THE APPLICATION OF LEARNING ORGANISATION THEORY TO THE
MANAGEMENT OF CHANGE
With reference to the Engineering Sector

by

PENELOPE ANN GARDINER

A thesis submitted to the University of Plymouth
in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

Human Resource Studies Group
University of Plymouth Business School

March 1998

ii

ACKNOWLEDGEMENTS

AUTHOR'S DECLARATION

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award.

The following activities were undertaken in connection with the programme of study:

> Attendance at a number of courses on research methods and data analysis
> Participation in research seminars, including presentation of papers
> Presentation of papers and workshops at four national conferences
> Attendance at four staff development days connected with research
> Establishment of useful contacts in the business world
> Preparation of paper for Business School Discussion Paper series.

Publications:

Gardiner, Penny (1996) 'The Case for Employee Empowerment as a Means of Enhancing Organisational Performance', *Management Research News*, Vol.19, No.4/5, pp 68-69

Gardiner, Penny and Whiting, Peter (1997) 'Success Factors in Learning Organizations: An Empirical Study ', *Industrial and Commercial Training*, Vol.29, No.2, pp 41-48.

Signed: ....

Date: ....

The Application of Learning Organisation Theory to
the Management of Change

ABSTRACT

Recent contributions to the literature on organisations have emphasised the need for constant adaptation to keep pace with the accelerating rate of environmental change. The learning organisation is proposed as one of the most effective means of achieving succesful adaptation through a central focus on learning. This thesis examines the development of the ideas which have led to the concept of the learning organisation and the application of this concept to the management of change. A number of reasons are proposed for the current adoption of learning organisation theory, these include the restructuring and downsizing of organisations, new Human Resource Management practices, improved understanding of learning and systems thinking. Organisational change is examined in relation to learning and a number of models of change management are considered. Different approaches to the evaluation of change are also discussed and some examples outlined. Some of the elements which comprise a learning organisation are described and the relationships between these indicated.

The project aimed to apply learning organisation theory to the management of change by studying firms which were intending to become learning organisations. A generic model was constructed and used to form the basis of a specially designed diagnostic instrument for the measurement of learning organisation characteristics. This took the form of a questionnaire called the Learning Organisation Research Inventory (LORI). Data were collected from two large organisations in the engineering sector via administration of the questionnaire and interviews with employees. Analysis of the quantitative data was based on nine conceptual categories derived from the literature. Factor analysis was carried out on the second data set but this failed to provide a satisfactory classification. It was proposed that further factor analysis be conducted on a larger sample.

The results of the study indicated that the generic model was probably inappropriate; there were factors specific to the engineering sector and to these particular companies which probably influenced the success of learning initiatives and indicated the need for a sector-specific model. Neither organisation could be said to be a learning organisation and it did not prove possible to identify the components of such organisations. However, the lack of certain characteristics in these organisations appeared to have acted as barriers to learning.

It was proposed that a learning orientation might be a more useful perspective than a learning organisation and may perhaps be easier to achieve. A new model of a learning orientation was developed from the research; it is suggested that, subject to further testing, this might form the basis for future studies of this type.

LIST OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

Increasingly rapid developments in the business and economic environment and improved technology and communications have resulted in a need for organisations to be extremely flexible and capable of constant change. Furthermore, with improved global communications, competition has intensified and the demands of customers are becoming more specialised and exacting. Organisations have been aware for a long time of the necessity for regular adaptation to keep pace with environmental change, but more recently the need for radical transformational change has become apparent (Jones and Hendry 1992). It has been suggested that the capacity to adapt faster and faster is essential for organisational survival in the current environment (Schein 1993).

Companies are beginning to look at new ways of creating and sustaining competitive advantage, not just through the development of new products or services, which can be quickly copied by competitors, but through discovering different ways of working. New types of organisations designed to meet the challenges of a turbulent business environment and an accelerated pace of change might eventually result in changes in the structure of society and people's perceptions of the role played by work (West 1994a).

In addition to external demands on organisations, the needs and rights of organisational members at all levels are now being asserted (Pheysey 1993). Changing workplace demands have led to an expansion in the role of human resource management from the training of individual employees to facilitating the development and learning of individuals, teams and the organisation as a whole (Watkins and Marsick 1992). Human resources; the ideas, skills and experience of employees are now being recognised as the primary assets possessed by organisations (Ripley and Ripley 1993, Gubman 1995). Recent initiatives such as Investors in People, employee empowerment and Total Quality Management are based on the notion that people are the single means of sustaining competitive advantage and that organisations must therefore promote the learning and development of their employees (West op.cit). Hence, a capacity to utilise the abilities, knowledge and expertise of these individuals to benefit the organisation and achieve organisational goals may be viewed as an important organisational competence.

It has been claimed that employee participation is the key to achieving competitive advantage (Wong and Kleiner 1996). Empowerment goes a step further than participation, moving away from traditional management direction to a situation where employees are not merely consulted but are given the authority to solve problems and make decisions related to their work, only resorting to supervisory support in exceptional circumstances (Pickard 1993). This implies an emphasis on the personal development of individuals and work teams in order to foster a climate of flexibility and adaptability to change. Investment in employees' learning is crucial, so that they will be prepared and qualified to cope with the constant change and increased responsibility likely to be characteristic of organisations in the future.

In this context, the concept of the learning organisation is perceived by a number of writers and practitioners (eg. Senge 1990b, Nevis, diBella and Gould 1995, Pedler, Burgoyne and Boydell, 1997) to be an effective prescription for dealing with current pressures. A learning organisation has a central focus on learning at individual, group and organisational levels and intentionally fosters the mechanisms through which this learning can take place. Most models of the learning organisation are based on the premise that the ability of the organisation to learn at a faster rate than its competitors may provide its only means of sustaining a competitive edge (deGeus 1988). The method by which the collective knowledge of the organisation may be integrated and used to make the organisation competitive is unspecified or vague at best, however.

A number of studies have indicated that the key to competitive success in organisations is the development of learning processes at all levels of the organisation (Pettigrew and Whipp 1991), hence the learning organisation is viewed by many academics and practitioners as the most appropriate way forward. This study emphasises that the learning organisation is an ideal state towards which organisational change may be directed, so that the company is orientated towards learning rather than seeking to attain a particular organisational situation at a given point in time. This is in accordance with Burdett's (1993) metaphor which likens the learning organisation to a journey rather than a destination.

This thesis describes the development over the last fifty years of theories of learning which have led to the formation of the learning organisation concept. Learning organisation theory is related to ideas on single and double-loop learning, action learning and organisational learning, and a clear distinction is made between organisational learning and the learning organisation. A number of definitions of the learning organisation by different writers are presented. The learning organisation may be described as a new name for a combination of theories and ideas which have existed for a considerable time (West 1994a). Reasons for the current adoption of these ideas, particularly in British and U.S. companies are put forward together with the view of many senior managers that a focus on learning as a major organisational competence may be the key to survival.

Organisational change is then considered in depth, particularly the role played in this process by human resource management, and the learning organisation is suggested as one model for managing such change. A number of other models of change are described, together with a brief background to their development and the benefits and drawbacks of each is discussed. The concept of organisational competences is then discussed, as identified by Prahalad and Hamel (1990). The importance of measuring organisational change is emphasised and a number of types of change evaluation are described. There appear to be few recent empirical studies based on change evaluation, but a small number of these are identified and described in brief. Alongside learning organisation theory a number of related concepts are discussed; the thesis suggests how these may fit in with the suggested characteristics of learning orientated organisations.

This study addresses the following research aims and hypotheses. Firstly it aims to discover whether the concept of the learning organisation may be used to provide a model for major organisational change. Secondly, it attempts to establish the essential characteristics of learning organisations through the hypotheses listed below.

Where organisations conform to the theoretical notion of a learning organisation:

H1: Leadership in the organisation encourages employees to learn and demonstrates management's willingness to learn too

H2: The organisational structure facilitates learning through flexibility and a lack of rigid vertical or horizontal boundaries

H3: The organisation and its members focus on continuous improvement and the organisational climate is designed to support this aim

H4: The communication system facilitates learning at both individual and collective levels

H5: Direction and strategy are regularly modified as a result of feedback

H6: Employees are empowered and make decisions related to their work

H7: Links are fostered between the organisation and its business environment

H8 : Individual learning and self-development is encouraged for the benefit of individuals and the organisation

H9: Employees participate in policy-making and company policies reflect the interests of all organisational members

It is also hoped to ascertain the place of a number of other associated concepts in relation to the learning organisation; shared organisational vision, employee empowerment, appropriate reward systems and trust between organisational members.

The empirically based section of the thesis comprises two major and several smaller pieces of research conducted in two large engineering companies, the first in the South West and the second in the Midlands. The research is designed to examine the perceptions of employees in both companies about the existence of learning organisation characteristics and a company orientation towards learning through data collected from two organisations using both quantitative and qualitative methods.

In Engineering Company 1 (Phases one to three of the research) a specially designed questionnaire measures the presence of learning organisation characteristics in one specific Group. The development of the diagnostic tool is described in detail and the advantages and disadvantages of this type of data collection, as opposed to other methods, are discussed. Analysis of the data obtained through the questionnaire is carried out using the Statistical Package for Social Scientists (SPSS) and a number of preliminary conclusions are drawn based on the eight conceptual categories from the literature around

which the questionnaire was formulated. These findings are later compared with the results of individual and focus group interviews to draw some overall conclusions relating to Company 1. The findings from the first questionnaire survey in Engineering Company 1 are supported by additional data from focus group interviews in a second Group, which makes possible a limited comparison. These qualitative data are examined using content analysis and are described in depth in Chapter 9.

Phases four and five of the research are centred in Engineering Company 2, a private-sector organisation based in Leicester. Phase four comprises a second survey using a modified version of the specially designed questionnaire, while Phase five consists of a series of telephone interviews with employees. Data from the questionnaire are analysed using similar methods to those employed in the first survey, although no form of in-depth comparison between the results of the two companies is carried out. The telephone interviews are designed to provide triangulation of data, as discussed in Chapter 10, and yield a significant amount of qualitative data, again based on the personal perceptions of respondents. These are analysed using a form of content analysis; this process and the results generated from this phase of the study are discussed in detail in Chapter 11. The data obtained from employees in the second company (Phases four and five) is used as a basis for factor analysis in order to provide validation of the diagnostic tool or to establish effective categories through accepted statistical means. The results of the factor analysis are discussed in Chapter 10 and full statistics are included in Appendix 10.

The thesis aims, through the results of the questionnaire surveys and interviews, to discover the extent to which learning organisation characteristics are present in each of the organisations studied and to establish the prerequisites for the development of such organisations. Through the use of different methods of data collection and factor analysis of the questionnaire data, the validity and degree of effectiveness of the questionnaire as a diagnostic tool are considered. Finally the findings of the study enable some observations to be made about the development of learning organisations in general, although these may be specific to older, large organisations in the engineering sector.

CHAPTER TWO

THE DEVELOPMENT OF LEARNING ORGANISATION THEORY

2.1 INTRODUCTION:

The study of learning in organisations has a lengthy history and the concept of the learning organisation was probably in existence long before a name was given to it. It has its origins in the Human Relations approach to organisational studies, which originated in the 1930s in counteraction to the mechanistic perspective of organisations and the pessimistic view of the workforce as lazy and unreliable, requiring strict control and only concerned with financial reward (Burnes 1992). The Human Relations claim that employees possessed needs, psychological and social as well as economic and that the informal co-operative systems within organisations were as important as formal structures suggested that there might be serious flaws in the previously accepted mechanistic approach, where people were equated with machines.

This chapter considers briefly some of the organisational theories which emerged from the challenge to the classical or mechanistic approach and looks at the development of theories of individual and collective learning. It indicates how, from these foundations, the concept of organisational learning has evolved and notes the influence of many writers and researchers evident in current learning organisation theory. The impact of ideas on action learning and experiential learning and the absorption of ideas on different levels of learning are also discussed. This section of the study then attempts to define both organisational learning and the learning organisation from a number of points of view and to identify the differences between these two approaches.

2.2 ACTION RESEARCH

Action Research was a term coined by Lewin (1951) to describe a collective method of addressing organisational and social problems. The idea originated in America but was quickly adopted by the Tavistock Institute in London with the aim of promoting management efficiency particularly in the coal industry. Action Research is described as 'the process of systematically collecting research data about an ongoing system relative to some objective, goal or need of that system; feeding these data back into the system; taking action ... and evaluating the results of actions' (French and Bell 1984). It is thus a rational

course of action based on a comprehensive analysis of an issue, which involves participation on the part of everyone involved and evaluation of the outcome. The process of change concerned must inevitably result in learning, both from the research itself and from shared decision making (Bennett 1983).

The first British programme, which took place between February 1954 and November 1956, examined the management structure in a group of collieries. It was termed an Action Learning project and was overseen by Revans who was later to utilise the method extensively (Revans 1972). Revans developed the theme of action research through *action learning*, which he popularised in Britain through a series of projects in the Health Service (Revans 1972, 1976, 1983). His concept of action learning is founded on the premise that in times of rapid or considerable environmental change organisations need to be capable of constant adaptation in order to survive and that this ability to adapt is dependent on learning. This bears obvious parallels to the later conception of the learning organisation, although the latter represents a wider concept of learning comprising not only adaptation but also major reframing of the organisation.

The learning needed to render the organisation capable of adapting to its environment constitutes more than just the acquisition of knowledge about the organisation because this is only applicable to past or possibly present problems. Revans argues that it is necessary to probe unfamiliar situations, to anticipate future needs and to 'pose useful and discriminating questions in conditions of ignorance, risk and confusion' (Revans 1983: p110). He claims that learning is composed of this process, which he calls *questioning insight*, together with programmed knowledge. Action learning does not reject conventional methods of instruction, but is composed only partly of these. Revans' model of action learning involves a two-way process of action and reflection, experience only being considered useful if subsequently reflected upon. Four stages are involved in the process:

1) Survey; observation, data collection, fact finding, investigation

2) Hypothesis formation; speculation, theorising, identification of patterns

3) Testing; experimentation

4) Audit; inspection, verification, evaluation.

A final phase of control might be added, where the organisation attempts to introduce general improvements as a result of the process (Revans 1983). This cycle of action learning has been developed and modified by Revans over a period of time and is also strongly influenced by the work of Lewin (1951) and Kolb (1981) on individual learning cycles (See 2.4 below).

Revans emphasises that learning only takes place if individuals within the organisation desire to change their behaviour. Urgent problems or attractive opportunities often act as a stimulus, providing motivation for learning. Furthermore, this learning only results from dealing with real problems, those which inherently involve the risk of failure. Feedback from the process is necessary to the individual in order for learning to result.

Action learning encompasses the idea of a small group of people exchanging knowledge, support and advice, and learning from each other in this way rather than being directed by management. The learning process claims to go much further than just group interaction, in that information is exchanged and the boundaries of current knowledge extended (Revans 1980). Employees are expected to share a sense of comradeship, due to the equity of status and opportunity. Moreover, 'learning to learn-by-doing' relies on experimenting with many different options in order to rethink programmes or processes (Revans op.cit: p299). Action learning should not be regarded merely as an antecedent to the concept of the learning organisation, however. It has continued to develop in its own right alongside other theories of learning and the method has been used in a number of recent studies (eg. Hendry 1995, Lee 1995).

2.3 LEVELS OF LEARNING

Some of the early work on levels of learning was conducted by Bateson (1973). In his series of essays on the orientation of the way people think, he posits that individuals become progressively more adept at problem solving with practice and that this is due to the acquisition of skills in learning-to-learn, which he calls deutero learning. This type of learning involves making changes or choices concerning the processing of accumulated

actions and experience into abstract habits of thought. He claims that there are three levels of learning, which he terms I, II and III. Level I, or proto learning, is changing or making choices within a fixed set of alternatives. Level II, which Bateson defines as changing the process of learning, corresponds to deutero learning and Level III learning consists of altering the process of deutero learning, so that the individual is able to learn-to-learn faster and more effectively (ibid).

Later in the 1970s, Argyris and Schon based their work in the US on Bateson's ideas, developing from his levels of learning their much quoted models of single and double-loop learning. Single-loop learning is described as learning within certain prescribed frameworks set by the governing values. This type of behaviour involves 'little public testing of ideas, especially those that might be important and threatening' (Argyris 1982) and no use of feedback. Double loop learning, in contrast, is founded on reflecting on actions taken and learning to reframe future actions in order to make them more successful. Argyris and Schon also take into account the existence of deutero learning (Bateson, op.cit.).

Much of Argyris's research is based on the detection and correction of error and the development and treatment of organisational routines inhibitory to double loop learning (Argyris and Schon 1978, Argyris 1990). It also focuses on double loop feedback which demonstrates that espoused theory frequently fails to match theory-in-use (Torbert 1994). Argyris and Schon found that a majority of organisations performed satisfactorily in single-loop learning, but few were successful in achieving double-loop learning; they were unable to find any organisations learning in a deutero manner. They conclude that this is due to the presence of inhibitory learning loops resulting from group behaviour which reinforce conditions for error such as ambiguity (Argyris and Schon, op.cit.).

Hawkins (1991) and Torbert (1994) suggest an additional level of learning which they term triple-loop learning. (ibid). Triple-loop learning is related to Bateson's Level III or deutero learning (Bateson op.cit.) and is an extension of double-loop learning, incorporating immediate feedback which enables the individual or organisation to learn on an instant basis, suiting the action to a single situation at one point in time (Torbert op.cit.).

11

Snell and Chak (1996) equate this type of learning to deutero learning and define it as 'inventing new processes for generating mental maps'. Mental models are described in greater depth below. Although there is some controversy as to the number of types of learning, no-one disputes the existence of different levels and the importance of understanding how these are linked. Sutton (1994) argues that there is no one number of learning levels which is 'right'; rather differentiating multiple levels of learning has proved helpful in studying organisational learning.

2.4 EXPERIENTIAL LEARNING

Experiential learning was derived from Lewin's (1951) field theory and Piaget's (1970) work on the nature and development of intelligence. It effectively addresses both operational learning; the steps required to complete a task learned through routines, and conceptual learning; the frameworks of thinking behind actions taken. The experiential view of learning is not a behavioural one based on organisational outcomes, instead learning is perceived as a continuous process supported by experience.
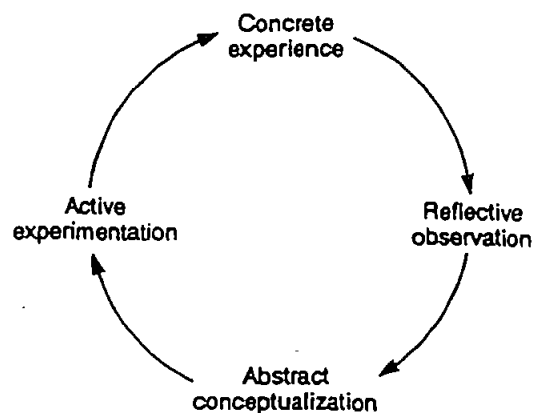
Figure 2.1: The Learning Cycle (source Kolb 1981: p20)

Kolb (1981) has helped to popularise a model of experiential learning usually referred to as Kolb's learning cycle, though it was originally devised by Lewin (op.cit.). The model integrates learning and adaptation processes and illustrates the translation of experience into abstract concepts which guide the selection of new experiences. Kolb's model, shown in

12

Fig.2.1, is almost identical to the one designed by Lewin (op.cit) except that Lewin's cycle is represented as moving anticlockwise, rather than clockwise.

A number of other learning cycles exist, all derived from the Lewin model. Argyris and Schon (1978) mention a Discovery-Intervention-Production-Generalisation cycle of learning, while Ishikawa (1985) describes a cycle of Plan-Do-Check-Act for use in the implementation of TQM programmes. Deming (1992) modifies this model to become his Plan-do-Study-Act learning cycle. Schein (1987) presents another version termed Observation-Reaction-Judgement- Intervention. Kofman's (1992) version of the learning cycle is named Observe-Assess-Design-Implement (OADI). These learning cycles could all be criticised for being presented as new ideas, when in fact they are entirely based on the ideas of Lewin (1951). The OADI model has been adopted by Kim (1993c) who adds the element of individual active memory, which he terms Individual Mental Models (IMM), claiming that the simple learning cycle does not demonstrate the important part played by memory in linking individual and organisational learning.

Kim's model of the organisational learning cycle also incorporates Argyris and Schon's concept of single and double loop learning at both an individual and an organisational level. Kim (op.cit: p38) defines learning as 'increasing one's capacity to take effective action' but divides this into two levels, operational learning and conceptual learning. These are related to routines and frameworks respectively. Routines comprise the day-to-day operations of the company; the physical domain of the organisation, within which learning takes place; this is what Kim (op.cit) refers to as know-how or operational learning. This is associated with procedures, which although familiar, may be modified to reflect learning and may also influence the learning process itself. Frameworks, on the other hand, are concerned with conceptual learning or 'know-why' (Kim op.cit); these form the infrastructure surrounding procedures or operations and support the everyday routines of organisational life.

Both operational and conceptual learning rely on individual mental models; highly specific representations of a person's view of the world incorporating both implicit and explicit understandings (Kim op.cit). These provide the background against which new

learning is measured and interpreted and may be considered the 'storehouse of knowledge and information in organisations' (Spicer 1997: p14). Senge (1990a) contends that people's mental models determine how they interpret the world and hence how they subsequently act. When accepted procedures are challenged for some reason, thinking is often reframed and new conceptual structures created; this corresponds to double-loop learning (Argyris and Schon 1978).

The precondition for shared learning is the alignment of individual purpose with the aims of the workteam, department or organisation (Senge op.cit). This can only take place through communication of a shared vision and organisational goals. Shared learning implies a collective discipline and is developed from individual learning through the two distinct activities of dialogue and discussion. Dialogue entails the 'free and creative exploration of complex and subtle issues' (Senge op.cit: p237) whereas discussion consists of airing different opinions and voicing conflict so that decisions may be made.

