. At the very least, it is important to realize that between the authoritarian transmission of information to uncritically receptive automata and the nondirective, free-flowing realization of learner-defined activities lies a crucial facilitation role. Facilitators have to be as wary of supporting every inclination, preference, or demand of learners as they are of forcing these same learners to follow a lockstep sequence of previously prescribed educational activities. In both instances learners are liable to develop an uncritical stance toward their own personal and intellectual development; in the one case because their opinion is never challenged or questioned, in the other because they are given no choice or chance to voice an opinion. Either option denies the essentially transactional nature of teaching-learning, and both options pretend that challenge, creative confrontation, and (sometimes painful) self-scrutiny have no place in adult learning. Without these elements, learners may find their educational encounters initially comforting but they will sooner or later come to suspect that such encounters are not really educational at all. When this awareness finally dawns, the resultant withdrawal from participation will have the same significance and result from the same kind of frustration as that caused by the learner's being allowed no voice in the educational transaction.

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Argyris, C., Putnam, R. & Smith, D. *Action Science*. Jossey-Bass, San Francisco, 1985.

This is the definitive description of Argyris's theory of a science of interpersonal action. It is often turgid and difficult to read, yet it clearly differentiates action science from other forms of research. What is missing from experimental, descriptive or naturalistic inquiry, according to these authors, is its viability in the action context. Action science is a science designed to create a community of inquiry and to generate new, usable knowledge that will transform the action context. Earlier works by Argyris (*Reasoning, Learning, and Action*, Jossey-Bass, San Francisco, 1983) and Argyris and Schon (*Theory in Practice: Increasing Professional Effectiveness*, Jossey-Bass, San Francisco, 1982) provide rich descriptions of the practice of action science and would make useful additional reading. This work concludes with a section of strategies for practising action science. It is thus a comprehensive overview of the theory, research method and practice of action science.

Brookfield, S. *Understanding and Facilitating Adult Learning*. Jossey-Bass, San Francisco, 1986.

Brookfield describes the purpose of this book as one of reviewing a range of practice settings in which educators of adults work and, from cases which grow out of these settings, to evolve a number of principles of effective facilitation of adult learning. He is critical of formulaic responses and suggests principles which themselves call on practitioners to challenge their own assumptions and to bring considerable creativity to the task of facilitating adult learning. The book is quite readable and contains an excellent synthesis of the literature of the field.

Casner-Lotto, J. & associates. *Successful Training Strategies*. Jossey-Bass, San Francisco, 1988.

There are many 'how to do it' books of strategies for teaching adults in the workplace. What is especially useful about this book developed by the Work in America Institute, is that it gives not instructions but case descriptions in chapter after chapter of twenty-six corporate training programs in five areas. Although many of the cases are not very specific about what was done, together they give an excellent overview of the kinds of things that corporate training departments do and why they do them. The emphasis is on continuous learning and total quality management efforts.

Knowles, M. *The Modern Practice of Adult Education*. Cambridge, New York, 1980.

Few would argue that this is a classic text on the nature of adult education. It begins with Knowles's concept of andragogy, which is a theory of how adults learn, and continues by describing in detail how one goes about designing learning for adults. This is program planning in a straightforward fashion. Critics argue that andragogy is less theory than it is method, and as such, a method that might be as suitable for some children as it is for some adults. Knowles's concept suggests that adult learning is problem-centred, immediate and grows out of the adults' experiences. The program planning model which follows thus emphasises involving adults in program planning through needs assessments and drawing on their experiences in the design of instruction. Despite the humanistic, learner-centered bias of his theory, the program planning recommendations tend to be behaviouristic. This is nevertheless, a useful and practical text.

Marsick, V. & Watkins, K. *Informal and Incidental Learning*. Routledge & Kegan Paul, London, 1990.

This work examines informal and incidental learning, learning which Carnevale (1984) noted now comprises \$180 billion of the \$210 billion spent annually on training in the United States. Informal learning is that learning which is predominantly experiential and non-institutional. Incidental learning is a form of informal learning which is unintentional and a by-product of some other activity. It is typically tacit and embedded in the actions of individuals. This theory is developed through analysis of six separate research studies in terms of the nature of informal and incidental learning in each and the enhancers and delimiters of this type of learning. The book concludes with strategies to facilitate informal and incidental learning.