Organisations learn through their individual members; shared learning is therefore developed from individual learning (Kim 1993b). The process by which this occurs is complex and involves the creation of shared mental models as shown in Figure 2.2 (Kim op.cit). Shared mental models are collective representations of physical reality which provide a basis for directing and controlling group decision-making processes. Not all individual learning will be shared because not all of it is relevant to group or organisational goals. Kim suggests that individual mental models and shared mental models together constitute the active memory of the organisation; intangible assets, experience and knowledge which cannot be recorded other than in the minds of organisational members. Without the existence of shared mental models the other more formally recorded parts of the organisation's memory cannot be utilised (ibid). Walsh and Ungson (1991) take a similar perspective, describing the blending of multiple individual perspectives on organisational experiences as shared interpretations and claiming that these transcend the individual level to form an organisational interpretation system.

14

Figure 3   Simple Model of Individual Learning: OADI-Individual Mental Models (IMM) Cycle

Individual Learning

Conceptual
Assess
Design
Observe
Implement
Operational

Individual Mental Models   Frameworks   Routines
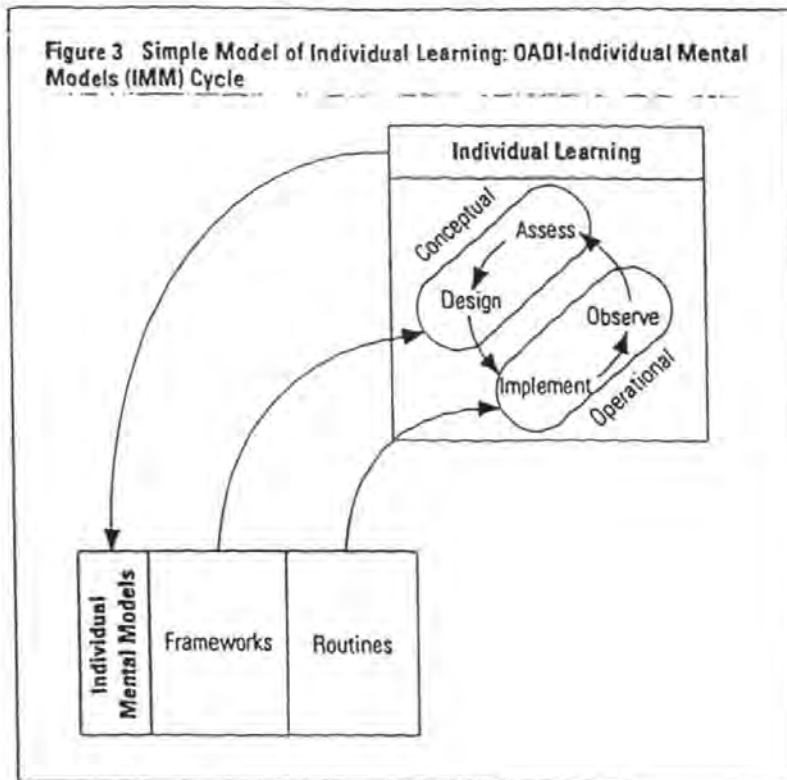
Figure 2.2: Links Between Individual and Shared Mental Models (source Kim 1993b: p40)

As Spicer (op.cit) suggests, an effective organisation acts as a gestalt entity, integrating and maximising the learning of the individuals within it, thereby aligning this learning with the progress of the organisation as a whole. This is the process described by Morgan (1993: p11) as the 'creation of shared understandings'. A number of writers have argued that mental models are the key to the storage and transfer of knowledge which results in organisational learning (eg. Stata 1989, Hayes and Allinson 1996). Kim (op.cit) discusses the links between individual and shared learning in depth through the use of individual and shared mental models, suggesting that the process of refining and articulating individual mental models is essential for the development of new shared mental models.

Marsick and Watkins (1993) highlight the importance of team learning and identify four stages of the team learning process; fragmented, pooled, synergistic and continous learning. They maintain team learning takes place through collaboration which forms the link between individual and organisational learning. This is illustrated in their model of learning organisation imperatives for action (see Figure 2.3). When a new idea is adopted by a team, individuals within the team reinforce each other's thinking and learning and then spread their ideas further into the organisation. Team learning involves 'innovative, co-ordinated action' (Senge 1990a: p236) in a range of processes which may include framing, reframing, integrating perspectives, experimenting and crossing boundaries (Schon 1983). Marsick and Watkins (op.cit) reiterate that the shift from individual to collective learning takes place through communication; open airing of conflicting views, inquiry and dialogue.

Society
Connect the organization to its environment

Empower people toward a collective vision

Establish systems to capture and share learning

Organization

Teams

Encourage collaboration and team learning

Toward

Continuous learning and change

Individuals

Promote inquiry and dialogue

Create continuous learning opportunities
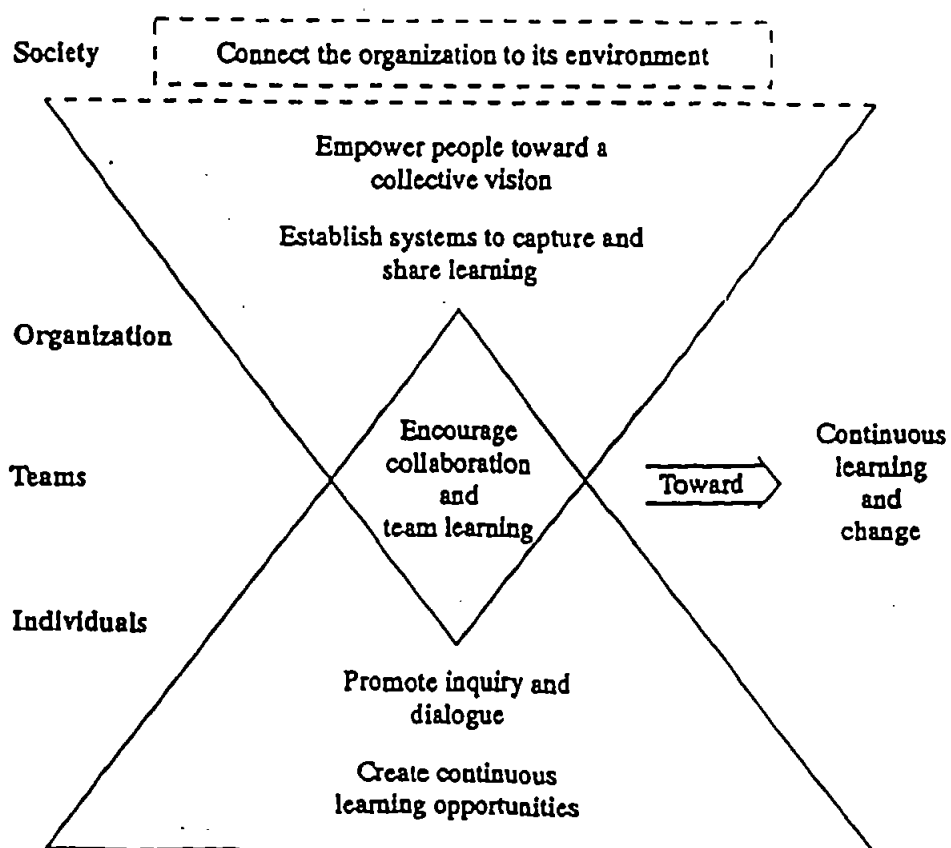
Figure 2.3: The Position of Team Learning (source Marsick and Watkins 1993: p10)

16

2.5 THE CONCEPT OF ORGANISATIONAL LEARNING

Some of the earliest published ideas on organisational learning are derived from the observations of Chapman, Kennedy, Newell and Biel (1959) on how air defence teams worked together. The researchers noted that learning is often not explicit, that it tends not to occur in smooth increments and that there are different types of learning. They also found that in many cases, performance can be maintained despite fluctuations in workloads. Cangelosi and Dill (1965) compare these observations with management processes and find the two to be fairly consistent, but note that the organisational learning derived is influenced by the immediate environment and by the subject matter being learned. Organisational learning is defined as a set of interactions between individual and organisational adaptation. They also emphasise the importance of tensions as a stimulus for organisational learning and suggest that such learning may involve the manipulation of tensions. There are said to be three kinds of tensions which generate, in turn, three types of learning; subsystem learning, total system learning and a combination of both of these (ibid).

The first theory of organisational learning was probably devised by Cyert and March (1963). Organisational learning is seen as one part of the organisation's overall economic decision-making; a system of adaptive elements. There are five important factors which make up this system, all of which are capable of adaptation; organisational preferences, external shocks, routines, control of outcomes and change processes. These ideas are expanded by Simon (1969) who defines organisational learning as a combination of growing insights within the firm and structural and other organisational outcomes, while admitting that these might not occur simultaneously. He recognises the ability of certain individuals to restructure organisational problems but fails to distinguish clearly between the measurable outcomes of the organisation and the less tangible intuitive processes taking place. Simon's definition is clarified by Duncan and Weiss (1978: p 84), who contend: 'organisational learning is the process within the organisation by which knowledge about action-outcome relationships and the effect on these relationships is developed'.

March and Olsen (1975) present a more complex perspective on organisational learning, positing that adaptive rationality is inevitably limited by individual and

organisational characteristics. They argue previous studies assume that people and organisations automatically learn from experience, whereas in practice, this depends on the way in which beliefs about such experience are assimilated into the organisation. Hedberg (1981) disputes that learning can be equated with adaptation, claiming that adaptation is a simple process of adjustment, requiring no insight, whereas learning comprises a series of cognitive processes. Shrivastava (1983) suggests that adaptation is one of four distinct perspectives on organisational learning:

1. adaptation

2. assumption-sharing

3. developing knowledge of action-outcome relationships

4. institutionalised experience.

He suggests that learning takes place at different levels in the organisation and that learning at company and industry level has more impact on strategic decision making than individual and departmental learning. Organisational learning is said to be shared and dispersed throughout the organisation through a series of learning systems (Shrivastava op.cit.).

March and Olsen (1975) emphasise the importance of organisational choice and the way in which changes in assumptions about the cycle of choice may significantly modify the whole system. They point out, for example, that organisational action does not necessarily determine environmental response. Fiol and Lyles (1985) however, contend that alignment between the organisation and its environment is critical in surviving and sustaining competitive advantage, which they argue are the overriding long term goals of all organisations. They postulate that inherent in this alignment is the potential for learning, a view previously asserted by Miles and Snow (1978) and supported by Chakravarthy (1982). Chakravarthy maintains adaptation is an ongoing process of strategic choice for coping with environmental change (ibid). Miles (1982) and Fiol and Lyles' (op.cit.) have developed March and Olsens' (op.cit.) theories on choice, positing that the element of choice in determining how the organisation responds to environmental changes results in an ability to learn over a period of time. Hence 'organisational performance affects the

18

organisation's ability to learn and adapt in a changing environment' (Fiol and Lyles, op.cit.
p 804).

2.6 THE LEARNING ORGANISATION

During the 1980s the rapid advance of technology and widely fluctuating economic
conditions made apparent the need for organisations to be capable of adapting in order to
survive. So that companies could respond sufficiently rapidly to environmental change,
learning was seen as necessary and this learning needed to be integrated throughout the
organisation by the actions of individual members. A new perspective on organisations
came into being; the organisation as a co-ordinated learning institution (Dodgson 1993a).
Environmental change is perceived as the major stimulus for learning and it is argued that
greater environmental uncertainty leads to an increased need for organisational learning.
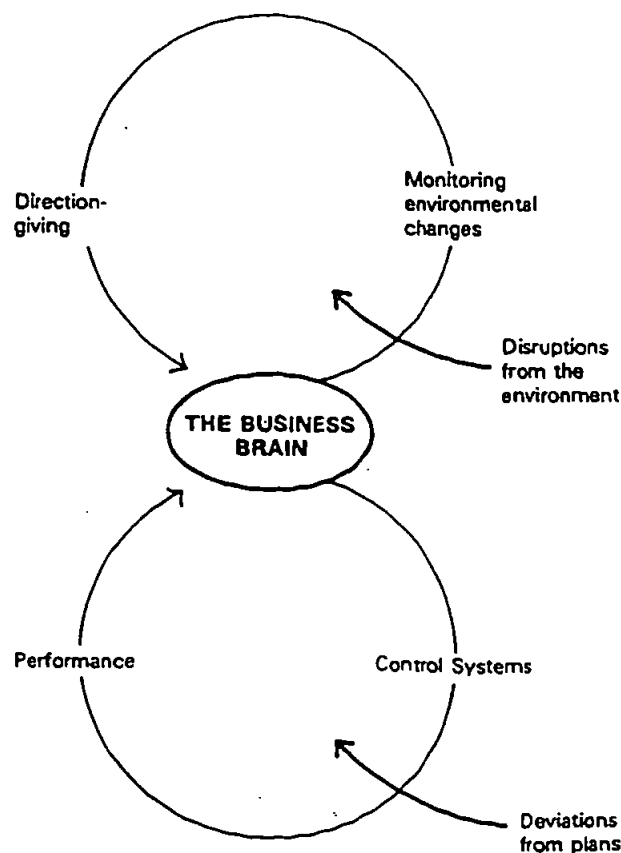
Figure 2.4: The Learning Organisation Model (source Garratt 1987: p110)

19

The ideas of Argyris and Schon were developed in the UK by Garratt (1987), applying his own model of double loop learning to the implementation of policy in organisations. He pays particular attention to the role of directors and endeavours to establish a concept of effective organisations as learning systems, with top management providing guidance. His learning organisation model is centred around the directors' role, which he terms the 'Business Brain' (See Figure 2.4 on previous page).

Following the impact of Japanese economic success, it became clear that one factor Japanese companies have in common is a high degree of employee commitment (West 1994a, Kidd and Teramoto 1994). The means for achieving this appear to be through the development of strong value systems and a culture which often emphasises the need for rapid adaptation and learning (West 1994b) Interest in so-called 'excellent' organisations also seems to point to the need for strong cultures and an enhanced capability for learning (Peters and Waterman 1982).

In 1988 Pedler, Burgoyne and Boydell published the first of their extensive work on learning companies, a term which they prefer to learning organisations. Their definition of the learning company and their diagnostic tools for measuring company learning processes have probably been more widely used in the UK than those of any other theorists. The Learning Company promotes the use of its own questionnaire, based around eleven characteristics of a learning company, for measuring the learning organisation and publishes some of the findings from these surveys (Pedler et al 1993).

Learning by individuals is said to be inevitable and is claimed to be inherent in organisations. Organisational learning focuses on ameliorating learning processes so that individual and group behaviour may be enhanced (Shrivastava 1983, Dodgson 1993). The learning organisation, however, is concerned with designing organisations specifically to enable employees to learn and thus to improve the flexibility of the workplace as a whole (Coopey 1995). It seeks to progress beyond incidental and natural learning, to strive for systematic and co-ordinated use of learning at all levels of the system. This is a radical concept to some extent, in that it involves a departure from conventional methods of work organisation and the behaviour associated with them. Managers are no longer expected to

20

'control and direct' employees but to enable workers to learn and to provide support and coaching.

2.7 DEFINING ORGANISATIONAL LEARNING

Definitions of organisational learning have evolved over a number of years as understanding about individual learning and knowledge of the way organisational work has developed. It is clear from early descriptions that although the roles of individual and collective learning were differentiated, links between the two were not clearly understood. More recent studies of organisational learning have incorporated the increased understanding of organisational psychology and definitions of the 1990s tend to reflect this in the language employed.

In one of the earliest studies of organisational learning, Cangelosi and Dill (1965: p200) describe it as 'a series of interactions between adaptation at the individual or subgroup level and adaptation at the organisational level'. This definition implies learning and adaptation were seen as synonymous at the time. Argyris (1977) depicts organisational learning as a process of identifying and correcting error and expands on this a year later (Argyris and Schon 1978), arguing that individual detection of congruence or incongruence between planned and actual organisational outcomes provides either confirmation or refution of organisational theory-in-use and results in organisational learning. Hedberg (1981) claims organisational learning is an understanding of the interaction between the organisation and its environment, while Fiol and Lyles (1985) suggest that it consists of the improvement of organisational actions through increased understanding.

By the end of the 1980s definitions of organisational learning had become more technical. Levitt and March (1988) describe 'the encoding of inferences from history into routines'. These routines act as guides for organisational behaviour. Swieringa and Wierdsma (1992) characterise organisations as a set of rules, both explicit and implicit, which determine how organisational members behave; where behaviour according to the rules does not produce the desired outcomes then the organisation will need to modify or transform the rules, resulting in organisational learning. Their model of the learning

organisation incorporates principles, rules and behaviour in processes of single and double-loop learning(See Fig. 2.5).
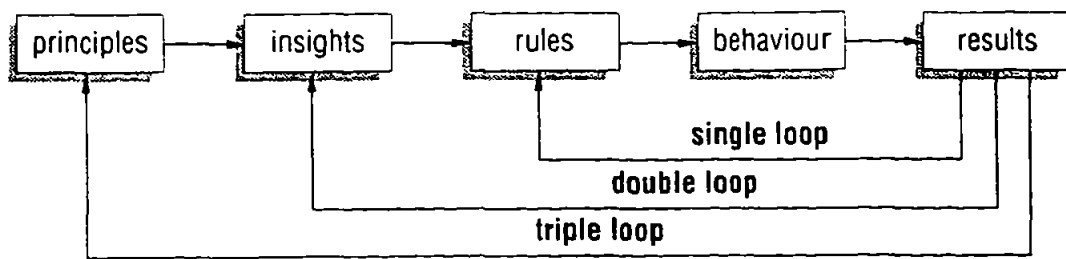
Fig. 2.5: A Model of the Learning Organisation (source: Swieringa and Wierdsma: p36)

They suggest that insights are also important and can have a direct impact on behaviour; these, they suggest, feed into triple loop learning, which they define as questioning and developing the essential principles of the organisation.

Huber (1991) also focuses on behaviour, maintaining that through the processing of information the organisation was able to learn and thus change its behaviour. Hayes and Allison (1996: p12) submit an extension of this theory positing that 'organisational (collective) learning involves sampling the environment, including the effects of past behaviour and using the information made available by this process to modify the mental models, schema or cognitive maps that guide behaviour'.

2.8 THE DISTINCTION BETWEEN ORGANISATIONAL LEARNING AND THE LEARNING ORGANISATION

Organisational learning then, is a collective process which occurs naturally in organisations, but is more prolific in some organisations than others, depending on the structure and the culture present. It consists of the shared knowledge and insights of organisational members and draws on the experiences and memory of organisational events (Stata 1989). However, organisational learning implies more than the sum of the individual learning that occurs throughout the organisation (Sadler 1993). A number of writers (eg. Argyris and Schon 1978, Senge 1990, Kim 1993) contend that organisational learning

occurs at both a single-loop and a double-loop level. Single-loop organisational learning is derived from the interaction between environmental stimulus and organisational response (Hedberg 1991) where the process of adaptation is continually modified to provide the most appropriate response. Organisational double-loop learning however, incorporates a whole range of interactions between individual and shared mental models, individual frameworks and a holistic view of the organisation (Kim 1993b).

Over the past two decades, factors such as increasing global competition, an emphasis on quality and a turbulent economic environment have intensified presssure for a major shift in the management of organisations, towards a more flexible and creative structure. The concept of the learning organisation is one response to this demand. It has been claimed that organisations can only cope successfully with rapid change when relevant learning occurs constantly throughout the system (West 1994a). The term learning organisation has been coined to express a type of workplace which consciously promotes learning as a central theme. This learning should focus on anticipation and avoidance of potential problems (Senge 1990a). The learning organisation may be described as a place where working and learning take place simultaneously, where the emphasis is on acquiring and exploiting knowledge creatively and where organisational behaviour is constantly being modified to reflect new insights (Pedler, Burgoyne and Boydell 1997).

However, the concept of the learning organisation as a 'place' may be misleading. The learning organisation has been described as not so much a state as a journey towards that state (Burdett 1993). Senge suggests the notion of an *orientation* towards organisational learning (Senge op.cit.). Honey and Mumford (1992) define the learning organisation as an environment where the behaviours and practices involved in continuous development are actively encouraged. Iles (1994) discusses the advantages of learning environments as a mechanism for accelerating learning which may occur naturally. Lessem (1990) also looks at the learning organisation from the perspective of the learning environment, describing a new form of structure, transcending the hierarchical institution and establishing horizontal and vertical communication, both external and internal, between

people and organisations. He notes that commercial, social and technological factors each play a significant part in this communication.

However, as Dodgson (1993b) points out, learning is derived primarily from the individuals within organisations and it is the way in which these individuals share and use their learning which results in learning at an organisational level. It is only by establishing appropriate organisational structures and a culture which facilitates learning that this process is likely to become central to the organisation (Hedberg 1981, Schein 1985). Handy (1991) maintains that a learning organisation can mean two things; an organisation which learns, or an organisation which encourages its members to learn; a true learning organisation should satisfy both meanings. He also argues that learning organisations require formal mechanisms for acquiring knowledge and learning from this, rather than leaving such processes to chance. Discretionary opportunities are inherent in learning organisations, greater responsibility entailing the potential for more errors. Mistakes should be perceived as learning opportunities in a successful learning organisation (ibid).

Garvin (1993) bases his concept of the learning organisation on the premise that innovations or new ideas are needed for learning to occur. These ideas may be created within the organisation, or may come from the environment and normally provide the trigger for organisational change. However, this does not necessarily constitute a learning organisation unless changes also take place in ways of working; it is the application of acquired knowledge to relevant activities within the company which is significant. Garvin maintains that the learning organisation possesses skills in creating, obtaining and transferring knowledge and that it uses these processes to adapt and modify its activities, reflecting new insights (ibid).

Peter Senge in 'The Fifth Discipline' (1991a) takes a systemic approach, describing five disciplines of the learning organisation; the first four consisting of personal mastery, a high level of proficiency and commitment, learning how to use and adapt mental models, team learning and the creation of a shared vision. He claims that the fifth discipline, systems thinking, is the key discipline, as it is responsible for the integration of the other factors into the organisation. Nevis, DiBella and Gould (1995) also submit a concept of

organisations as learning systems, based on the sustainable nature of organisational learning even when individuals change. They claimed that effective learning organisations 'diligently pursue a constantly enhanced knowledge base', which enables the organisation to develop specific competences and to be capable of both regular adaptation and transformational change (ibid: p74). Similarly, Senge (op.cit.) defines learning organisations as organisational systems where employees are constantly expanding their capacity to achieve desired results, where innovative ways of thinking are fostered and where people learn how to learn together.

Perhaps the most widely used definition of the learning organisation, certainly in the UK, is that of Pedler, Burgoyne and Boydell, who state that a learning company is an organisation which 'facilitates the learning of all its members and continuously transforms itself' (Pedler et al 1991: p1). The basic assumption is that organisations can be designed specifically in a way which makes them capable of making constant modifications in response to both internal and external demands, rather than remaining static for a number of years and then requiring radical reorganization. The 'members' of the company are taken to include not only employees, but also customers, suppliers, owners and anyone else involved in the business in any way. Pedler et al (op.cit) contend there is no standard model for setting up a learning company but that it has to be developed from elements already present in the organisation. They emphasise the need for managerial experiments in order to find better ways of working, rather than opting for fashionable theories expected to provide immediate solutions to organisational problems.

Dorothy Leonard-Barton, writing in the US, also focuses on experimentation and suggests a new perspective on organisations; companies as learning laboratories (Leonard-Barton 1992). She adopts a systems approach like Senge (1990a) and advocates deliberate and careful design of the learning laboratory, with managers involved in the communication of cultural values, and detection and modification of inconsistent behaviour in their staff. Her definition of a learning laboratory describes an organisation dedicated to the creation, collection and control of knowledge. She perceives such a laboratory as a complex system

25

where problem-solving, innovation, internal knowledge and environmental information were all interrelated (Leonard-Barton op.cit).

From these descriptions a composite model of the learning organisation begins to emerge, with fragments of theory borrowed from a number of different writers. The learning organisation must be one which responds to a rapidly changing environment by ensuring that relevant learning is the central focus and that it occurs constantly and at all levels throughout the system (West 1994a). Working and learning should take place side by side as a matter of course and the emphasis should be on acquiring, sharing and using knowledge creatively. The precise means of doing this will probably vary from company to company (Pedler et al 1997) but organisational aims will have a number of factors in common and communication of these can be assisted by the alignment of cultural beliefs and value-systems. Innovation and experimentation should take place regularly and insights gained from new ways of working and learning, gained both incidentally and deliberately, are used to constantly adapt and modify the working of the organisation (Garvin 1993).

2.9 SUMMARY

This chapter has examined the gradual development of the learning organisation from a series of ideas which originated with the Human Relations (HR) approach in the 1930s. Action research and action learning form an important part of this development and have laid the foundations for many of the notions embodied in the present concept of the learning organisation.

A number of theories based on levels of learning have been discussed; these are variously termed levels I, II and III or single-loop, double-loop and deutero learning. Deutero learning is particularly significant as it is concerned with the process of learning how to learn. The notion of experiential learning has also been examined, which incorporates both operational and conceptual learning. This has been developed by a number of researchers and illustrated by a series of closely related four-step cycles of learning, the best known of which are probably Kolb's learning cycle and the OADI model.

Subsequent work has added theories of individual and group mental models to the simple four stage cycle.

The concept of organisational learning emerged during the 1960s and a number of writers propounded various definitions. The notion drew on previous theories of individual learning, action research and adaptation and may be described as a collective process of interactions between individual and shared mental models in the organisation, though there are a large number of different definitions.

The theory of the learning organisation was developed in the 1980s, partly in response to the recognition that the success of many Japanese companies was due to a focus on appropriate organisational cultures and the involvement of all employees in the running of their organisations. The learning organisation has been variously defined but is taken here to imply an organisaitonal orientation towards learning by all its members. The notion of the learning organisation is related to the systems approach and incorporates a range of features, which may differ between organisations; these elements are described in Chapter 5.

CHAPTER THREE

THE LEARNING ORGANISATION IN CONTEXT

3.1 INTRODUCTION

Recent years have seen the development of the concept of the learning organisation, based on the premise that organisations may cope more successfully with a turbulent environment when relevant learning takes place at regular intervals and at all levels of the organisation (West 1994b). A learning organisation is more than just a workplace where a lot of learning occurs, however. The term has been coined by various authors to express a type of organisation where learning is consciously promoted at all levels. Working and learning take place alongside each other, and employees are aware of opportunities for acquiring knowledge, applying it creatively to their work and sharing the resulting learning with their colleagues. The ideas behind the learning organisation are not in themselves new, but perhaps as Garratt (1995: p25) suggests, an 'old idea that has come of age'. This chapter examines some of the reasons behind the current adoption of learning organisation theory and offers some suggestions as to why these ideas have come into favour at this time.

The economic and business environment of the 1990s is characterised by rapid and continuous change, ever advancing technological development and increased national or international interaction. One response to this situation is for organisations to become more flexible and capable of constant internal adjustment in order to cope with the demands of the external environment (West 1994a). The effect of new technologies, particularly in production, has been to create an increased demand for new skills and continuous innovation which require both individual and organisational learning. The structural changes which have taken place in many organisations over the past decade have meant the removal of middle management layers and the subsequent devolution of responsibility to individual employees and cross-functional work teams. There is clearly a necessity for improving methods of sharing new knowledge and developing skills in learning how to learn (Iles 1994). Many writers now believe that competitive advantage will, in the future, only be derived from the acquisition and creation of new knowledge and the exploitation of insights gained as a result of this (West 1994b).

It is now beginning to be realised that traditional systems of management characterised by control and direction tend to stifle creativity, motivation and often self-esteem, by rewarding employees for acting in ways designed to meet the approval of others and by discouraging attempts to try out new methods of working, risk taking or experimenting, because they might lead to failure (Deming 1986, Schein 1993). Yet it is these qualities; creativity, high levels of motivation and the willingness to take risks which are now being deemed desirable by many companies (Pearson 1991, Bunning 1992). Honey (1991) claims that while most members of organisations learn naturally and continuously, the structure of many workplaces has encouraged the learning of behaviour and practices now considered undesirable to many organisations; activities which are deeply entrenched in past experience and which hinder creative development.

Managers are being encouraged by the current literature to adopt new ways of thinking which focus on expanding the learning capability of the organisation and enabling employees to develop their potential (Ezzamel et al 1994). Because the market changes so rapidly, it may no longer be enough merely to solve problems, identify present needs and produce solutions accordingly, because in all probability by the time this has been put into practice the responses will already be out of date. Some forward-thinking companies are now seeking to meet the latent needs of customers; i.e. what might be asked for or needed in the future, even though it has not yet been specified (Senge 1990b). A truly creative response is required, but in order to achieve this the right conditions need to be present within the company.

3.2 ENVIRONMENTAL PRESSURE

A number of writers suggest that the main force behind the current adoption of learning organisation theory is environmental change. Of course, such change has always existed, but the nature of change has altered over the past two decades; as Handy (1989: p5) points out 'change is not what it used to be'. The rate of environmental change has accelerated in recent years and continues to do so, due to a number of factors including improved global communications, fluctuating economic conditions and the constant

updating of technology. Moreover these changes are discontinuous, rather than part of a steady pattern of growth (Handy 1989). Jashapara (1993) asserts that a constantly increasing rate of product change and a variety of environmental demands undergoing continual adjustment have emphasised the need for companies to gain a competitive edge in order to survive. Few would dispute that most organisations now exist in a more highly competitive market. The best way of achieving competitive advantage, Jashapara contends, is through the the development of an organisation where continuous focused learning takes place at all levels (ibid). Moss-Jones (1992) similarly suggests that the environment of the 1990s is characterised by rapid change and uncertainty and submits that organisations can cope with this most effectively through continual organisation-wide learning. The establishment of a climate and systems where such learning can take place usually results in the creation of a learning organisation (West 1994a).

However, many descriptions of the learning organisation include the terms *continuous* or *continual learning* (eg. Senge 1990a, Maccoby 1993, West 1994a) but do not prescribe the structures within which this learning might occur. While it is evident that learning, both planned and incidental, takes place in most if not all organisations on a daily basis, if there is no means of harnessing and exploiting such learning it will have little benefit for the organisation. Hawkins (1991) confirms that there is often little transfer of learning following participation in training courses or planned opportunities for learning. In many organisations there may be few opportunities for sharing information of any kind, perhaps because the mechanisms for this have not been put in place.

The use of the term 'learning organisation' is diverse; this is evident from the variation in its definition. The learning organisation is variously described as an environment where continuous development is encouraged (Honey and Mumford 1992); a new form of structure, establishing vertical and horizontal communication between people and organisations (Lessem 1990) or an organisation skilled at creating and sharing knowledge and at adjusting its responses to incorporate new knowledge (Garvin 1993). Other writers have suggested a learning organisation is a place which facilitates learning

(Pedler, Burgoyne and Boydell 1997) or a series of interacting systems (Senge 1990b, Nevis, DiBella and Gould 1995). Sadler also describes the learning organisaiton as a 'total learning system' (1993: p10) implying continuous assessment of learning activities and an inherent feedback loop. This range of diverse descriptions may appear to form a contradictory picture of such organisations but, provided that each organisation involved has a true understanding of the type of learning oganisation it seeks to become, such a diversity of definitions may in fact prove an advantage; a learning organisation may conform to one or all of these definitions.

Senge (1990a: p1) describes learning organisations as places 'where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together'. Similarly, West (1994a: p15) asserts that a learning organisation possesses 'the types of culture and processes to create the climate and systems needed to ensure that the organisation can learn continuously'. These are laudable aims but the ideals are very abstract and no real framework is provided in which action may be taken to achieve such aims.

The problem of definition may result partly from the notion that the learning organisation is a 'place'. Burdett (1993) proposes the metaphor of a journey rather than a destination, implying an ongoing process instead of a position to be achieved. Similarly, images of the learning organisation as a direction or an orientation (Coopey 1995a) are probably more useful indications of an emphasis on achieving a focus on organisational learning. Garvin (1993) points out that it will be difficult for managers to realise when their companies have become learning organisations, or in terms of the above perspective, to recognise when an alignment with a learning orientation has been achieved. Some form of regular assessment is required which provides feedback into the organisation to ensure that it is continuing to learn and is working towards organisational goals.

In some circumstances companies have claimed to have become learning organisations despite having implemented only the most rudimentary aspects of the model. There is a danger that the learning organisation may become yet another management tool to enhance business reputation. Burgoyne (1995) admits that claims to

learning organisation status are being used in some cases as an excuse for downsizing and reducing staff numbers. Giddens goes further than this maintaining that those who promote the principles of organisational learning 'are offering just another metaphor to be used manipulatively' (1979: p78). Admittedly this claim was made some years ago, but there may be some truth in this perspective. Such companies demand more work from their employees in return for the same or smaller rewards, while at the same time substantially increasing the financial rewards of the senior managers instigating the downsizing programmes (Burgoyne op.cit).

Similarly, some of the components of the learning organisation may be put in place and utilised purely to achieve greater cost-effectiveness or effort rather than to offer opportunities or structures to facilitate learning. Empowerment and participation in policy making, while in theory providing autonomy and greater job satisfaction for lower level employees, may in reality be another more insidious form of management control along Orwellian lines, requiring unqualified commitment by employees to the aims and objectives of the organisation.

Hawkins (1991) puts forward a number of criticisms of the learning organisation concept, particularly the Pedler, Burgoyne and Boydell (1991,1997) model, claiming that it fails to distinguish between types or levels of learning and that organisations are probably not capable of transforming themselves. There also appears to be some ambiguity surrounding the various elements which go to make up the learning organisation; different writers have described different components. Furthermore, many of the descriptions of learning organisations or learning companies employ terms which are nebulous and imprecise. It is therefore difficult to describe examples of companies that have 'become' learning organisations, partly because there is probably no one point at which this can be said to have been achieved. Though a number of writers describe characteristics of the learning organisation which are measurable (e.g.Marquardt and Reynolds 1994, Pedler, Burgoyne and Boydell 1997), it is not clear whether companies need to possess all of these in order to be considered learning organisations. Claims to

learning organisation status are frequently based on the perceptions of a small number of senior managers, not on the views of all organisational members.

A number of writers have noted that there is little which is completely new contained within the concept of the learning organisation. Peters (1993) describes an old idea whose time has now come; this is reiterated by Garratt (1995), while West (1994a: p15) suggests it is 'a comparatively new term for a complex mix of ideas which have been present for a long time'. It may also be claimed that the learning organisation is a reinvention of the notion of organisational development (OD), which focuses on continuous organisational change through such mechanisms as participative management, team building and employee involvement in organisational improvement, all of which may be considered as elements inherent in the learning organisation. OD is described in greater detail in Chapter 4, as one of the models of change management.

The stimulus which prompts a company to become a learning organisation may be a crisis of some kind, frequently a threat to survival (Lessem 1993, Chan 1994). Yet a number of companies have tended to view the concept of the learning organisation as a universal panacea, whatever the problem. It may be that a state of crisis is not the best situation in which to implement the principles of a learning-focused organisation because of the anxiety and perhaps low trust which are likely to exist among employees at such a time, characteristics which will probably inhibit the growth of organisational learning.

Unlike conventional hierarchical structures, which tend to isolate themselves from their environment, the learning organisation promotes continual interaction with its environment in order to extend its knowledge, predict future trends and adapt accordingly. However, in order for this interaction to take place structures need to be in place to support such external communication. Pedler, Burgoyne and Boydell (1997: p136) suggest that these structures would comprise inter-company learning, eg. benchmarking, joint ventures with competitors, information-sharing between companies; and environmental scanning; the collection of environmental data by 'boundary workers', those in regular contact with customers or suppliers. It is likely that a major shift would be needed before employees in most organisations come to perceive these tasks as

inherent to their jobs. Furthermore, knowledge acquired from other organisations or the external environment is unlikely to be utilised by the company unless an effective system of pooling such information is set up.

The learning organisation is one response to the fact that the implicit employment contract between organisations and their staff has broken down in many instances over the last decade and a half. The tacit agreement which existed formerly, that hard work and loyalty to the company would be rewarded by financial and employment security, is probably unrealistic in today's climate. Cashman and Feldman (1995) submit that a new social contract is being established, based on an exchange of contributions; organisations value employees who accomplish high quality work appropriate to the company's needs, and employees remain with companies when their personal and career needs are satisfied. This new agreement depends to a great extent on the ability of employees to recognise their potential and to develop a clear vision of their career progress in order to make a relevant and useful contribution to the organisation, and at the same time articulate and address their own needs (ibid.) Human Resource managers have an important role to play in helping employees with the achievement of these objectives.

Since the mid 1980s major changes have taken place in the way people are managed, particularly in the relationship between employees and management. Organisations have responded to environmental change factors by flattening structures and devolving responsibility, by sharing power between a greater number of people and by recognising the need for diversity (Cave 1994). Carnall (1990) suggests that change may also be introduced in order to increase organisational effectiveness, but points out that where an organisation is not particularly effective employees are less likely to be receptive to new ideas. In fact, employees may not necessarily welcome the notion of power-sharing, deducing that this will probably entail greater responsibility and effort on their part in order to complete each task.

3.3 NEW MANAGEMENT PRACTICES

It has been posited that management practice is now moving into a new stage of development; two earlier phases comprised splitting control and ownership and the design of systems which controlled corporate development and measured the way in which policy objectives were met (Drucker 1988). This third stage emphasises the availability of information , the removal of vertical and horizontal boundaries and a shift away from a direct-and-control style of management to one based on coaching and facilitation of learning (Ezzamel et al 1994).

Conventional hierarchical structures are now considered to be expensive and to inhibit employee creativity and speed of response to environmental changes. Instead, many organisations today favour leaner organic structures, which focus on employee commitment to core organisational values. The new style of management, therefore, does not require the enforcement of rules or an insistence on compliance, but the ability to take an overall view of the organisation, to exploit opportunities and to facilitate innovation and the sharing of ideas and skills (Ezzamel et al 1994). A number of writers have suggested that a move to this type of management means unlearning the very types of behaviour which were central to the management role in the past and which probably led to the manager achieving his/her present position in the company (Burdett 1991, Leigh and Maynard 1993).

Furthermore, it may be that beneath the rhetoric of new management practices, many managers are reluctant to abandon their old mindset and attempt to implement empowerment programmes for employees while simultaneously retaining control (McGill and Slocum 1993, Ezzamel et al, op.cit.). Pfeffer (1995) argues that it is essential for management to take a holistic view of the organisation. Not only do organisational changes take some time to produce results through improved performance, but managers need an overall philosophy and a comprehensive understanding of management practices in order to encourage employees to overcome problems and to persist even when initial attempts may fail. Kotter (1996) notes that in many cases attempts to reform

organisations fail through a poorly defined vision, lack of communication of this vision or precipitate claims of success, amongst other factors.

Conventional management solutions to environmental turbulence revolve around strategy, re-structuring and steering; the monitoring of internal performance and external markets. New ideas developed around chaos theory (Stacey 1991, Kaye 1993) and self management suggest that strategy should be much more flexible than was previously thought to take account of unpredictable factors and that organisational structures should similarly be much looser and informal, allowing creative thinking and collaborative work patterns to develop. Moreover, the application of chaos theory to the steering process implies that rather than planning organisational development, a team approach using predetermined objectives and a constant process of adaptation to conditions as they occur may be more appropriate (Muller and Watts 1993). Hutchins (1991: p22) calls this approach 'local designed adaptation' but points out that as one team makes modifications in response to environmental change, this may have unanticipated effects on other subsystems of the organisation and may ultimately change the behaviour of the whole system.

The learning organisation is becoming an increasingly relevant paradigm for dealing with external changes, opportunities and threats, as organisations focus on learning as a means of integrating response to change, organisational performance and a leaner structure (West 1994b). Furthermore, changing work patterns mean that organisations and their members must become more flexible and capable of dealing with uncertainty (Carnall 1990). However, it should be recognised that the learning organisation is not the only organisational solution to such problems; in some cases (eg. small owner-managed companies) this model may be inappropriate.

A recognition that the key to competitive advantage lies within the workforce is reflected in current award schemes such as Investors In People, and organisations are now beginning to understand the need to invest time and money in the development and learning of their employees (West 1994a). Nevis et al (1995) suggest that styles of learning vary between companies, but that all organisations can become learning systems

if they are learning orientated; ie. they have a conscious mode of acquiring and disseminating knowledge and an emphasis on learning, and if mechanisms are in place which facilitate effective learning. They do not specify whether this should be individual or organisational learning, however.

Jones and Hendry (1994) suggest that much of the literature, while purporting to discuss the learning organisation, actually focuses on organisational learning and fails to differentiate between the two. While the process of organisational learning and the development of individual learning into collective learning continue to be the key elements, the focus of the learning organisation is essentially on the process of achieving organisation-wide learning. There is little specific guidance on how individual learning may be linked to organisational learning.

Many definitions of the learning organisation are vague and generalised, furthermore most are highly normative and represent an ideal which is 'imperfectly attainable' (Sadler 1993: p10). Indeed much of the literature about learning organisations is evangelical in approach, presenting the concept as the sole remedy for the organisational problems of the 1990s. This view is reflected in some of the language used; Hawkins (op.cit) for example, describes spiritual dimensions, while Jashapara (1993) likens the learning organisation to the Holy Grail. Yet paradoxically it would appear that there are few models of the learning organisation considered applicable to all organisations (Raper, Ashton, Felstead and Storey 1997). Pedler, Burgoyne and Boydell (op.cit) have produced a blueprint of their version of the learning company presented as a 'fountain tree' (see Figure 3.1 on following page) which is perhaps the best known model. Burgoyne (1995: p22), although a member of the learning Company team, concedes the learning company (organisation) is an 'aspirational concept' rather than an observed phenomenon. Raper et al (op.cit) claim that such aspirations are useful as models but are highly prescriptive and not capable of being tested. Garvin (op.cit) maintains new ideas are the only real source of learning, but in themselves these are only likely to lead to improvements, consistent with single-loop learning, rather than totally new solutions.

Learning Approach to Strategy

Participative Policy Making

Formative Accounting and Control

Informating

Internal Exchange

PURPOSE

Reward Flexibility

Enabling Structures

IDENTITY

PEOPLE

Inter-company Learning

Self-development Opportunities for All

Boundary Scanners

Learning Climate
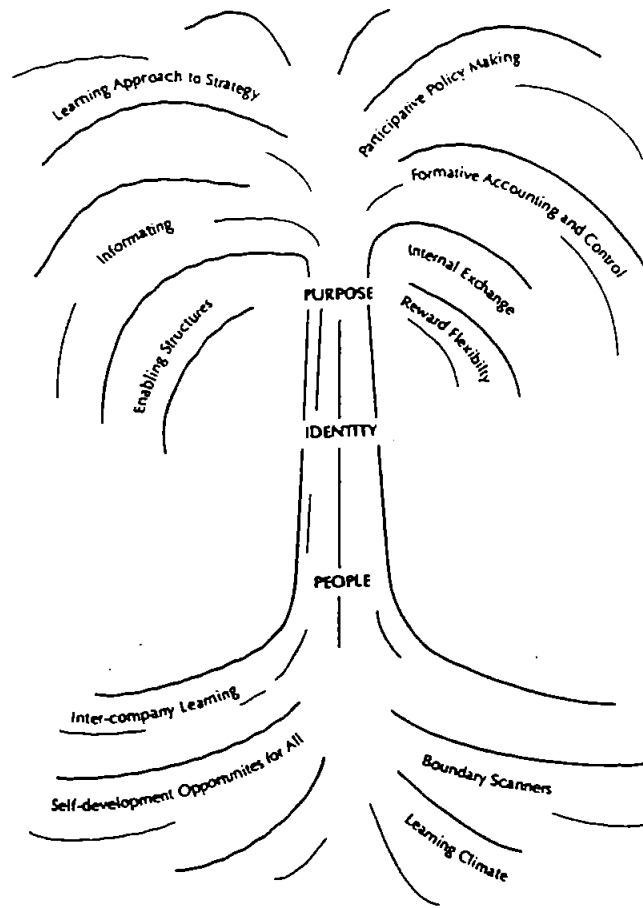
Figure 3.1: The Fountain Tree Model of the Learning Company (Pedler et al 1997: p20)

In order to achieve transformational change, modifications must also be made to the process, ie. the way in which work is done; and the thinking surrounding this. If the organisation wishes to facilitate new ideas then the incentive systems must encourage risk taking, otherwise no employee, from shop floor to management level, will be willing to experiment and risk failure; creativity will thus be stifled (ibid). Iles (1994) claims the culture of learning organisations needs to be openly supportive of learning. He suggests a number of informal measures to enhance learning, including reviews and face-to-face discussions, which are useful but time-consuming. It is doubtful whether many organisations are in a position to permit employees to spend their working hours pursuing informal, albeit useful, conversations.