Marsick, V. (ed.). *Learning in the Workplace*. Croom Helm, London, 1987.

Marsick brings together chapters which define a new paradigm for learning in the workplace which is less behaviouristic and more critically reflective. Chapters include four on strategies for facilitating informal learning including a chapter on self-directed learning in industry, mentoring as a learning experience and one on coaching. The author concludes by calling for continuous informal learning on the job fostered through networks or learning relationships supplemented by formal training. The chapters on informal learning are especially useful, with excellent case illustrations to enrich the description of the concepts.

McCall, M., Lombardo, M. & Morrison, A. *Lessons from Experience: How Successful Executives Develop on the Job*. Lexington Books, Lexington, Mass., 1989.

The authors, researchers from the Center for Creative Leadership in Greensboro, North Carolina, report the results of interviews with successful corporate leaders in a highly readable, practical manner. They find that managers learn most from challenging work, other people and hardships. Strategies to facilitate learning from experience as well as to foster long-term career development of managers are offered.

Rothwell, W. & Kazanas, H. *Strategic Human Resource Development*. Prentice-Hall, Englewood Cliffs, NJ, 1989.

This is an excellent reference text which describes the field of human resource development in terms of its strategic role in business. It is a comprehensive overview of the field, its background, purpose and activities. Sections detail how to assess needs for training and development, how to choose and implement an organisational strategy for human resource development, various functions including organisational development and how to evaluate the human resource development function. Many checklists and surveys are included which is what makes this a useful tool for new facilitators of workplace learning.

Schön, D. *Educating the Reflective Practitioner*. Jossey-Bass, San Francisco, 1987.

Schön depicts in clear and rich detail the type of learning strategies that lead to more reflective practice. Through conversations between an architect and his student, Schön illustrates the way in which practice calls for a 'reflective conversation with a situation'. As the architect looks at a piece of land, he has a mental image of a potential building there while the student may be unable to determine a design which will overcome the inherent problems in the land. Schön suggests that professionals engage in conversations with a situation, often through the creation of what he calls virtual worlds, 'a constructed representation of the real world of practice' in which the professional can, so to speak, stop the clock and explore by 'reflecting on the "back talk" from a situation', by questioning the assumptional structure of knowing-in-action and by conducting on-the-spot experiments. Schön's theory grows out of his research on the expert practice of architects and his study of how one teaches this to others.

ACKNOWLEDGMENTS

Reading 1 Victoria J. Marsick, 'Learning in the workplace: The case for reflectivity and critical reflectivity', *Adult Education Quarterly*, vol. 38, no. 4, 1988, pp.187-98. Reproduced by permission of the American Association for Adult and Continuing Education.

Reading 2 Excerpted and adapted from Victoria Marsick and Karen Watkins (eds), *Informal and Incidental Learning in the Workplace*, Routledge, Kegan Paul, London, 1990, ch. 8.

Reading 3 Stephen Brookfield, 'A critical definition of adult education', *Adult Education Quarterly*, vol. 36, no. 1, 1985, pp. 44-9. Reproduced by permission of the American Association for Adult and Continuing Education.

Reading 4 Stephen Brookfield, *Understanding and Facilitating Adult Learning: A Comprehensive Analysis of Principles and Effective Practices*, Jossey-Bass, San Fransisco, 1986. © Jossey-Bass. Reproduced with permission. All rights reserved. By permission of Stephen Brookfield.

ABOUT THE AUTHOR



Karen Watkins is an Associate Professor of adult and human resource development leadership in the Department of Educational Administration of the University of Texas at Austin. Prior to joining the Department, she taught English composition and literature and conducted faculty development programs for Miami-Dade Community College in Miami, Florida and later for a statewide consortium of universities and community colleges. She then worked for a national staff and organisational development centre which provided faculty development workshops and training materials to community college faculty and administrators throughout the United States and in parts of Canada. She was the founder and founding editor of *Innovation Abstracts*, a newsletter which abstracts innovative ideas and practices for community college faculties, which now has a readership of more than 50 000. She received her doctorate from the University of Texas at Austin. She recently completed a book with Victoria Marsick of Teacher's College, Columbia University entitled, *Informal and Incidental Learning in the Workplace*. Her research interests are in the area of organisational change and human resource development, with action science as a theoretical and research framework.



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