The ability to create new knowledge, share it throughout the company and use it to foster innovative outcomes in response to environmental demands is likely to prove a

major factor in the survival and competitive success of organisations in the future (West 1994b). Learning and interaction are now considered central elements in the process of innovation (Storper 1996) and most descriptions of the learning organisation include innovative solutions (Garvin 1993) or challenges to accepted working practices (Iles op.cit). However, it should be recognised that it is possible for organisations to be innovative without becoming learning organisations, the learning organisation is only one of a number of methods of achieving competitive advantage.

3.4 THE NEW FACE OF HUMAN RESOURCE MANAGEMENT

Since the early 1980s the scope of human resource management has widened, to include in its remit not only welfare, personnel management and employee relations but also an interest in the design and implementation of policy and business strategy. This is largely due to the shift of emphasis from manufacture of tried and tested products to creative development of employees and their capacity for inventing new ideas and anticipating future markets (Burgoyne 1995). It is now argued that the chief asset of many companies is their workforce in terms of innovation, expertise, knowledge and experience (Klein et al 1991). However, many organisations have not yet discovered the means to exploit this potential to any great degree. Watkins and Marsick (1992) seek to broaden the definition of human resource development, proposing that the facilitation and evaluation of all types of learning become part of that activity.

One of the main themes of HRM is the consideration of people's needs while at the same time encouraging all employees to work together to achieve organisational goals (Foot and Hook 1996). It is now widely recognised that attention paid to the emotional and intellectual career demands of individuals is to the advantage of the organisation as a whole. The focus of human resource development (HRD) in organisations has begun to shift from an emphasis on specific training for individuals to an encouragement of individual and group learning and the development of the capacity to use learning related to work (Watkins and Marsick op.cit).

Human resource developers are responsible for identifying the opportunities to acquire information and learning which arise from strategic decisions; they can consider what the company may learn, what core skills will be developed and how resources will need to be allocated (Dixon 1990). As Watkins (1989: p427) suggests, '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 organisational levels'. In other words, HR professionals are responsible for developing and integrating the organisation's learning system. The capacity to learn may be enhanced through a number of initiatives and collaborative structures, such as programmes to identify and address gaps in employee skills, mechanisms to recognise and reward individual and group achievement and provision of funding for experiments and learning opportunities (Watkins and Marsick op.cit).

As Dixon (op.cit: p367) argues, HRD specialists are 'uniquely positioned to facilitate organisational learning because they are the recognised learning specialists'. However, in order to utilise this position they need to create new processes for learning in addition to expanding accepted practice. One focus for human resource developers may be the facilitation of learning from past successes and failures, because they may construct a true picture of the circumstances surrounding the experience without any departmental accountability attached, which might prejudice this picture (ibid). This learning from past experience corresponds to the notions of critical reflection (Brookfield 1987) and action science (Argyris 1990). HR professionals may also act as gatherers of learning in the organisation, collating and storing sources of acquired information for future use. The retrieval of learning often occurs automatically from its store in individual mental models, but information may also be retrieved in a controlled fashion by learning specialists who have a record of individual or group expertise in particular areas and can arrange to tap this knowledge.

Human resource managers may also play a part in facilitating communication, particularly where there are conflicting issues, or where functional boundaries are crossed. The emphasis of HRD is now changing from analysis of information,

particularly the reasons for past failures or successes, to action learning and critical thinking in order to interpret and utilise organisational experience (Dixon op.cit).

The realisation of a learning organisation is a long term continuous process which may be led by a vision designed by organisational leaders, but which requires human resource developers to promote the structures to recognise and exploit learning opportunities and facilitate the behaviour which results in shared learning. HR professionals are also responsible for ensuring the management team recognises the significance of learning in achieving the organisational vision and consequently facilitates learning at all levels.

Whilst organisations have been trying to increase performance and simultaneously cut costs in response to a fluctuating economy and a series of recessions, the predominant management change programmes have reflected the need for survival through delayering, business process re-engineering (BPR), total quality management (TQM) and more recently empowerment. But now many companies have become as 'lean' as possible and cannot move any further in the direction of maximum efficiency, it is suggested the next logical step is to focus on learning (Burgoyne1995). Staff at all levels of the workforce are being required to become responsible for decision making and outcomes within a framework of accepted values and behaviour (Garratt 1995). Drucker (1992) argues that learning is no longer an option but a necessity, that combined with knowledge it is the key to the future of organisations. Schein (1993) affirms that organisations must learn how to adapt faster and learn how to learn in order to survive and prosper.

3.5 CORE COMPETENCES

A number of writers have discussed the need to *rethink* the organisation in order to move ahead (Senge 1990, Marsick and Watkins 1993). One way of doing this is to view the specific knowledge and capablities of the company in terms of collective learning, rather than proficiency in producing particular goods or services. The challenge of adapting to constantly changing markets, quickly capturing emerging markets and inventing new products to satisfy future needs of customers can perhaps best be met by

focusing on the development of core competences. These use the the shared learning of the organisation to integrate diverse technologies and co-ordinate existing skills at all levels in the organisation, crossing functional boundaries wherever necessary (Prahalad and Hamel 1990). This perception of the organisation is more likely to lead to competitive advantage than a conventional emphasis on a small number of products, as competences can be transferred easily to other goods or services not currently produced by the company (Iles 1994).

In order for core competence to become central to the organisation a high degree of commitment is required by employees and communication must take place constantly between people at different levels and in varying functions. It is essential that the expertise involved in the innovative and creative practices leading to the development of core competences is shared and joined with the skills of others throughout the organisation (Prahalad and Hamel 1990). Dodgson (1993) argues that such collective learning can only become central to the firm when double-loop and deutero learning are included in the process, otherwise the nature of its activities will merely be repeated and improved upon, instead of being developed into competences which may be applied and adapted.

Similarities between the learning organisation and the development of core competences can clearly be identified. Pedler et al (1997) have described the continuous transformation needed to turn an organisation into a learning company and Prahalad and Hamel (1990: p80) describe 'rethinking the corporation' so that the principles of management can be reformed. Nevis et al (1995) contend that successful learning organisations establish and constantly update an effective knowledge base from which core competences can be developed using some form of integrated learning system, and that the survival and growth of such organisations is dependent on these competences. Thus the presence of core competences might be considered *a priori* a characteristic of the learning organisation. However, this approach, while relevant to knowledge-based companies may not be so appropriate to other types of organisation.

3.6 IMPROVED UNDERSTANDING OF LEARNING

Studies of individual and organisational learning have flourished during the last fifteen years and knowledge of learning processes has expanded simultaneously. There is a growing realisation that in order to enable learning to take place and to facilitate organisational learning processes, organisational stuctures have to change. Iles (1994) advocates new methods of integrating working and learning in the form of *learning communities*, which incorporate a series of multiskilled, self-managed workteams and value the diverse skills and backgrounds of team members, while retaining a central focus on learning in the organisation. One of the key factors to successful growth of learning organisations is the construction of learning cultures which focus on the constant development of employees throughout the organisation. Often, the organisation is left with isolated pockets of learning, rather than an even distribution of learning throughout the organisation; in order to avoid this positive steps need to be taken to remove barriers to the acquisition and sharing of knowledge. This can only be achieved by addressing the underlying beliefs and values of the organisation and promoting a new form of culture, which emphasises learning and behaviour that will facilitate learning (Kim 1995, Peters and Waterman 1982).

In recent years, many assumptions about the process of learning have begun to be challenged. Hierarchical models of learning, where knowledge is passed down from those who possess it, are being replaced by a new concept of self-managed learning (Critchley 1993). Individuals in organisations learn in three ways; as individuals, in teams and as members of the organisation. New paradigms of learning therefore result in new and different types of individual, group and organisational behaviour patterns (Sadler 1993). Transfer of learning involves the spread of learning throughout the organisation. Although it is often thought of purely as a means of exploiting off- the-job training, it may also take place in a number of other ways, from coaching or counselling to managed culture change (Sadler op. cit.). Transfer may be direct and take place instantly, or may be deferred learning; the effectiveness of either direct or deferred transfer of learning is influenced by both technical and social factors. Attempts to adapt technical training; the

44

knowledge and skills necessary to perform a particular task effectively, in the workplace without the involvement of social learning processes, i.e. the understanding of social norms, values and established ways of working, tend to lead to a negative outcome (Analoui 1993). When transfer of learning is indirect and deferred, accumulated learning is amassed in the form of policy documents, tried and tested procedures and specifically designed corporate culture (Sadler 1993).

The learning organisation, although in itself not a new idea, suggests a new focus on organisational learning, as the core activity of the company. However, despite claims to the contrary it appears there are few organisations which could be said to have achieved learning organisation status. Raper et al (op.cit) found little empirical evidence of the existence of learning organisations in Britain but discovered that many organisations were shifting the focus of their training towards a more learning-centred approach. They describe this shift as a 'trend towards work based learning in context' (ibid: p17). The radical changes in working and managing needed to implement a learning organisation will not take place overnight and require more than just willingness on the part of management. It is likely that many organisations attempting to reach a learning organisation position will have made significant progress in only a small number of areas of the organisation; the challenge is then to develop other areas to match. This is in reality a tall order, as the learning orientation is a continuous process and momentum must be constantly maintained. It may be that the learning organisation as an entity does not actually exist, that as Burgoyne (1995) claims, it is useful only as an ideal concept.

3.7 SYSTEMS THINKING

One focus of the changing thinking in organisations has been the systemic approach. Following on from the literature on excellence (Peters and Waterman 1982), a wider perspective on competition began to be considered, involving an interaction between the immediate company environment, the industry as a whole and national and global economies (Miller Hosley et al 1994). Systems thinking considers organisations and the groups and individuals within them as organisms whose components interact

45

continually with each other and with their environment. Stata (1989: p65) likens organisations to 'giant networks of interconnected nodes' and warns of the dangers of decision making at local level without taking the conditions of the whole environment into account. The future survival and success of the organisation depend on its internal cohesion and the capacity of the component parts to adapt (West 1994a). Nevis et al (1995: p73) describe learning as essentially a 'systems phenomenon' as it belongs to the organisation, remaining there even when the individuals who generated it have left.

Senge (1990a) proposed five disciplines of the learning organisation, of which the fifth, and by inference the critical one, is systems thinking; he defines this as the ability to consider the organisation holistically, rather than in terms of its constituent parts. The importance of *metanoia* is emphasised, i.e. a group of individuals working together on an appropriate vision to produce a radical transformation from seeing small parts to looking at the organisation as a whole (Kiefer and Senge 1982). The systemic view of organisations involves viewing development in terms of cycles with inbuilt feedback processes for the purposes of reinforcement and balance or regulation (Senge op.cit.)

Meyer (1982) in his study of U.S. hospitals also found cycles of learning, which were initiated by a surprise or jolt. His findings help to indicate why an organisation dedicated to continuous, incremental learning, probably of a single-loop type, does not necessarily constitute a learning organisation. Whilst overall expertise improves and renders the organisation more capable of adapting to change, unless the process of transformation described by Pedler et al (1991) takes place; that is double-loop learning, the organisation is only repeating and improving upon previous cycles of behaviour (Watkins and Marsick 1992).

The stimulus for the required reframing of the organisation is supplied, according to Meyer's research, by an environmental jolt (Meyer 1982). But the 'creative tension' which is the source of learning is often produced by a lack of alignment between the organisational vision and current reality (Watkins and Marsick 1992: p125). This bears similarities to the theories of Argyris and Schon (1978), who contended that the trigger for learning was the detection of error or a poor fit between planned and achieved

46

outcomes, and Senge (1990a) who described a gap between vision and the present organisational situation as providing creative energy. This creative tension is necessary for *generative learning* (which corresponds to Argyris and Schon's double-loop learning) and is concerned with the creation of new ideas, as opposed to the more prevalent *adaptive learning,* the single-loop type found in organisations, which hinges on coping with existing situations (Senge op.cit.)

3.8 INHERENT CONTRADICTIONS WITHIN ORGANISATIONS

The gap between desired and actual practice is discussed by Seeley-Brown and Duguid (1991) in their attempts to present an integrated view of work, learning and innovation. They found significant differences between the way employees actually operated and formal descriptions of their work, and suggest that the latter can hinder the progress of learning by restricting management understanding of the conditions central to learning. Further contradictions arise from management's desire to implement new organisational practices which empower employees and encourage creativity, and the need to remain accountable for profitable growth. On the whole, employees in Western Europe and the USA enjoy opportunities for an individual approach and in return may be offered the chance of promotion or enhanced security linked to performance although opportunities for promotion have decreased with the downsizing of many organisations. Yet high performance is a result of 'collective effort' rather than individual work (Ezzamel et al 1994).

Seeley-Brown and Duguid (op. cit.) espouse the concept of *legitimate peripheral participation* or LPP (Lave and Wenger 1990), a perspective which emphasises the social transfer of learning, whereby learners acquire the ability to 'function in a community' (Seeley-Brown and Duguid op.cit: p48) and adopt the appropriate culture. This community is frequently an informal, cross-functional group which may not be recognised by management, thus attempts to restructure the organisation or create workteams which do not take account of existing communities may severely disrupt current collaborative practices and learning.

47

It is widely accepted that innovation is a necessary characteristic of the learning organisation (Stata 1989, Schein 1993, Nevis et al 1995), but as von Hippel (1988) points out, innovation need not always be radical, but can involve integrating changes in an incremental fashion into everyday work, adaptive learning occurring continuously alongside regular generative learning. In order to facilitate innovation and learning, it is argued that organisations must be allowed to function as a group of communities within a wider system and each must be allowed the authority to reject accepted practices where appropriate (Hedberg 1981). Learning organisations, by removing many of the vertical boundaries and encouraging cross-functional collaboration, should be capable of unifying new ideas, work and learning.

3.11 SUMMARY

It can be seen that a number of reasons have brought about the current adoption of ideas that have been in existence for some time. The late 1980s and early 1990s saw vast restructuring programmes, with many organisations being delayered, made leaner or re-engineered, with the focus on quality and cost-cutting. Managers are now coming to realise that there is not one best way of bringing together more rigorous customer demands with a smaller workforce and still achieving competitive success. Rather, many organisations are turning to the notion that organisations are open systems of interconnected parts with structures which may be contingent on a number of factors; it is the job of management to determine the best fit between structure and environment (Burnes 1991).

More reliance is now being placed on members of the organisation who are being offered more responsibility to take decisions and act upon them, within a loose framework of agreed values and behaviour (Garratt 1995). Constant learning is now viewed as a critical factor in deciding the future success of organisations and the role of management is directed towards establishing a climate where learning can take place. An improved understanding of how individuals in organisations learn and of how this learning can be shared and exploited to benefit the organisation as a whole has led to

learning as the main focus of forward thinking organisations of the 1990s. The learning organisation offers a formula for placing learning at the centre of the organisation, by rethinking the way in which individuals contribute to the company and the interaction between organisations and their boundaries (West 1994a). In this manner, the organisation can deal with uncertainty, by anticipating change and pooling all available information and using it to adapt and reframe its actions.

However, there are a number of problems associated with the concept of the learning organisation. Definitions vary widely and tend to employ vague and generalised language and there is ambiguity over the exact components. Many descriptions of such organisations are abstract and very idealistic; there appears to be little empirical evidence to suggest that learning organisations actually exist. It has been suggested that the concept may in certain cases form yet another management tool, to be used as an excuse for laying off staff or introducing unpopular measures. Most of the literature is highly prescriptive; it may be that the notion of the learning organisation is most useful as an ideal or aspirational concept.

CHAPTER FOUR

ORGANISATIONAL CHANGE AND ITS EVALUATION

4.1 INTRODUCTION

Since the mid-nineteen eighties a number of factors in the external environment have combined to intensify competition and generate revolutionary change in organisations and the way they are managed. Organisations are currently facing increasing challenges, demands and instability in the business environment following the impact of economic and social changes such as rapidly changing technology (West 1994b), the changing structure of the workforce, new opportunities in the EU and globally (Kidd and Teramoto 1994) and turbulent economies. This has led to a crisis of managerial confidence based on fears of an erosion of authority (Brooks 1980). Many organisations are questioning the conventional structure; hierarchical layers and horizontal boundaries between departments can now be seen to hinder the spread of information and the sharing of ideas (Ezzamel, Lilley and Willmott 1994). The need for change is indisputable, but as Belasco (1990: p4) comments, 'needing change doesn't make it happen'.

Following a shift of emphasis to the customer, companies have responded in different ways. Some have refused to acknowledge the need for change and continue to use traditional practices, often until a state of crisis is reached, while others have adopted a scientific approach to coping with market pressures using prescriptive programmes such as Business Process Reengineering (BPR). Newer organisational designs focus on people and quality and encourage the participation and empowerment of everyone involved at any level of the change (O'Connor 1993, Gardiner 1996) and the notion of the learning organisation adds learning as a central theme.

There are a number of issues associated with the call for organisational change. Decisions on the type of change required and the method of implementing it are confused by the existence of a number of specific change programmes each claiming to be the blueprint for success. The long term goals identified by the organisation will influence the choice of change process. Carnall (1990) argues the need for explicit strategy, or vision, in order to provide direction and effective planning. Other writers agree with this perspective; Senge (1990b) argues that an overall vision is necessary to establish the

51

creative tension between the current organisational position and the desired state.. Similarly, Prahalad and Hamel (1991: p82) submit that companies can create 'new competitive space' only by mapping out long-term opportunities, the scope of which is beyond a simple business plan. Belasco (op.cit.) emphasises the central role of vision in empowering change and defines it as a statement of where the organisation wants to be. He elaborates on this, indicating that the wording of the statement is crucial and that the aims it embodies should be based on consensus rather than the views of one senior executive. Organisational visions and mission statements are considered essential elements in most change processes, yet the aims specified within their wording are often vague and unrealistic (Carnall op.cit., Packman 1994). The primary goal of change is often increased organisational effectiveness. However, Hall (1972) disputes the notion of overall effectiveness, suggesting that where priority is given to one organisational objective, this may be realised at the expense of other aims, thus rendering certain parts of the organisation more effective than others.

Wilson (1992) disputes the existence of a universal formula for organisational change and proposes instead a contingency approach, selecting a change programme based on analysis of the economic and political context of the organisation (Pettigrew and Whipp 1991). There is little doubt that national culture plays a part in the type of approach taken to change management. The UK and the US appear to rely heavily on managerial skills for the design and implementation of change programmes (Leavitt 1991). Other nations, such as Japan, have traditionally employed a more participative model, with responsibility and ideas for the change shared by workers, supervisors and managers (Wilson op.cit.); these ideas are now being incorporated into many British and US businesses. Yet in some organisations moves towards empowerment of employees and teamworking may merely be symbolic gestures on the part of management, while at the same time planned changes are in fact eroding the power of individual employees (Feldman 1989).

Few managers today dispute the need for change in order to keep pace with advances in technology, rapid globalization of markets, a focus on quality and calls for

cost-reduction in order to compete effectively. Minor incremental changes in ways of working have become a fact of life in many organisations as they constantly implement adaptations in response to environmental pressures. However, these changes may not be enough to cope with the ever increasing rapidity of change and the associated uncertainty. Ulrich, Jick and von Glinow (1993: p55) cite shorter cycle times, increased competition, globalization and higher customer expectations as some aspects of a rapidly changing environment and advocate the need for the integration into strategic plans of 'quick market intelligence' in order to match the pace of change. Many organisations have now recognised the need for more radical transformational change (Jones and Hendry 1992). Pedler et al (1991: p1) describe learning companies as those which can transform themselves 'in response to the needs, wishes and aspirations of people', both within and outside the organisation. Benjamin and Mabey (1993: p186) also advocate 'reassessment of an organisation's core purpose', which they maintain will prompt its members to question organisational values.

4.2 THE MANAGEMENT OF CHANGE

Substantial changes introduced in many organisations during the 1980s were based on new information technology (IT) or innovatory management styles. Yet results were frequently disappointing despite great expense and a high rate of adoption of IT. A number of reasons for this have been proposed, but the two most significant causes of failure were probably inappropriate management of the change process and poor design (Tranfield 1994). The impetus for change must be a top-down process because of the necessity for its instigators to keep an overall perspective on the process, though the management style may be kept relatively relaxed and new ideas introduced through informal discussions, for example. But, whatever the type of management, planning must be seen as essential to any change process, because it encourages the development of a shared rationality, even though plans are probably never adhered to precisely (Eccles 1994). Effective planning produces benefits from not only the realisation of goals and the methods by which these are achieved, but more importantly from the learning which

results from the planning process (deGeus 1988). Some organisations; Analog Devices. Incorporated for example, are now beginning to structure their planning with the aim of acquiring learning; adapting organisational values and practices to fit environmental changes and thereby attempting to avoid resistance to change within the organisation (Stata 1989). The emphasis has shifted from evolutionary models of change to planned strategies with a shared vision (Wilson 1992). This vision for the future needs to integrate the hopes, dreams and ambitions of those responsible for the company and incorporate practical benefits for all (O'Connor 1993).

Resistance to change occurs in a number of forms; employees may oppose all proposals or withhold support for key plans, they may deliberately meet requirements as late as possible or they may just refuse to co-operate with the changes. Moreover, this behaviour may be intentional or not, open or covert (O'Connor 1993). Prescriptions for dealing with resistance are generally centred on the relationship between management and staff. Gubman (1995) claims that the ideal relationship is one of mutual interdependence, of which trust and honesty are the vital ingredients. O'Connor (op.cit.) suggests that the key to dealing with resistance is flexibility. Ignoring initial opposition or attempting to forcibly remove it, may lead to the development of major problems at a later stage. Instead, managers need to take a rational approach, using employee recalcitrance as an opportunity to establish a better understanding and recognising that resistance may be based on real fears.

A re-educative approach to change, advocated by Chin and Benne (1976), claims that it should be a gradual process, which takes into account existing cultural norms and sets out to modify them and design new organisational values which would be assimilated into the organisation through re-education of employees. Lewis and Thornhill (1994) propose restructuring as the most effective means of instigating change and meeting resistance as it occurs; this is probably in line with the policies of many organisations in the 1990s. As structural changes are initiated, corporate and personal objectives should be set, pay is related to performance and there is a focus on training and learning throughout the organisation. The success of change depends on whether individuals are

prepared to adapt their behaviour to achieve specified organisational objectives; this in turn depends on their motivation. Clarity of vision by top management, which relies on accurate identification of the gaps between rhetoric and reality, should encourage employees at all levels to work more creatively and efficiently.

Some writers have differentiated between resistance to change and readiness for change (Kanter 1983, Armenakis et al 1993). A proactive strategy is recommended, which requires an initial demonstration of the gap between desired organisational performance and current outcomes (Katz and Kahn 1978), and of why the desired performance is justified (Bennis and Nanus 1985). Readiness for change is achieved by developing awareness throughout the organisation of the reasons for the implicit problems of the organisation and of solutions to these problems. This is essentially a social process involving interpersonal relationships, the influence of leaders and social exchange, i.e. the collective agreement among members that they are ready for change (Armenakis et al 1993). 'Readiness programmes', as defined by Armenakis et al (op.cit: p686), aim to minimise resistance to change at the outset by enabling members of the workforce to participate in strategic decision making, thereby shaping the changes which will affect them.

Resistance to change is not necessarily limited to lower level employees, however. There is now evidence that a number of managers threatened by the flattening of organisational structures, greatly reduced promotion prospects and erosion of their traditional roles are attempting to impede the process of change or generating resistance in a number of ways (Goffee and Scase 1992). Older managers may oppose the replacement of established structures and values which underpin their position within the organisation (Ezzamel et al 1994). Faced with major restructuring, some of these may opt for early retirement, while increasing numbers of younger executives are seeking self-employment and work on a consultancy basis. Other managers may respond to the loss of career opportunities by working to a 'barely acceptable minimum standard' (Goffee and Scase 1992: p376). Moreover, the management turnover in many organisations has increased; managers are moving more rapidly between organisations in order to secure

promotion and increased financial rewards. All these factors are likely to result in a loss of commitment to individual companies and increased stress levels among management.

4.3 MODELS OF CHANGE

Current interest in the management of organisational change from both practitioners and theorists has led to a common vocabulary and an apparent acceptance of a small number of approaches to planned change (Wilson 1992). A number of theories of change management are based on the three-stage process first proposed by Lewin (1951) beginning with 'unfreezing' the organisation. This notion has since been reiterated in a number of accounts of organisational change which follow this pattern of successive phases of unfreezing, change and refreezing (e.g.Dunphy and Stace 1988, Cummings and Huse 1989, Burnes 1992). The unfreezing process may be seen to possess similarities to the idea of unlearning the organisation (Hedberg 1981, Nystrom and Starbuck 1984). In order to unlearn, an organisation needs to free itself from a number of impediments to employees' learning and create new practices; a culture which embraces learning, open internal and external information networks, different and appropriate recruitment systems and original leadership (McGill and Slocum 1993). Festinger (1957) suggests the stimulus for unfreezing and subsequent change is cognitive dissonance; conflict or disharmony in people's organisational experience, which is confronted and responded to; other studies have termed this 'disconfirmation' (Fink, Beak and Taddeo 1971, Pettigrew 1985).

Both Burnes (1992) and Hendry (1996) maintain that most, if not all of the theories and models of organisational change have been developed from the ideas of Lewin (op.cit.) and Field Theory. Action research, described in greater detail in Chapter 2, was developed in the USA by Lewin in the 1940s and was adopted a short time later by the Tavistock Institute in Britain. In applying action research methodology to organisational problems, elements of cognitive theory and social psychology are incorporated. Its basic premise is that effective solutions to organisational problems can only be developed through cogent, systematic analysis of relevant issues and participation

of all concerned (Burnes 1992). It posits that change is brought about by enabling organisational members to reflect on their situation and identify a need for change through insights gained. Studies which have followed this approach indicate that learning takes place during the second phase of the process, the change itself, using extant knowledge, experiential development and formal and informal relationships as its key elements (Hendry 1996). Models of interactive action research (Sandberg 1992, Hultman and Klasson 1994) which involve all the members of the organisation in the management of change bear similarities to the learning organisation in that the objective is to develop ongoing competences in problem-solving and adaptation throughout all levels of the organisation. Coch and French in their (1948) study of organisational change found that participation in change greatly lowered resistance to new ideas. This is confirmed in later studies of employee involvement (Chell 1985, Plunkett and Fournier 1991).

Armenakis, Harris and Mossholder (1993) liken Lewin's concept of the unfreezing process to developing readiness for change and argue that this can best be achieved by proactively influencing the beliefs, attitudes and behaviour of employees, an approach derived more from behaviourist thinking. These changes in individual behaviour are largely dependent on social dynamics: collective action and interpersonal information exchange and clearly run parallel to the role played by social relationships during the second phase of the action research process, when most learning occurs. The origins of action research in field theory have tended to be forgotten over a period of time and instead practical approaches which appear to fit the situation are often employed; accusations of action research as possessing a limited theoretical base may thus be partially justified; Hendry (1996: p622) claims that the management of organisational change makes only 'partial, limited and incoherent' use of learning theory.

The Phases of Planned Change model, suggested by Burnes (1992), is a further extension of Lewin's three stages, based on the premise that different states exist at various times in organisational life and that planned change can facilitate movement from one state to another. Cummings and Huse (1989) also use this approach, but include eight such states, while Bullock and Batten (1985) apply a four phase model of

57

exploration-planning-action-integration. Variations of this model are applicable to a range of change situations in that factors from a number of other models are featured. However, it differs from action research and indeed the learning organisation approach in that it is directed by a consultant in conjunction with usually one top manager; employees participate little and are passive actors (Burnes op.cit.).

Another approach to the implementation of change is organisational development (OD). This is based on the achievement of consensus through the participation of individuals within an organisation and the establishment of good internal relationships (Wilson 1992). Armstrong (1995) describes OD as planning and implementing changes to improve the overall effectiveness of the organisation. This may include the introduction of new structures, team development or educational programmes designed to improve interpersonal and inter-group skills. The OD model traditionally employed by managers advocates steady incremental change and a participatory style of management but does not incorporate the need for radical organisational shifts increasingly recognised as essential at some times in response to a turbulent environment (Dunphy and Stace 1993). Porras and Silvers (1991) refer to transformational change as 'second generation OD', however a number of other writers would seem to disagree with this viewpoint. Kanter, Stein and Jick (1992) consider transformation a complete reframing, rather than an extension of previous organisational practice. The idea of reframing the organisation implies an association with double loop learning at an organisational level (Argyris and Schon 1978). It would appear therefore, that OD functions in a similar way to single loop learning, in that existing behaviour is modified and improved continually and then repeated. Dunphy and Stace (op.cit.) claim that the Organisational Development model no longer represents the way change is implemented in a majority of organisations today. In their study of Australian organisations they found that approximately two-thirds were undergoing rapid transformative transitions in which leaders played an important role, while the small number making minor incremental changes or 'fine tuning'(Dunphy and Stace: op.cit. p909) proved to be the poorest performing organisations. This would seem

to indicate that refinement of existing procedures and policies is not as effective as more radical change strategies.

Behaviour modification (BM) as a change strategy involves trying to modify organisational culture. A new vision of the organisation is created and communicated to all its members. Managers then attempt to put in place a new culture through changes in key personnel and clear specification of organisational goals. Employees are then persuaded to conform to the new culture; appropriate organisational behaviour is reinforced accordingly and attitudes inconsistent with the preferred culture discouraged (Wilson 1992). There are clearly some parallels between the BM orientation and the learning organisation, where everyone shares information and learning for the benefit of the company, but BM appears to imply coercion and manipulation of employees to ensure conformity. For this reason it has largely been discredited as a tool for long-term change.

One of the most widely used programmed approaches to organisational change is Total Quality Management (TQM), developed in Japan and adopted later by American and British companies, eg. Courage, Rover, BT. The concept is based on creating and sustaining continuous improvements in the quality of production and service at all levels of the organisation through enhanced cross-functional co-operation and a focus on client satisfaction. TQM aims to implement quality throughout the company by making it the central concern of each employee (Evans 1993). The best-known pioneer of the Quality movement; Deming, maintains that the key to improvements in quality is through a focus on improving business processes (Deming 1986).

The TQM philosophy takes a long-term holistic approach to the organisation, with customer needs at the centre; it is the responsibility of management to design appropriate responses to those needs in all sections of the organisation. The process whereby these elements are integrated and the learning which results should bring about major organisational change (Wille and Hodgson 1991). This appears to be a rather undefined and unplanned approach and may perhaps explain the lack of success of some programmes of this type. Wilson (1992) claims that TQM is one method of replacing the

competitive behaviour prevalent in many organisations, which results from short-term solutions and an emphasis on individual advancement in a period of job insecurity. Wilson's view appears to be a rather idealised notion, and is not generally borne out by the results from organisations which have tried this approach. While there have been notable successes, particularly in the US, using the TQM model a number of attempts to implement quality programmes in British companies have failed to produce the expected changes. TQM has also been criticised for neglecting to address the cultural aspects of change (Clark 1993). The popularity of the quality model is waning in the 1990s as more companies focus on learning or 'scientific' approaches to change.

Business Process Re-engineering (BPR) is claimed to be the most 'scientific' of the change programmes (Hammer 1990). It advocates radical rethinking and redesign of business processes in order to produce major improvements in company performance (Hammer and Champy 1993). It is described as scientific because it seeks to eliminate the parts of processes which do not add to the efficiency of the organisation. BPR champions argue that many current practices are obsolete and inappropriate to the highly competitive business world of today. Information technology is perceived as a key factor in improving efficiency; most companies implementing this type of change appear to identify the need for new information systems, rather than automating existing work by means of new IT solutions (Ascari, Rock and Dutta 1995). The pioneer of re-engineering, Hammer (op.cit.) takes an extreme approach, recommending that existing business practices be obliterated and outdated rules and assumptions abandoned in favour of redefined jobs, streamlined processes and a reorientation towards the customer. Companies which successfully used this approach appear to have been triggered by a crisis situation and to have simultaneously implemented changes in a number of aspects of the organisation; culture, processes, structure and technology (Ascari et al op.cit.). There are however, a number of BPR programmes which have failed, perhaps due to the lack of attention paid to cultural and social factors (Stewart 1993). BPR bears similarities to learning organisation initiatives in that it takes a transformational approach to change and advocates adaptability, empowerment, innovation and integration of a number of

60

elements. The underlying difference between the two types of programme is the central focus, which in BPR is the outcomes; customer needs and performance, and in the learning organisation is the capacity for sharing knowledge and learning.

Clarke and Krone (1989) advocate an open-systems planning approach to organisational change, with four main stages; identification of environmental factors, detailed mapping-out of the interaction between organisation and environment, the establishment of goals; i.e. how the organisation will act on environmental factors, and finally, the planned restructuring of the organisation to impact on the factors specified. This method differs from the three-stage approaches developed from the ideas of Lewin (1951) in that it does not begin with an unfreezing or unlearning process, but instead focuses on external factors.

A more participative style of change management is proposed by a number of writers in line with notions of empowerment (e.g.Plunkett and Fournier 1991, Ripley and Ripley 1992); the concept of empowerment is discussed in depth in 5.2. Lupton (1991) suggests that a bottom-up approach to change, in contrast to the conventional change programmes designed and implemented by top management, may be more effective in that employees on the shop floor are likely to possess more detailed knowledge of the practices and procedures of the organisation. Benjamin and Mabey (1993) corroborate this view, contending that the main means of accomplishing change is through the people within an organisation, though the stimulus for change may come from outside. Moves in recent years to delayer and establish leaner organisations have meant that employees need to be more adaptable, more flexible and to possess wider skills (Green 1994). But this in turn results in a workforce more likely to question the strategic direction of the organisation. As the value of the learning acquired by these employees begins to be recognised, companies are now attempting to channel this learning and utilise it fully (Ripley and Ripley 1992, Gubman 1995).

4.4 ORGANISATIONAL COMPETENCES

Thompson and Richardson (1996) assert that there are three groups of competences developed over time which influence the strategic success of an organisation in fitting an increasingly competitive business environment. These are competences in strategic change, in strategic learning and in organisational content.

Figure 4.1 illustrates the interdependence between the three forms of competence and the organisational environment. An organisational capability in interpreting and responding to the complexity of the environment is likely to result in significant learning and successful management of change (ibid).
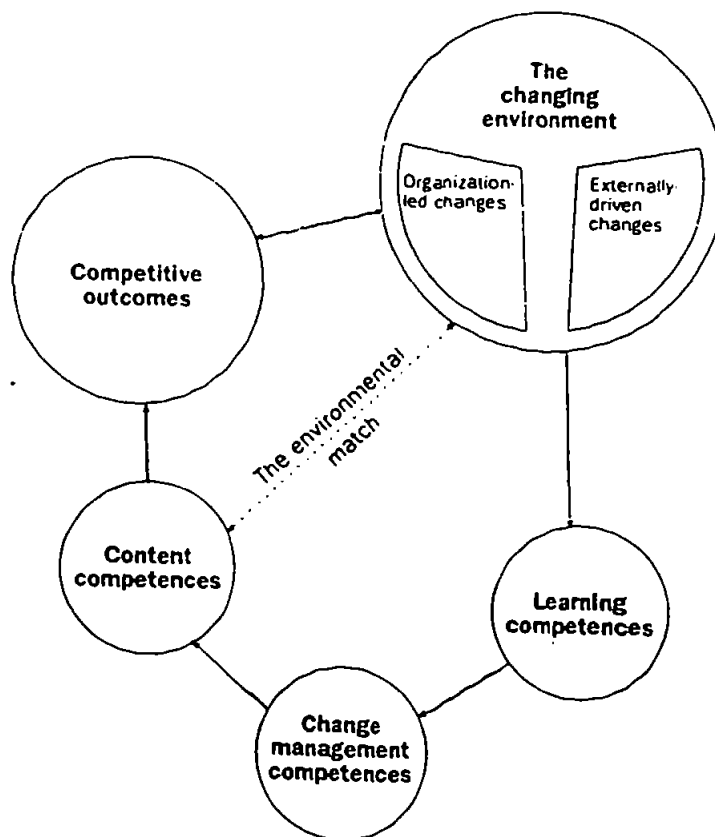
Figure 4.1: Interdependent Competences (source:Thompson and Richardson 1996: p14)

Competence in managing strategic change is derived from a long-term strategy design, forward planning and appropriate leadership (Richardson and Thompson 1995). However, it may be difficult to define what is meant by 'appropriate' leadership during a change programme. Advocates of the learning organisation view the role of leader as that

of designer and builder of policies and structures (Senge 1990), as 'catalyst of paradigm shifts', ie. questioning existing beliefs and guiding the organisation into new conceptual frameworks (Kim 1993: p34), or as facilitator of learning and information sharing (Garratt 1986, Pascale 1990). Dunphy and Stace (1988) in their study of styles of change leadership found that the predominant style employed was directive rather than collaborative or consultative. It has been suggested that in some cases, a command-and-control style of management continues to exist beneath the surface of supposedly 'empowered' organisations. This may be because uncertainty and insecurity increase initially following major changes and it appears easier for managers to hang on to traditional methods in order to retain a feeling of control (Ezzamel, Lilley and Willmott 1994).

Change competence involves regular modifications in response to environmental factors, and a focus on innovation, but may also imply occasional major shifts in structure and management style. There are strong parallels here with the concept of readiness for change proposed by Armenakis et al (1993). They too, emphasise the importance of internal change agents, ie. managers and organisational leaders, in generating the drive, inspiration and support necessary to render the organisation receptive to change. It is argued that strategic change competence requires leaders who behave proactively towards organisational opportunities and who facilitate creative ways of working within their organisations (Pinchot 1985). Thompson and Richardson (op.cit.) claim competence in managing strategic change is a necessary condition for the establishment of competitive advantage and that the behaviour of the leader and his/her openness to change is critical to the continuing development of core competences. This description of competence in managing change is, however, very dependent on the ability of the leader to make strategic plans and create opportunities for sharing and learning.

Prahalad and Hamel (1990) suggest that leaders may sometimes limit the ability to utilise organisational potential through their adherence to obsolete mindsets. Rather than a reliance on the ability of one leader to establish competences in learning or change management, it has been posited that successful ventures are frequently implemented by

an entrepreneurial team (Doutriaux 1992). Indeed a recent study indicates that companies undergoing the most rapid growth possess a top team but do not have a leader (Vykarnam, Jacobs and Handelberg 1996). It has been suggested that one of the key core competences during a process of rapid growth or major change is the ability to manage relationships (Vykarnam and Jacobs 1993).

Hendry (1996) advocates a more systemic approach to organisational change on the part of leaders (Senge 1990b) based on fostering communities-of-practice centred around learning capabilities. Furthermore, he suggests that organisational values cannot be changed effectively by chief executives imposing their own espoused value systems, rather behaviour needs to change before new values can be developed and adopted.

Thompson and Richardson's (op.cit.) third type of competence, content competences are akin to the core competences defined by Prahalad and Hamel (op.cit.); clusters of skills, experience and expertise which are developed by the organisation with the aim of achieving competitive advantage and which should prove difficult for other companies to imitate. They claim this is achieved through the integration of individual technologies and excellence in production. Core competences may be said to comprise the collective learning of the organisation; efficient communication systems and proficiency in cross-functional working are essential to this learning (ibid).

4.5 CHANGE EVALUATION

There are a number of approaches to the evaluation of change. Continuous evaluation refers to assessment of the organisation at the outset and throughout the change programme, in order to make regular modifications. Legge (1984) contends that any process of organisational change inevitably involves an element of evaluation; the identification of a gap between the current situation and an ideal organisational state, followed by the design of a change programme to address this gap. However, this view of evaluation raises a problem in that it may be difficult to separate the formal assessment of organisational change from the minor evaluations and subsequent modifications which occur throughout the process. Strategic evaluation should comprise the continual

measurement and improvement of organisational competences, (Richardson and Thompson 1995). Yet evaluation in many organisations to date has only occurred at the inception of the change process when the top planning team assesses the options and decides on the changes to be implemented, in accordance with previously specified objectives, opportunities and threats (Johnson and Scholes 1989). Morgan and Smircich (1980) claim there is no final situation which can be assessed in any change process, rather individuals are continuously adapting to their organisation and the organisation to its environment through learning and it is the effectiveness of this which requires measurement. In order to assess and manage change they assert it is necessary to examine the whole organisation and its members in context. Such an approach to change evaluation corresponds with the theories of Burdett (1993), Pedler et al (1997) and others that the learning organisation is an orientation rather than a fixed target and that its measurement should take this into consideration. Richardson and Thompson (op.cit.) recommend the application of strategic organisational competences to the management of trends developing in the business environment, using continuous evaluation methods and up-to-date technology. Their approach contains parallels with the notion of a learning approach to strategy, posited by Pedler et al (1997) as one of the characteristics of a learning company.

Organisational development (OD), as described by Armstrong (1995) incorporates a type of measurement similar to continuous evaluation. It relies at the outset on a form of evaluation known as 'process consultancy'. Schein (1969) describes this as a comprehensive diagnosis of the strengths and weaknesses of the current structure, normally made jointly by a manager and consultant. This diagnosis forms the basis for deciding on incremental changes to be implemented in order to improve organisational performance. Process consultancy tends to be highly prescriptive however, and the focus has now shifted to a more contingent approach, which may incorporate elements such as empowerment, teambuilding and culture change as methods of enhancing organisational effectiveness, though Armstrong (op.cit.) argues these could still be described as part of the OD framework.

Preskill and Torres (1996) also advocate a continuous approach to change evaluation. They claim that traditional evaluation practice has had little impact on the success of change initiatives, in that feedback has rarely been used to modify the ongoing process. In its place they advocate evaluative inquiry, which they describe as a systematic process of collecting information and adjusting organisational fit. The activities of asking questions and reflecting on current practice may result in changes in behaviour as a direct result, either intentionally or intentionally, evaluative inquiry could thus be described as a learning process (ibid).

Learning from experience is dependent on continous reflection during the implementation of change (Mink, Esterhuysen, Mink and Owen 1993). Preskill and Torres (op.cit.) identify a number of types of reflection; the first of which is ongoing monitoring and adjustment, part of the everyday process of organisational adaptation. Secondly, there is post-hoc reflection, which considers outcomes and process after they have taken place and thirdly premise reflection, which focuses on the relevance of underlying beliefs and values to the organisation. The fourth type is reflection on future practice; consideration of how to use acquired learning for future activities. There are parallels here with experiential models of learning, which also include stages of reflection and assessment (Kolb 1984, Herriott, Levinthal and March 1985). Preskill and Torres's study appears to indicate an extension of the role of evaluation and evaluators to provide links with organisational learning (op.cit.). An evaluator might now work in the same way as an organisational development consultant, supporting the development of a learning culture by communicating the advantages of this type of environment for members of the organisation and reinforcing the commitment of top managers (Preskill 1994). when a learning culture has become established and its results begin to be shared throughout the organisation, the evaluation process should then provide the means of assembling participants to reflect on previous activities and plan future strategy. As employees reap the benefits from an involvement in organisational learning they then become capable of working together to create systemic organisational change (ibid).

Any evaluation of change necessarily involves both the predicted outcomes and methods used and also the significance of these outcomes. Different frames of reference of parties involved may lead to a conflict of interests (Carnall 1990). Organisational assessment, according to Lawler, Nadler and Cammann (1980), measures the effectiveness of an organisation in terms of task, structure and function, and in addition the social impact of the system on its staff. They advocate assessment through collection and interpretation of data and its application in the context of a systems approach, whereby the organisation is viewed as a series of interacting parts. Other writers, (e.g Van de Ven 1980) have focused on performance as the most significant factor in evaluation. Yet as Carnall (1982) points out, any assessment of performance inevitably involves varying criteria and subjective value judgements.

The exchange theory approach incorporates employee reward systems and reciprocal relations (Cohen 1979). Allocation exchange relations, or economic exchange refers to the distribution of financial and non-financial rewards and sanctions to employees in return for commitment or compliance. Brown (1978) asserts that instability in organisations may often be caused by inequalities in rewards, especially where these are not related to merit. Reciprocal or social exchange involves relationships between groups or individuals which are not specified by employment contracts but form the informal organisation and the obligations, expectations and levels of trust implied thereof. Carnall (1982) suggests that organisational change can be evaluated by its effects on both types of exchange relations for all groups of employees, and their perception of the changes. Subsequent behaviour will depend on this perception and may be acquiescent or resistant accordingly.

The other main form of change assessment is retrospective evaluation. Gowler and Legge (1979) differentiate between formative and summative evaluation designs, and describe the latter as a focus on the outcomes of change programmes and an attempt to measure to what extent these meet previously prescribed goals. The value of *post facto* evaluation is referred to by a number of writers. Hinkin (1995:p 982) maintains that 'theoretical progress ... is simply not possible without adequate measurement' and that

empirical results aid evaluation of the theory and facilitate its advancement. Sadler-Smith and Gardiner (1996) stress the importance of retrospective evaluation that comprises more than the informal and often biased assessments of managers. Yet although this type of evaluation is recognised as valuable to the process of organisational change, it is frequently missed out or carried out in insufficient depth (O'Connor 1993). Moreover, it is frequently admitted that the findings of evaluation research are underused or even bypassed altogether in subsequent strategic planning exercises. This may be the case for a number of reasons; findings and recommendations may be presented to managers who are resistant to the change or not directly involved in its implementation or there may be political reasons why they do not pass on information signifying the need for change (Legge op.cit.).

Carnall (1982: p19) proposes an approach to organisational assessment which examines the effects of change on various 'interest groups' within the organisation. these groups are described as sets of individuals involved in ongoing and interactive social and economic exchange and may perhaps be considered as similar to 'stakeholders' as defined by Pedler, Burgoyne and Boydell (1997: p4). Carnall (op.cit.) suggests that the evaluation of change should focus on changes in behaviour of these groups following the change process, and on whether a new framework has been established on which new organisational practices may be based.

In any change process it is important to identify the desired results; it is then easier to assess whether the actual outcomes meet those planned. O'Connor (op.cit.) warns against a focus on one particular success and its associated events, advocating instead an integrated appraisal of all the relevant outcomes. Scientific assessment of organisational performance is often criticised for adhering to the norm and not taking into account unexpected outcomes and altered issues which come into force when conditions are changed (Brooks 1980). Evaluation of change should reinforce learning acquired from all parts of the change and contribute to the management of future change. New benefits can be enumerated and welcomed and the reasons behind mistakes comprehended (O'Connor op.cit.). Furthermore, the findings of evaluation research need to be not only

valid but also meaningful. The aim of evaluation is to enhance understanding of the change process and set it in context by means of personal insights, which may, of course, vary according to the particular perspective of the individual (Legge 1984).

A small number of studies have attempted to evaluate organisational learning or the learning organisation as models of change. The 'Eleven Characteristics Questionnaire' developed by Pedler, Boydell and Burgoyne (1994) attempts to measure the learning company (organisation) in terms of eleven attributes identified by the authors through case studies carried out in a large number of companies; these are shown in Table 4.1.

Eleven Characteristics (Pedler, Burgoyne & Boydell 1994)	Eleven Essential Elements (Marquardt and Reynolds 1994)
A learning approach to strategy	Learning strategy
Participative policy making	Empowerment
Informating	Learning technology
Formative accounting and control	Quality
Internal exchange	Teamworking and networking
Reward flexibility	Supportive atmosphere
Enabling structures	Appropriate structures
Boundary workers as environmental scanners	Environmental scanning
Inter-company learning	Vision
A learning climate	Corporate learning culture
Self-development opportunities for all	Knowledge creation and transfer

Table 4.1: Eleven Characteristics of the Learning Company (Pedler, Burgoyne and Boydell 1994, 1997) and Eleven Essential Elements for Learning (Marquardt and Reynolds 1994)

Pedler et al (1997) focus on developing the capacity of the organisation for continuous adaptation to present and predicted environmental change. A case paper based on the

findings analyses the questionnaire for the purposes of providing internal validity and reliability of the questionnaire itself, rather than measurement of learning organisations or the evaluation of change (Pedler et al 1994). The application of existing change packages in organisations implementing large-scale change have been criticised as largely irrelevant to the companies involved (Argyris 1990). Pedler et al (op.cit) imply that the learning organisation model can be individually tailored to suit the needs of each organisation and is thus more useful as a model of change.

Marquardt and Reynolds (1994) also suggest eleven essential elements for a learning organisation. They argue that organisations have been forced to reconfigure their ways of thinking, managing and operating with employees, customers and competitors in response to a number of pressures. Table 4.2 compares Pedler et al's characteristics with those of Marquardt and Reynolds. Although each set of authors has coincidentally extracted eleven factors, only a certain number of these correlate with each other. Clearly a learning strategy, environmental scanning, a learning climate and enabling or appropriate structures correspond exactly and there are links between informating and learning technology and to a lesser extent between participation in policy making and empowerment. The other five elements differ however, although much of the vocabulary is common to both sets of characteristics and indeed to much of the literature on learning organisations.

The methods used in evaluation research vary. Pedler et al's (1993) questionnaire employs purely quantitative data collection and analysis which provides both an assessment of the progress towards a learning organisation and a 'dissatisfaction index', which attempts to measure the gap between present and desired states. Earlier work by the Learning Company adopted a case-study approach where behaviour characteristic of learning organisations was illustrated in a series of vignettes (Pedler, Boydell and Burgoyne 1988), which attempted to measure the orientation of an organisation rather than its achievement of learning company status. Leitch, Harrison, Burgoyne and Blantern (1996) utilise a combination of Pedler et al's Eleven Characteristics Questionnaire with a case-study approach to consider the learning potential in one

medium-sized company, and ongoing participatory action research, which places participants in an active role throughout the research process, in contrast to their passive position in a conventional survey. The findings, which cover learning potential and the gaps between the current and ideal positions, are discussed in depth but suffer from the disadvantage of a small sample size.

The Royal Institute of Chartered Surveyors (RICS) Survey; 'Learning to Succeed' (Green, Dale, Kennie, Matzdorf and Megginson 1997) also uses the Eleven Characteristics Questionnaire in an assessment of learning processes in the chartered surveying profession. This study attempts to gain an overall view of learning in this type of organisation, rather than to measure levels of learning within individual organisations. The report concludes that good communications, both internal and external and a flexible approach are vital to organisational learning, and advocates proactive strategy-making, the development of collaborative partnerships and the enhancement of individual potential through greater use of training in order to increase the rate of organisational learning in these organisations. It also submits that a version of the questionnaire more specifically geared to the chartered surveying profession might have been useful.

Crossan and Hulland (1996) on the other hand, have developed their own diagnostic tool, the Strategic Learning Assessment Map (SLAM), which aims to measure patterns of organisational learning in order to identify key points for investment of learning. The SLAM also uses a questionnaire approach which is analysed in terms of behavioural, leadership and cognition items. Preliminary findings from Crossan and Hulland's research (op.cit.) indicate a significant variation between the three types of learning and also a difference between cognition and behaviour. Furthermore, they have identified four aspects of organisational learning which may provide input into programmes to enhance learning. This research is still in progress, but results to date appear to confirm that merely examining individual and group learning is not enough, rather practitioners and researchers need to understand how learning is being shared, transferred and exploited throughout the organisation.

71

4.6 SUMMARY

It is clear therefore, that the literature on organisational change is extensive and wide-ranging in response to a recognition of the need for organisations to operate in new ways. Companies throughout the UK (and indeed worldwide) are coming to understand the neccessity for transformational rather than evolutionary change in order to survive and sustain their position in an increasingly competitive environment (Jones and Hendry 1992, Garvin 1993, West 1994a). However, there are a number of recipes for successful change, some claiming to be more scientific, others focused on quality or the abilities and needs of organisational members. Some such programmes have been widely utilised in different companies over short periods of time, only to prove difficult to sustain or unsuccessful, due to resistance or only partial adoption of their underlying precepts. Other approaches which continue to be employed are based on established ideas which have been modified to suit the needs of organisations in the 1990s.

The benefits of organisational assessment are numerous. At the planning stage, gaps between the actual and desired organisational state can be identified and addressed, while continuous reflection and subsequent organisational modification throughout the change programme can reduce the risk of errors and aid adaptation to environmental demands (Preskill and Torres 1996). Retrospective evaluation of change examines the outcomes of organisational change and the degree to which prescribed aims have been achieved (Gowler and Legge 1979). Its value for addressing deficiencies in organisation-environment fit or for planning future change programmes is unquestionable, nevertheless the findings of evaluation research are often ignored or underutilised for the reasons mentioned earlier. Indeed, the decline in popularity of a number of change programmes may be due in part to the lack of evaluation both during and following the change process.

There appear to be few recent evaluation studies and an especial lack of assessment of the learning organisation model despite the extensive literature prescribing the use of this approach. While it is clear that a small number of researchers are beginning to address the lack of empirical studies on evaluation of change, there is still a

scarcity of material on this subject. In particular, very few writers present a learning organisation orientation on this issue. Most of the studies described above have applied the Learning Company questionnaire (Pedler et al 1993,1997). This is undoubtedly a valid measure of company orientation towards learning, though some of the items on the questionnaire may be criticised as being vague and difficult to answer.

The purpose of the present study is to address these issues, firstly through the development of an alternative diagnostic tool employing coherent and unambiguous questions. It also aims to present empirical evidence from two major companies, based partly on the findings of two large surveys, but supported by a number of qualitative pieces of data. It is suggested that a combination of these methods will go some way towards filling the gap currently existing in research in this area.

CHAPTER FIVE

COMPONENTS OF THE LEARNING ORGANISATION

5.1 INTRODUCTION

This chapter discusses various aspects of the learning organisation which have been identified through the literature as elements essential to its implementation. It examines each of these in depth, and considers the relationship between them and the role each can play in putting learning organisation theory into practice. These are not necessarily all characteristics of learning organisations as described by Pedler, Burgoyne and Boydell (1997) or Marquardt and Reynolds (1994) but are wider issues which encompass a range of more specific features.

The five issues; empowerment, facilitative leadership, appropriate reward systems,, shared information and trust have been identified from the literature as the most important human resource issues of the learning organisation and are relevant to the model discussed in Chapter 6. These aspects of the learning organisation are closely interrelated and it may be difficult to ascertain which are preconditions of others. This chapter attempts to suggest some of the links between these elements and to relate these to the composition of the learning organisation.

5.2 EMPLOYEE EMPOWERMENT

A recent survey of UK organisations found that about 20% of managers consider their organisations as already becoming empowered (The Industrial Society 1995). Many employees in organisations working either individually or as members of a team already have a certain amount of power; the power to work enthusiastically or not, to produce high quality goods or services or not, to espouse corporate goals or not. Many also participate to some extent in the running of their organisation or department. A number of writers suggest though, that empowerment should go much further than participation (Pickard 1993, Blundell 1994). Whilst participation is concerned with joint decision making and consultation with employees (Burdett 1991), empowerment implies that the decisions are actually taken by individuals or teams endowed with the appropriate authority, without referring to management. By passing a degree of power to the workforce, management may remove rigid control but retain the capacity to influence the climate, and ultimately the

75

performance of the organisation by creating learning opportunities, feedback mechanisms and an underlying atmosphere of trust. It is important though, that the mechanisms which are needed to support an empowered workforce are put in place as supervision is withdrawn and that both managers and employees have a clear understanding of their new roles (Brown and Brown 1994). Crosby (1992) presents a management-centred perspective on empowerment, implying that greater, not lesser control may actually be achieved over the workforce by authorising employees to solve problems and take decisions, because the latter are then focused on achieving organisational goals.

The transition to empowerment cannot take place without modifications to the expectations of both employees and management (Gubman 1995). Employees released from conventional constraints require support and training; this may be highly specialised, taking place over a long period, or may involve short term on-the-job learning (Allan 1995). The offer of greater power to individual workers is not always welcomed, particularly in older organisations with a hitherto hierarchical structure and a history of management by control. In an already uncertain environment employees may be unwilling to assume reponsibility for decision making (Plunkett and Fournier 1991)

Managers may also mistrust the empowerment approach, fearing a lack of overall control and, in some cases, worrying that power sharing might erode their own positions, perhaps eventually leading to the loss of their jobs (Leigh and Maynard 1993). Many managers find it difficult to put empowerment techniques into practice where staff are reluctant to shoulder responsibility (Drath 1993). Empowering employees may mean asking management to behave in a way directly in contrast to that which led to the succesful attainment of their positions (Marsick 1994); small wonder that many managers find this so difficult. In order to overcome resistance to change managers need to unlearn behaviour which regards power as their prerogative and to develop instead alternative forms of authority based on trust, effectiveness and respect (Burdett 1991). There is a growing emphasis on the human assets of the organisation, while managers are beginning to play a more symbolic role (Lee 1996).

5.2.1 Current Interest in Empowerment

The empowerment of employees has been implemented in a wide range of organisations in the 1990s, both in its own right (eg. at W.H.Smith) or as part of a change programme. The current adoption of empowerment theory is due to a number of reasons. It is probably primarily a response to the flattening of organisational structures; layers of middle management are being removed in many organisations and the responsibility for decision making and problem solving formerly undertaken by this group needs to be shifted. In many ways it makes sense for this process to be transferred to the shop floor; workteams are usually capable of taking extra responsibility for the work, although training may be required (Allan 1995). Front line workers are in charge of customer perceptions and are often more in tune with changing demands, product or service satisfaction and customer concerns than management (Brown and Brown op.cit).

The literature cites a number of advantages to empowering employees. Firstly, successful empowerment programmes may provide workers with greater job satisfaction (Blundell 1994). Employees with a degree of autonomy tend to have greater self-esteem and to be more highly motivated, they interact more warmly with customers in service industries and are likely to be more committed to achieving quality in products or services (Bowen and Lawler 1992). Moreover, where individuals play a proactive part in their own development they are also more likely to develop an awareness of their own learning strategies (Megginson 1996) and adapt these to their own organisational situation. Secondly, many organisations are now beginning to recognise that people are their most valuable resource; empowerment can be the means of unleashing the potential of creative ideas, diverse experience, talents and expertise held by staff (Anderson 1995). There is a growing realisation that there is no general prescription for success today, but that the distinguishing characteristic of a number of successful organisations seems to be the degree to which they are capable of utilising the potential of their workforce (Edmonstone and Havergal 1993).

However, there is a danger that employees in many organisations may be required to work increasingly harder and to take on greater responsibility for their jobs without

receiving noticeably increased rewards (Gubman 1995). The empowerment literature contains many references to utilising the talents and skills of staff (Holpp 1995) and exploiting the potential of employees (Edmonstone and Havergal op.cit). Certain ruthless organisations may do exactly this; exploit their staff for no exra reward, regardless of their personal wishes or career needs.

The exacting customer demands of the 1990s may be easier to meet in a situation where employees are not bound by traditional constraints. Responses can be personally tailored and rapidly produced where creative rule-breaking is permitted or encouraged in non-standard situations (Bowen and Lawler op.cit.). Where clients are dissatisfied with a product or service, empowered employees are in a position to devote attention to putting the situation right rapidly without recourse to higher authority (Ripley and Ripley 1992). Of course, there are circumstances where rule breaking is never appropriate; health and safety regulations need to be adhered to, for example; empowering employees must clearly involve specification of the boundaries within which they are permitted to operate (Bowen and Lawler op.cit).

Empowerment of employees inevitably involves political factors to a certain degree; individuals operating in strategic decision making will bring their own objectives, allegiances and affiliations to bear on the outcomes (Chell 1985). The diversity of individual views, however, can only enhance the process of formulating decisions and policies, in that the status quo will be constantly challenged and the organisational image modified accordingly (Herriot and Pemberton 1995).

5.2.2 Empowerment and Learning

Some writers claim that empowerment of employees is a necessary component of the learning organisation (Marquardt and Reynolds 1994, Burgoyne 1994, Brown and Brown 1994). Conversely, Greenwood (1995) maintains that ongoing learning is a quality essential to the empowered organisation. The relationship between empowerment and the learning organisation seems to be clear; without empowerment, individual members in an organisation have neither the opportunity nor the motivation for individual learning which

may, in turn, lead to organisational learning (Dixon 1994, Vince 1995). However. as Coopey (1996: p10) suggests 'it is unlikely that an organisation's rank-and-file members will enjoy anything like the level of real empowerment judged necessary for the continuous process which forms the learning organisation'.

Employees at all levels need to be in a position to contribute ideas and opinions in a non-threatening environment (Ripley and Ripley op.cit). Unfortunately, empowerment is frequently introduced as part of a programme of major change,which in itself is likely to cause feelings of uncertainty and anxiety in employees. Moreover, such change programmes, as previously suggested, are usually introduced as a result of some form of crisis or environmental threat; such circumstances are not likely to produce a climate of trust in the first instance, when staff may fear losing their jobs. Individuals in an empowered workplace need to be committed to improving their own and others' performance; this commitment can only be derived from a shared sense of responsibility and a clear understanding of organisational goals (Brown and Brown, 1994).

Today's companies attempt to achieve a competitive edge by producing goods or services which not only satisfy customer requirements to the full, but also anticipate future customer needs and, in some cases invent new markets. The emphasis on value for money, quality and innovation inherent in these processes involves new and different demands on the workforce (Cashman and Feldman 1995). It is no longer sufficient for companies to repeat tried and tested solutions to problems, or to merely turn out updated products or services in response to situations. Champions of empowerment maintain a workforce is needed which can adapt rapidly to whatever changes take place in the external environment, can design tailormade responses to exceptional circumstances if necessary, and above all can learn from a variety of outcomes and use this learning to improve future productivity (Bowen and Lawler op.cit).

It is asking a lot of such a workforce however, to become involved to such a degree in their work, if their only reward is to be increased job satisfaction (Burdett 1991, Leppitt 1993). Gubman (1995) suggests that employees should expect in return freedom from anxiety, opportunities for learning and the chance to experiment and take risks. Yet as

Plunkett and Fournier (1991) note, in today's business climate more and more work is now being done by fewer and fewer people. It is inevitable that this should lead to a greater incidence of stress-related illnesses amongst employees, which will, in turn, influence organisational performance.

Rather than merely helping to spread the workload, empowerment should, in the long term, provide much greater benefits to both employees and the organisation. After an initial period of adjustment and suitable training, workers may enjoy the added responsibility of participating in decision making, particularly when they can see how those decisions affect the work they are engaged in (Clutterbuck 1995). Moreover, where staff feel their opinions and ideas are valued, they will be more likely to offer constructive suggestions which may prove valuable to the organisation (Burdett op.cit). The development of workteams, imbued with suitable authority and a degree of self management, can provide the opportunity for employees to invest personal effort and commitment in their work and produce truly creative outcomes (Herriott and Pemberton 1995). It should be noted, though that these benefits are only likely to result where employees clearly understand the long-term goals of the organisation and the part they play in helping to attain these.

5.3 FACILITATIVE LEADERSHIP

Writers and practitioners alike seem to agree on the significance of appropriate leadership in the learning organisation. The role of leaders in the organisations of the 1990s has radically altered from the authoritarian style of traditional heads of hierarchies whose function was to direct work and make short term decisions (Senge 1990a). Certain famous leaders of the past, Henry Ford for example, were charismatic figures who believed it was their responsibility to do the learning for their organisations. Few would accept this view today. The recognition of the increased importance of learning in organisations has led to a view of leaders as facilitators of learning, rather than as key decision makers (Senge, op.cit). The process of facilitation often involves *not* doing a number of things which were previously central to the leader's role; not acting, not making

decisions for people or not solving problems (Bentley 1994). As the Tao Teh Ching notes, 'a leader is best when people barely know that he exists; not so good when people obey and acclaim him' (Tzu c.500 BC).

5.3.1 Definitions and Types of Leaders.

The conventional picture of leaders is of heroes; energetic and decisive individuals who have risen to the top, probably during periods of crisis, and who direct and inspire the workforce according to their vision (Senge 1990b). Boeker (1992) claims that leaders are likely to be people who enjoy power and are anxious to maintain their positions of power. Traditionally, a good leader was a commander of people, but this role is now being redefined as a facilitator, a coach or an enabler, though charisma and the ability to inspire employees are advantageous to any of these roles (Dixon 1993).

Management and leadership are not necessarily synonymous, though. Leaders are capable of influencing the attitudes and commitment of the workforce, and normally hold positions in top management. Managers are formally responsible for decision making and direction in their department; leadership is only one element of the role of most managers (Dixon, op.cit.). Management produces the conditions wherein leadership qualities can develop, but the conditions are also those which can promote a climate of commitment to success. It is probably preferable to focus on the creation of an appropriate culture rather than to rely on the emergence of a charismatic leader (Drucker 1955). Increasing complexity is inherent in the notion of the learning organisation and it has been suggested that there is no ideal managerial style (Lee op.cit).

The new leader is concerned with achieving a fit between the organisation and its members, and between workteams and their skills and knowledge, in order to meet organisational goals (Ezzamel, Lilley and Willmott 1994). Jaques and Clement (1991) suggest that good leaders emerge from management roles and are primarily those who demonstrate competence, which then unites employees and directs them together towards corporate objectives.

81

Perhaps the most significant quality which leaders possess however, is the ability to create a vision for the future and to communicate this to all organisational members. Effective leaders are capable of motivating and inspiring others to follow their vision (Senge 1990a). They should be inspired by their vision, engaged in building new theories and receptive to learning (Kim 1993). They may then design a learning culture where only general objectives are specified and employees have to decide what needs doing and act accordingly. Bentley (1994), who sees leaders primarily as facilitators, claims that good leaders stay in the background, providing support and confidence for their subordinates to enable them to make decisions.

5.3.2 The New Role of Leaders.

The leader in the learning organisation has a role very different from that of his/her predecessors in bureaucratic organisations, and older managers may find themselves trying to assume a role which is in direct contrast to the one by which they came to power (Leigh and Maynard 1993). Instead of controlling and commanding the workforce, they are now expected to remain in the background, providing support and encouraging subordinates to make decisions. Participative styles of leadership, where leaders trust and involve employees in setting organisational aims and deciding on methods of attaining them, are generally felt to be more relevant to organisations seeking to become learning orientated (Plunkett and Fournier 1991).

Leaders of learning organisations also need to enable employees to learn and to establish mechanisms which facilitate the sharing of learning (Burdett op.cit.). Successful leaders of change should be concerned with 'catalysing the capacity to generate new knowledge' and developing mechanisms by which employees can exploit and apply this knowledge for the benefit of the whole organisation (Kim 1993a: p35). Megginson (1996) distinguishes between planned and emergent strategies of learning, claiming that both approaches are valuable to the manager; these two types of learning may be incorporated into management skills. If learning is to be shared, it follows that management must make

information available to everyone and communicate it freely throughout the organisation, not keep it exclusively in the hands of a few (Brown and Brown 1994).

Schein (1989) perceives the establishment and dissemination of culture as another major role of organisational leaders; this encompasses a wide range of values, attitudes and behaviour deemed desirable in employees and aligned to organisational goals. In a learning organisation, Pedler, Burgoyne and Boydell (1997) argue that it is first necessary to create a learning culture, one where both senior managers and subordinates question their own attitudes and behaviour and where the structure of the organisation is orientated towards learning and continuous improvement.

One aspect of a learning culture is that employees are allowed the freedom to solve their own problems, make decisions and experiment with new ways of working, without interference from management (Brown and Brown 1994). Leaders must retain an overall picture of the work in progress, however, and remain accountable to staff (Jaques and Clement 1991). They need to provide safeguards and specify boundaries so that workteams are able to take minor risks (Brown and Brown op.cit). Perhaps most important of all, a good leader should provide support for employees, encourage and reward their efforts and supply practical help when necessary.

5.4 REWARDING EMPLOYEES FOR EFFORT AND IDEAS

The distribution of rewards in any organisation has traditionally brought with it a number of problems and conflicts. The incentive system is an integral part of organisational culture; superior performance in the marketplace is dependent on corporate values and beliefs which motivate employees and managers to anticipate environmental changes and adapt accordingly (Kotter and Heskett 1992). Armstrong (1993) claims that management attitudes and philosophy are reflected in the way rewards are distributed throughout the organisation and that the reward system is indirectly responsible for employee behaviour and commitment. Williams et al (1992) reiterate that strong cultural messages can be communicated through remuneration systems. There is thus a strong argument for linking rewards and incentives to corporate aims and values. Where such links are strongly in

place, the remuneration system is capable of reinforcing organisational objectives, but where links are not evident the organisation sends conflicting signals to its employees (Bradley 1995).

Pedler et al (1997) suggest that in line with increasing empowerment of staff and the development of more flexible ways of working, employees should participate in designing alternative reward strategies aligned to differing employee contributions. As the focus on individual performance is replaced by teamwork, new incentives should focus on collective effort rather than individual competition, although this concept conflicts with the Western overall approach to society and education, which emphasises the competitive performance of the individual (Bunning 1992).

Besser (1995) suggests a model similar to that employed by Japanese companies such as Toyota, comprising the organisation, motivation, efforts and rewards, where pay and other rewards do not directly affect individual motivation but are directed towards overall organisational objectives (see Fig. 5.1). The community of fate ideology refers to a belief in a shared organisational future and impacts on individual motivation towards attaining organisational goals.
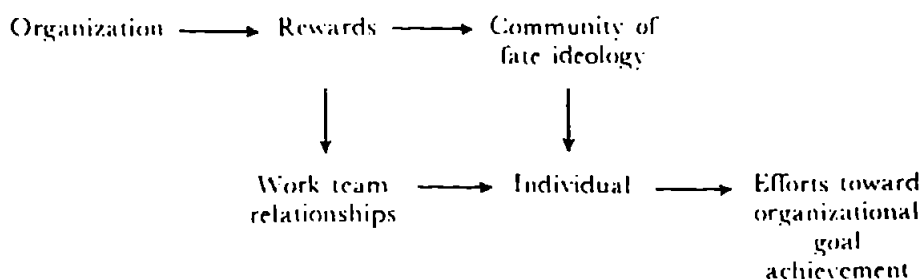
Figure 5.1: Rewards and Company Ideology (source Besser 1995: p388)

5.4.1 Why Reward Strategies Need to Change.

Recent economic upheaval and cost-cutting drives have led to a general flattening of organisations and the removal of many posts in middle management. Prospects of promotion have consequently been drastically reduced with the result that increasing

numbers of employees are reaching the top of their pay scales with little or no opportunity of gaining further pay increases or higher positions. This is obviously likely to lead to poor motivation among employees (Bradley 1995).

Moreover, the trend towards lack of job security means that either staff will remain in their jobs for fear of the unknown but with little trust in the company, or because of lack of commitment will move jobs purely on the basis of increased financial rewards. There is therefore a case for providing incentives to motivate valued employees to remain in the company, with personal career aims aligned to organisational objectives (Bunning 1992). A decline in heavy industry, an increase in service industries, a fluctuating economy and changes in the structure of society generally have meant that the composition of the workforce has altered accordingly. There are now more women workers, larger numbers of temporary and part-time staff and a greater proportion of workers from ethnic minority groups. All these factors have had an impact on the design and effectiveness of reward systems (Bradley op.cit.).

There appears to be increasing scepticism throughout society about the allocation of rewards, linked with a heightened sense of political injustice and awareness of the widening gap between rich and poor. This has been reinforced by media coverage of huge pay rises awarded to top executives already receiving high salaries. While performance-related pay is much discussed and put into practice in a number of organisations, it is clear that over the employed population of Britain, there is very little actual correlation between pay and performance.

Pedler, Burgoyne and Boydell (1997) suggest that one solution to the conflict and uncertainty surrounding reward systems is to identify the underlying principles on which they are based, to disclose these to the workforce and invite participation in formulating alternative strategies or clarifying existing systems. Greater flexibility is required in the types of reward available and the means by which they are distributed. Pedler et al maintain that 'flexible working patterns (should) allow people to make different contributions and draw different rewards' (ibid: p26).

Japanese management methods have undoubtedly exerted a significant influence on the way Western companies now approach motivation and commitment of employees. Besser (1995) demonstrates how the alignment of financial remuneration with group performance at Toyota in Kentucky has strengthened relationships within workteams and encouraged feelings of equity between management and the labour force, which are reinforced by the benefits package open to non-managerial employees. Probably the greatest contribution of Japanese companies has been to illustrate that loyalty and commitment can be inspired in employees by factors other than cash incentives and that these attributes are best encouraged through creation of an apposite culture.

5.4.2 Individual versus Collective Remuneration.

Few organisations would now, in theory, advocate rewarding workers on an individual basis when corporate cultures now require teamwork and collaboration. Yet individualised reward systems continue to exist in some organisations (Baron 1994) and sales staff are usually rewarded according to individual performance. Many employees have been conditioned to work within a culture which favours individual contribution. Unless changes are made to this culture, attempts to link reward to collective performance are likely to meet much resistance (Ezzamel et al 1994). Bunning (op.cit) argues that people are naturally sociable and perform better in a supportive collaborative atmosphere; therefore it would make sense to align pay structures with group working. New remuneration systems should base reward and recognition on team performance but should recognise exceptional individual effort, within the context of teamwork.

5.4.3 Financial and Non-Financial Rewards.

Although more responsibility is now being given to lower level workers, the systems for allocating financial rewards have not been revised in line with this. Morris (1995) suggests that not only could pay be distributed more fairly in most organisations but substantial savings could also be made for the companies involved. Where middle

management layers have been removed, the money saved on managers' salaries could be used to provide financial incentives for workteams (ibid).

Besser (1995) cites the example of the successfully restructured remuneration programme at Toyota. Members of teams received equal regular pay, with team leaders earning only five percent more than team members. Bonus pay was also awarded on an equal basis and special monetary awards were given to groups contributing valuable suggestions for improving the working of the company. At Chaparral Steel in Texas, the pay system was revised so that incentives and rewards supported the organisation's belief in egalitarianism (Leonard-Barton 1994). Teams were rewarded according to performance, but also for accumulation of skills, a practice commensurate with the principles of the learning organisation.

Alternative types of reward; 'incentives-in-kind' (Hogg 1990) instead of financial incentives, are beginning to be considered in some organisations. Atwood and Beer (1988: p203-4) advocate the use of 'a full range of rewards' which include approval, approbation, career development and improvements in working conditions. In a similar vein, Pedler et al (1997) point out that money is not the only possible incentive and that for a number of people a wide variety of inducements might be valued equally. Garvin (1993) notes that a system of performance awards, given to teams at AT&T and publicised throughout the company via electronic mail and written reports, provided a very effective incentive to enhance performance. However, this may not always be the case. A recent survey on the effects of performance-related pay on employee motivation in the Inland Revenue found that financial incentives had not led to significant changes in employee behaviour in most cases, or increased productivity in the workplace (Marsden and Richardson 1997).

Non-cash rewards may take the form of gift vouchers for large stores, merchandise, tickets to concerts or matches, or travel; usually in the form of paid holidays, though in the UK these do not often include spouses, unlike in the USA. Travel tends to be seen as the highest reward for performance (Hogg 1990) though as Curry (1995) notes, recipients of such rewards may be unaware that they are counted as taxable income in some cases. There are many other forms of non-financial reward though, which range from

dinner in a restaurant or a car parking space to letters of recognition and certificates. Hogg (op.cit) suggests that one of the main factors in awarding prizes to employees is the public presentation of the reward; this may be as significant to the recipient as the award itself. There is undoubtedly a case for exploring the use of a wide range of non-financial incentives as an alternative to conventional rewards.

A few voices are raised in protest against the almost universal adoption of incentive systems in organisations. Kohn (1993) argues that the behaviourist theory on which most reward schemes are founded is fundamentally flawed and that rewards, rather than promoting desirable behaviour, tend to undermine the processes they are designed to improve. People who expect to be rewarded for performing a task may actually perform less well than those not anticipating rewards. Watson (1994) confirms this idea, suggesting that people are motivated by seeking to meet the criteria for receiving a particular set of rewards rather than by trying to do their work well.

Many writers seem to be in agreement though, as to the value of reward systems in motivating employees and enhancing performance. Atwood and Beer (1988) emphasise the role of incentives in encouraging a greater degree of integration between personal and organisational development and Morris (1995: p83) insists that 'money is a good motivator' which facilitates superior performance on the part of workteams. It is important that reward strategy is linked to corporate goals and smaller scale team objectives, and there need to be strong associations with cultural values (Bradley 1995). Rewards are undoubtedly valuable factors in selecting, retaining and motivating staff. Their impact on the organisation has a strong element of symbolism as they are clear demonstrations of the values, beliefs and behaviours the organisation wishes to promote (Johnson and Scholes 1993). Yet Tichy, Fombrun and Devanna (1982: p54) contend that reward systems are 'one of the most under utilised and mismanaged managerial tools' for improving performance.

5.5 SHARED INFORMATION

Knowledge and work-based information have traditionally been regarded as the 'right' of functional specialists. The advantages of sharing knowledge are now beginning to be realised in some organisations however, as firms introduce initiatives such as teamworking and empowerment in efforts to increase employee commitment and job satisfaction and to benefit the organisation as a whole. Many companies still place little emphasis on the acquisition and use of information though, and consider specific information-gathering activities of limited value or as expensive overheads (Kaye 1995).

A number of writers have noted the importance to the learning organisation of sharing information at all levels (Iles 1994, Pedler et al 1997), rather than regarding it as the prerogative of a certain few key individuals. Moreover, all the different types of information sharing throughout the organisation; informal discussion of ideas, team briefings and seminars, established written information and technology-based communications need to be integrated (Drew and Coulson-Thomas 1996). Mintzberg (1973) cites information gathering and dissemination as one of the major components of managerial work. Yet few writers have described specific mechanisms for putting the principles of information sharing into practice. Guile and Young (1996) argue that the literature on learning organisations makes little reference to the potential of information technology for integrating learning and work. It may be however, that this process has largely been covered in the extensive literature on information systems.

Nonaka (1994: p15) differentiates between knowledge, which he defines as justified existing beliefs, and information, described as a 'flow of messages' which may add to or modify knowledge. Shared original experience enhances the store of tacit knowledge among the workforce. Nonaka suggests unrestricted social dialogue is probably the most effective method of achieving this, through sharing ideas and devloping concepts jointly, particularly in the early stages of knowledge creation.

5.5.1. Use of Information

There are several factors which influence the use of information in organisations; firstly rationality. Ideally, all relevant information on a topic should be collected and evaluated before a decision is made, but in practice only a certain amount of information is accumulated and the first acceptable solution is applied. Jordan and Jones (1997) note that information sharing at meetings often takes place after key decisions have been made. All organisational decisions are influenced by the dominant perceptions of the manager(s) concerned, and there is sometimes a 'hidden agenda' which affects the way in which information is used; it may be intended for purposes other than those ostensibly stated, for propaganda, power over others or for post-hoc rationalisation of decisions (Kaye op.cit). Organisational information should be used for positive purposes such as learning, understanding, discovering and inventing but may sometimes also be used in order to mislead, deceive, manipulate or dominate (ibid.).

Sligo (1996) suggests two aspects of information flow in an organisation; the ability to provide information and means of access for staff and the desire and motivation of employees to seek out work-related information. It should also be noted that much information may not consist of hard facts but be based on opinions or subjective interpretations (Kaye op.cit). All information is relevant though and need not be ignored because it duplicates or overlaps other information. Indeed Nonaka (op.cit: p28) underlines the significance of 'redundant' information in accelerating the rate of effective knowledge acquisition. Stores of knowledge are important as a basis for strategic planning; in order to establish these new information needs to be combined and co-ordinated with existing knowledge (Kaye 1995).

Feedback to the company can be provided not only by internal sources but also from relevant information gathered outside the organisation. Easterby-Smith (1992) emphasises the importance of both internal and external feedback. Direct information from outside can be collected by employees at all levels who have direct contact with customers, suppliers or other companies. This corresponds to Pedler et al's (1997) notion of boundary workers as environmental scanners. Drucker (1995) recommends employing the help of

external specialist advisors to collate and organise external information to challenge company strategy.

The assembly of external information has a number of uses to the company. Rapid, accurate information is necessary for organisations to respond to change, opportunities and threats in the external environment. External information is also needed concerning markets, customers, available technology, etc., in order to design organisational strategy (Kaye 1995). Pedler et al (op.cit: p136) view the use of 'boundary workers as environmental scanners' as one of the eleven characteristics of the learning company (organisation), suggesting that these employees can actively seek out useful data, but that the organisation must create mechanisms for the integration of this information into the company. They cite the example of delivery drivers at a bakery who gathered information about market demand or dissatisfaction and pooled the intelligence at weekly meetings attended by managers.

5.5.2 Information to Facilitate Organisational Learning

Efficient internal communication is essential both in its own right and to utilise the potential of external information. The information passed on needs to include negative as well as positive factors so that ideas can be tested and conflicts openly aired (Easterby-Smith op.cit). The strong links between trust and access to information are discussed in 5.7.2 below. Awareness of negative information plays a significant part in the development of trust; where management demonstrates a willingness to apprise employees of bad news at an early stage, this is more likely to generate or reinforce a trust relationship between employees and management.

Several writers have commented on the role played by shared information in developing organisational learning. According to Lyles, von Krogh, Roos and Kleine (1996) the transformation from individual into organisational learning occurs through dissemination of information and mechanisms designed to promote shared ideas. They describe three methods of promoting the change; personal facilitation; key managers develop a common basis through which individuals can share information, shared

facilitation comprising extensive discussions among co-workers to establish shared understanding and artifactual facilitation whereby knowledge and learning is shared through specifically designed systems and structures in the company. Leitch, Harrison, Burgoyne and Blantern (1996) similarly argue that the clear articulation of aims and the facilitation of internal and external collaboration are important factors in the development of a learning organisation, while Kanter (1991) emphasises the importance of open communication in fostering innovation and learning.

Moreover, hoarding or poor utilisation of information is likely to provide barriers to organisational learning. Many companies, while paying lip-service to notions of organisational learning and shared knowledge actually focus on profits and short-term goals and give low priority to non-visible assets such as open communication systems (Pucik 1988). Thus little transfer of learning takes place due to the non-existence of appropriate mechanisms and the climate for learning is poor. Pucik also describes how reward systems often unintentionally discourage managers from sharing information by recompensing them for being knowledgeable to the exclusion of others. He advocates recognising and rewarding managers for the sharing and diffusion of critical information to counteract this problem (ibid).

5.5.3   The Role of Information Technology

Much emphasis in the literature is placed on the part played by information technology (IT) in developing open communication and rapid diffusion of knowledge to everyone in the organisation. Guile and Young (1996) cite the global trend towards the development of huge networks of information, largely dependent on IT. Information technology may be used to automate; ie to replace paper-based tasks, or to informate; to disseminate information throughout the company (Zuboff 1988). Pedler et al (1997) also use the term informating to mean providing all employees with access to useful company information, assembling databases as stores of information and promoting shared ideas and learning generally.

The sharing of knowledge can be fostered through computer-based technology which enables people to discuss ideas and create inventories of knowledge sources and competences (Drew and Coulson-Thomas 1996). Lee and Kim (1996) advocate the development of IT-based information systems in all companies in order to maximise the potential of ideas, knowledge and talents possessed by employees. Drucker (1995) also stresses the need for information systems and considers their importance is often underrated; companies frequently perceive new technology as a means of replacing people and paper-based tasks. He suggests instead that new diagnostic tools should be used to convert separate techniques and pieces of information into an ongoing, integrated information store which can then be used to feed into the overall planning process.

A systems approach to information acquisition and dissemination using IT is essential if the company wishes to focus on organisational learning (Rockart and Hofman 1992). Information systems can be used to record innovations, not only internal, but throughout the entire field and to assess to what extent the company has exploited its potential (Drucker op.cit). A holistic view involving an understanding of current capabilities and future aims is thus available to all organisational members, who may begin to participate in strategic decision making. Kanter (op.cit) advocates the mobility of employees across functional boundaries; this should result in the enhancement of internal communication networks through human links. These new links could then provide either support or information from other departments when required. Information networks can also be developed through the formation of cross-functional teams on a non-permanent basis. These may exist at all levels of the organisation but their importance in communicating knowledge is probably particularly relevant at middle and senior management level (ibid).

Easterby-Smith (op.cit) reiterates the importance of technology-based information systems but suggests that many such systems are specifically designed to iron out variations and exception in the basic pattern. He maintains instead that new information systems should focus on non-standard occurrences, threats and mishaps in order to develop innovative behaviour and to make informed decisions about the future (ibid). Many

organisations have perceived computer networks as the solution to their communication problems, but few have paid attention to the mechanisms for personal and informal information gathering which need to exist alongside the technology. In order to genuinely share information and learning among all employees, the company needs to create an information culture, centred on the organisation as a learning system (Kaye 1995).

Business processes and information systems are interdependent in many organisations today, however the conventional design of information systems may not support the qualities needed for organisations to become either world-class or learning organisations. Computer systems may inadvertently remove opportunities for flexible working, creative solutions and equality among employees (Lee and Kim 1996). Furthermore, IT may not always be the most effective means of sharing information, due to its impersonal nature and the fact that it provides little room for discussion or dissent. 'Soft' information, ie. ideas, unconfirmed information and incomplete knowledge which exists in the minds of individual employees may be shared more effectively where the organisation provides opportunities for informal, face-to-face discussions (Sutton 1994). In practice, rather than replacing existing communication systems, the most useful application of computers is in rapidly transmitting one piece of critical information to many people simultaneously. It is unlikely that IT will effectively replace verbal communication because it is less efficient for purposes of discussion and it lacks the complexity and quality of information passed by word of mouth (Guile and Young 1996).

5.5.4   Information and Empowerment

Access to knowledge and empowerment are inextricably linked, thus open availability of information is essential where employees are to be empowered; it is no longer appropriate to restrict the spread of information in order to protect managerial authority (Sligo 1996). Not all writers would agree with this though; Jones and Hendry (1992) align empowerment with a fairly low level of employee participation where open access to corporate information is probably not relevant. Lee and Kim (op.cit) agree that availability of organisational information to all employees is a principal component of

empowerment, positing that without constant and easy access to data, employees cannot be empowered, even where they appear to be autonomous.

Receiving information is a reciprocal process, Burke (1996: p63) argues, because it encourages employees to pass on their information in turn, ie. 'repeated interaction encourages co-operation'. Links between sharing information and trust are mentioned in 5.6; if trust and co-operation are to be fostered there must be no discrimination in access to information, it must be considered a prerequisite to learning for all organisational members (Sligo op.cit). This view is supported by Nonaka (1991) who suggests that where employees have varying degrees of access to information, the inequalities which result will inevitably create barriers to organisational learning. Kanter (1991) emphasises the importance of openness in communication, so that differing opinions may be aired and notes that this may be encouraged by the physical design of buildings with low or non-existent partitions to foster informal discussion of ideas. Burke (op.cit.) reiterates notions of openness and accessibility of information based on his studies which found that sources of information varied according to the position of employees in the company. He concludes that employees who receive more information, particularly through informal, interpersonal sources, value the information they receive more highly, develop greater commitment to the organisation and derive more satisfaction from their work (ibid).

This and other studies appear to highlight the need for increased opportunities for informal discussion in addition to other sources of information, both written and technology-based. There seems little doubt that many organisations have become so involved in increasing efficiency that they have failed to recognise the significance of providing the mechanisms for interpersonal communication and the access to information for people at all levels so that the focus on learning they claim to espouse can be put into practice.

5.6 A CLIMATE OF TRUST

The establishment of a climate of trust is 'a recurring theme in workplace relations' (Fells 1993: p34). Trust is associated with integrity and an expectancy that the word or the

behaviour of others is dependable (Rotter 1967). Commitment and trust are seen as key factors in employee-management relations because once established, they foster co-operation and commitment and encourage loyalty (Morgan and Hunt 1994) Operational efficiency is dependent on co-operation between individuals and teams throughout the workplace (Deakin and Wilkinson 1995); similarly Morgan and Hunt (op.cit.) conclude that where trust and commitment are present in an organisation, the co-operative behaviour which ensues results in enhanced efficiency and productivity.

Situations requiring trust occur constantly in organisations, where the outcome depends on the behaviour of two or more individuals or groups. However, there is always an element of risk involved in trust. Fells (op.cit.) describes it as a calculated risk based on expectations of other people's behaviour, Luhmann (1979: p24) argues trust is a 'risky investment' and Lane and Bachman (1995: p9) submit that 'trust is fragile because it can be betrayed'. Any trust relationship carries the danger of the exploitation of one or more individuals by the other party or parties involved, however in situations where the risks are minimal, perhaps because of the unlikelihood of breaking accepted conventions or rules, the sense of trust will also be limited. Trust is self-reinforcing moreover; those who are themselves trusted tend to show a greater propensity to trust others.

5.6.1 The Social Aspects of Trust

There are clearly strong links between the presence of trust in an organisation and the values and basic underlying assumptions of that organisation, ie. its culture. Indeed, Morgan and Hunt (op.cit.) argue that shared values and the degree to which organisational members believe certain behaviours and goals are important are a prerequisite of trust. The relationship is a social one creating shared expectations and common long-term interests which in turn, because of their confidence in others, tend to lead to greater independence and flexibility among employees rather than a reliance on contracts and rules (Madhok 1995). A high trust relationship is also associated with respect, commitment and honesty on the part of both trustors and trustees (Sako 1992). Loomis (1959) and later Rotter (1967) found that those who have a propensity to trust others are likely to be more co-

operative or trustworthy themselves. An organisational climate of trust may be considered today as a requirement for competitive success because of the need to co-operate and share knowledge in order to keep pace with volatile markets and rapid environmental change.

5.6.2 Trust and Information-Sharing

Trust may also help to combat the effects of both individual and organisational uncertainty, but in order for this to work it is important for organisational leaders to undestand the importance of information sharing. Rapid communication of useful information enhances trust by matching employees' perceptions to their expectations (Sabel 1992) and may also reveal and help to resolve conflict. The process of developing trust is dependent on the sharing of information because retention of information by one party means that the other is vulnerable and must depend on the one who possesses the information; trust cannot be enforced, it can only develop voluntarily (Pettit 1995). Yet as Pucik (1988) notes, the reward systems of many companies actively encourage the retention of useful information, by regarding managers who arm themselves with critical facts as 'experts' and promoting or otherwise rewarding them.

5.6.3 The Need for Trust

The structure of many British firms to date has resulted in a lack of consideration of the needs or wishes of their employees, who in turn demonstrate little commitment to their organisations (Coopey 1996). Despite many claims to the contrary, employees in most organisations are probably not sufficiently empowered to focus on the continuous learning cited as necessary to the development of a learning organisation by Pedler, Burgoyne and Boydell (1997). Senior managers are in a position to safeguard their own power and financial rewards which often removes much of the power from employees. The reliance of these employees on the opinions and decisions of senior management needs to be reduced before trust and commitment can be established (Coopey op.cit.).

Companies wishing to become learning organisations need first to establish a climate of trust for a number of reasons. In order for employees to possess a commitment

to shared values and organisational goals, they must believe in those values and goals and trust that the rewards of achieving and sustaining them will benefit all the stakeholders of the organisation, not merely directors and shareholders. These rewards may not all be financial or tangible, but may include factors such as improved workplace relations, innovative products and competitive advantage, which will serve to benefit everyone in the long term. Most learning organisations have as a central tenet the participation of employees at all levels of the firm. A number of writers have emphasised the value of the human assets of organisations as a potential source of ideas and practical expertise (Edmonstone and Havergal 1993, Gubman 1995, Clutterbuck 1995). But for employees to be prepared to offer their suggestions and to state their opinions on matters of organisational or departmental policy, they must be secure in the belief that their ideas will not be dismissed or ridiculed or that expressing unpopular opinions will not influence their career prospects.

Earlier in this chapter (see 5.5) the need for members of learning organisations to become involved in creative processes which generate new knowledge and lead to innovation was discussed. Regular experiments on products and processes to provide constant feedback into organisational planning are recommended by Leonard-Barton (1992) and Garvin (1993). Yet for employees to take the step of committing themselves to such risky ways of working requires that a number of safeguards must be in place. The individuals conducting experiments must be able to trust in the accountability of managers and must have faith in the licence to make mistakes or fail, without fear of retribution or blame.

The sharing of information as a prerequisite to the establishment of trust has already been debated. It could also be argued however, that it is necessary for some form of trust to exist before members throughout the organisation will be prepared to share their knowledge, information and learning. In communicating valuable learning to others for the benefit of the organisation as a whole, the individual takes the risk that the person receiving the information will use it for personal gain (Kaye 1995). A relationship of trust must exist therefore before total information sharing can take place so that lower level employees can be sure that the possession of knowledge they have communicated will not be abused or

used exclusively for others' ends. Open communication and trust thus forms a virtuous circle whereby the sharing of valuable information helps to create or reinforce trust, while at the same time producing a greater willingness in those receiving information to reciprocate.

5.6.4 Establishing Trust

While many organisations recognise the need to create a climate of trust, it is not at all easy to put the notion into practice. Some writers claim that trust is almost impossible to create, as it is 'a state of mind' rather than a tangible product (Dodgson 1993b). Even where both sides recognise the advantages which would ensue from greater co-operation and trust it is a state difficult to produce intentionally. Sabel (1992: p216) claims that trust can only be 'found' or may develop, and where it does so is likely to be taken for granted because it has evolved through a series of fortunate circumstances.

Not only is trust very difficult to generate, it is also a slow, long-term process which requires corroborative action by both parties (Dodgson op.cit.). Reciprocity in trusting relationships can only take place over a long period of time. A relationship is established based on social exchange which creates various bonds and commitments which may be social, technical or knowledge-related. Over time this process develops by increments a climate of trust between people (Fells op.cit). Pettit (1995) contends trust develops for three types of reasons not necessarily exclusive of each other; as a result of loyalty on the part of others, through a confirmed belief in the good character of others or through prudence, ie. a belief that the person being trusted will understand the value of being proved trustworthy.

Hawes (1994) confirms the view that earning trust is a slow process which can only be accomplished in steady increments and suggests that most individuals or organisations would like to learn to speed up the process. Barnes, however (1981) claims that it may be easier to establish a climate of trust than previously thought. He advocates a middle-of-the-road approach to management, assuming a position of 'tentative trust' and employing as many options as feasible rather than choosing between them. However, this

opinion may be rather dated, coming as it did before the economic turbulence of the 1980s created widespread global unemployment and insecurity. More recently Hawes (op.cit) recommends a strategy designed to help sales representatives which comprises identifying types of behaviour which are likely to gain trust, such as demonstrating truthfulness, making promises and adhering to them, being scrupulously honest particularly about drawbacks or problems, providing outstanding service and establishing credibility by dressing and behaving professionally. He then suggests putting each of these into practice in succession in order to achieve a position of trustworthiness relatively rapidly (ibid). There are clearly some lessons for organisations here, many of the same strategies might be employed in demonstrating the trustworthiness of managers to employees, rather than adhering to conventional management practices of withholding power and information and hoping that despite this a relationship of trust will develop.

5.7 SUMMARY

This chapter has examined a number of factors considered as components of learning organisations; these aspects are interdependent and often self-reinforcing. Empowerment of employees, while not always specifically listed as a characteristic of the learning organisation, emerges from the literature as an essential component of a learning-orientated organisation because the types of employee behaviour characteristic of such organisations rely on a degree of individual thinking and decision making which can only exist in an empowered situation. It seems clear that a growing emphasis on the HRM side of organisations and a recognition of organisational members as a largely unexploited asset indicates a trend towards addressing the needs of employees rather than considering them merely a means to an (organisational) end. Moreover, it is essential that employees possess a degree of autonomy if they are to work creatively.

Reward systems have traditionally focused on pay and have recompensed employees for performing to expectations. With new emphases in companies on teamwork and creative outcomes, systems of remuneration need to be modified so that ideas and

effort are rewarded. Furthermore there is a great potential of non-financial types of reward to be explored.

The need for corporate information to be dispersed and shared throughout the organisation has been discussed at length; employees can be neither trusting not empowered if vital information is not passed on to them. The receipt of knowledge is likely to have widespread effects on job satisfaction, feelings of security and the work atmosphere in general.

There are a number of very strong links between information-sharing and the development of trust between people in organisations. Trust is a very complex issue however; difficult to create and dependent on a number of other factors, many of them historical. It is considered by a number of writers a precondition of the learning organisation, others suggest it may be a likely result of a learning orientated company.

CHAPTER SIX

RESEARCH AIMS AND METHODS

6.1 INTRODUCTION

The previous four chapters have reviewed the literature pertaining to the development of theories of organisational learning, the current adoption of the concept of the learning organisation, some of the elements which comprise this, and the management and evaluation of organisational change. The following chapter attempts to show how two broad research aims and a model of the learning organisation have been derived from the literature. Subsequent to this model, a number of hypotheses are described which are addressed by the research. The methods employed to conduct the research for this project are then described in detail together with a discussion of associated issues.

6.2 A SYNTHESIS OF THE LITERATURE

The growth of the literature on learning in organisations has been described from its roots in early action research projects and psychological studies of learning through to the formulation of theories of organisational learning with an increasing focus on this topic. Current understanding of organisational learning is based on a synthesis of the many views and theories which have contributed to the overall picture. The learning organisation is defined as a focus on effective individual and shared learning in the workplace. It is not suggested that learning should be the sole aim of such organisations, but rather that learning should take place constantly alongside work and that the organisation should consciously promote opportunities for learning among its employees and establish mechanisms to facilitate the sharing of knowledge and ideas.

The concept of the learning organisation draws considerably on the ideas of Senge (1990a) who perceives organisations as a series of interactive systems and Kim (1993a) who expands the ideas of Senge on the links between individual and shared mental models. Kim also combines the notion of individual learning derived from the work of Kolb (1984) with organisational models of learning. However, where possible, definitions and descriptions of the learning organisation have concentrated on the UK model, as described by Garratt (1987) and Pedler, Burgoyne and Boydell (1991, 1997), though this

has in itself incorporated notions of single and double loop learning derived from work in the US (Argyris and Schon 1978).

The literature on change management focuses on the need for both incremental and transformational change in response to increased global competition and economic turbulence as described in Chapter Four. The goals of such change may include greater profits, competitive advantage or improved quality. It is unlikely that there is one right way of achieving appropriate organisational change, the means of bringing about such change will vary depending on the existing organisational culture and the economic and political environment of the organisation concerned. Many organisations are now taking a more participative approach to change, recognising the worth of the ideas, talents and expertise of their employees (Plunkett and Fournier 1991, Benjamin and Mabey 1993).

A number of models of change have been considered, ranging from Lewin's (1951) concept of unfreezing and refreezing the organisation, through Organisation Development (OD), Behavioural Modification (BM) and Total Quality Management (TQM) to Business Process Re-engineering (BPR). The learning organisation is perhaps one of the more recent in a long line of such models, although there is little discussion in the literature of the links between this concept and the management of change in organisations.

One of the preliminary aims of this research therefore, is to apply the principles of the learning organisation to the process of change management in organisations, in an effort to determine the suitability of the concept as a model. Whilst links between the implementation of the learning organisation and organisational change may be implicit in a number of case studies, they are not referred to explicitly in most instances.

As described in the literature review, there appear to be few tried and tested instruments for measuring the existence of learning organisations; most evidence presented by writers is anecdotal or relies on the unsubstantiated claims of senior managers. Those diagnostic instruments which do exist for the purposes of assessment are commercially produced consultancy tools (eg. Pedler et al 1993), and as such are expensive and thus largely inappropriate for academic use. A second preliminary aim of

this research is to develop and test a reliable instrument for measuring the learning organisation.

6.3 GAPS IN THE EXISTING RESEARCH

A number of gaps exist in the research on learning organisations to date. Firstly, there is little empirical evidence, particularly in the UK, that such organisations actually exist. There have been a number of claims to learning organisation status, but many of these have been made by senior managers of the companies involved (eg. Greenwood 1995, Jarvis 1995), who almost certainly stand to benefit from such claims and who may not be in a position to view their organisation as a whole. Certainly there is very little empirical data to support the existence of learning-orientated organisations.

Secondly, definitions of the learning organisation are vague and variable, in particular the component parts of such organisations have been little discussed, with two notable exceptions. Two sets of authors; Pedler, Burgoyne and Boydell (1997) and Marquardt and Reynolds (1993) have proposed models which both consist of eleven characteristics or essential elements (see 4.4). However, few people have questioned these sets of characteristics as comprising the factors which make up a learning organisation, instead the limited number of empirical studies which have taken place have tended to employ these characteristics, particularly those of Pedler et al (op.cit), as a basis for measurement (eg. Green et al 1997), probably because they form the basis of one of the few diagnostic tools available.

Existing models of the learning organisation have also tended to be generic, there has been little or no consideration of factors which may be specific to particular organisations or sectors. However, it is likely that the determinants of learning organisations will vary between organisations or types of business, hence it may be advisable to develop specific rather than generic models. The model described in the following section is derived from the general literature on learning organisations and as such is initially generic, however following its application it may prove to be specific to a particular organisational size or sector.

105

6.4 A MODEL OF THE LEARNING ORGANISATION

This research project attempts to identify the characteristics of a learning organisation and to use these to measure the development of firms towards the achievement of a learning organisation. A model has therefore been developed from the literature which illustrates the various aspects of a learning organisation. This is a generic model, which forms a synthesis of the literature on learning organisations, rather than being based on the ideas of any one writer.

The model of a learning organisation is shown in Figure 6.1 and has nine component parts, which are considered to be characteristics of the learning organisation.
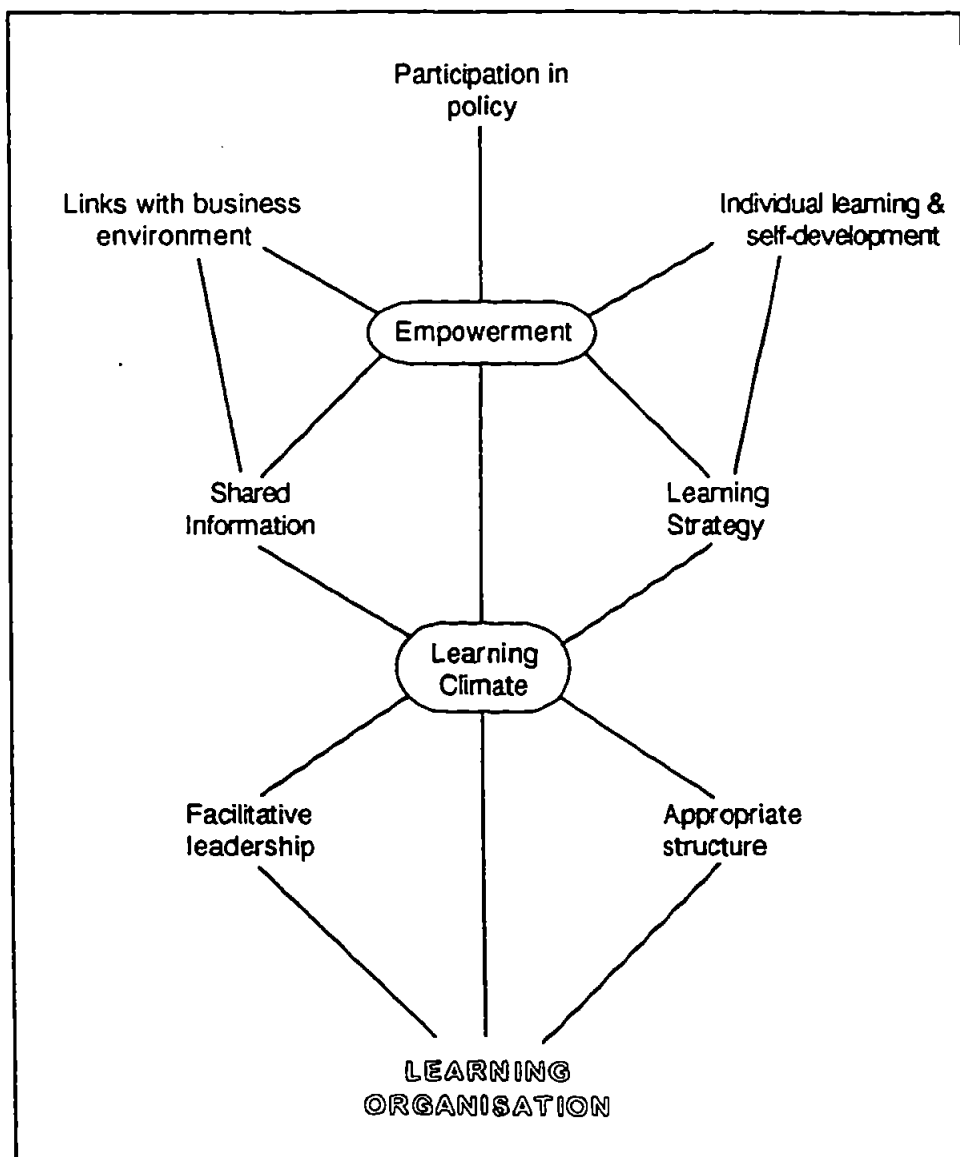
Figure 6.1: A Generic Model of the Learning Organisation

The foundations of the model are facilitative leadership and an appropriate organisational structure. Drucker (1988) describes the organisation of today as characterised by cross-functional teams and shared access to information in place of the vertical and horizontal levels which existed formerly. Rigid vertical and horizontal divisions are now perceived as restricting effective communication and the speed of adaptation to changing conditions. Instead, a more flexible form of organisational structure is advocated, based on shared values and commitment (Ezzamel, Lilley and Willmott 1994).

With this new type of organisation a new facilitative type of leadership is required. The traditional view of leaders is that of people who set the direction, make key decisions and motivate the workforce. Leaders in the learning organisation take a different approach however, assuming the responsibility for building the organisation and fostering learning (Senge 1990b). The role of the leader is also linked to the development of organisational culture; he/she is responsible for shaping the values, beliefs and attitudes of the workplace (Schein 1985). Senge (op.cit) argues that the leader of a learning organisation creates and shares a vision of the organisational future and is committed to this vision (Kim 1993b). The facilitative leader allows people to take control of their own efforts and learning while providing guidance and coaching (Bentley 1994).

One of the central elements of the model shown in Figure 6.1 is a learning climate. Pedler, Burgoyne and Boydell (1997) suggest that this should result naturally from facilitative leadership, where senior managers constantly question and seek feedback on ideas, assumptions and actions and expect other employees to behave in the same way. They maintain that in a learning climate employees strive for continuous improvement and search for information to help them to achieve this, that people view mistakes as opportunities for learning and that diversity in employees and their backgrounds is valued (ibid). Iles (1994) suggests that a learning climate is openly supportive of learning, and information and knowledge are shared across the organisation.

Shared information is one of the key characteristics of the learning organisation in this model and is perceived as a consequence of a learning climate. It should include both internal and external information and probably requires the establishment of specific mechanisms to promote information exchange (Lyles, von Krogh, Roos and Kleine 1996). The importance of collective aims established through dialogue is stressed by Leitch, Harrison, Burgoyne and Blantern (1996) who consider that the facilitation of collaboration is a key factor in the development of a learning organisation.

On the other side of the model and also shown as a development of a learning climate is a learning strategy. This aspect of the model is largely based on the ideas of Pedler et al (op.cit: p30) who use 'a learning approach to strategy' as one of their eleven characteristics of the learning company (organisation). They describe a learning strategy as constantly taking stock and modifying the strategy and direction of the organisation. At the same time a learning approach is taken to determining policy, with new ideas regularly tried out in pilot form. Small-scale experiments to find different and better ways of doing things also form part of the strategy and are a means of learning incrementally (Garvin 1993).

The other central element in this model of the learning organisation is empowerment which has already been discussed extensively in Chapter 5. Empowerment is not just about giving power to staff but giving it in a way which will ensure that it is used for the overall benefit of the company, i.e. the personal objectives of employees must be aligned with corporate aims (Pheysey 1993, Foy 1994). By passing a degree of power to the workforce, managers should replace rigid control with the capacity to influence the climate, and ultimately the performance of the organisation by creating learning opportunities, feedback mechanisms and a climate of trust. However, the transition to empowerment cannot take place without modifications to the expectations of both employees and management (Gubman 1995) or adequate preparation and training for the employees concerned (Leppitt 1993).

Three further components of this model are depicted as emanating from the empowerment of employees; these are individual learning and self-development, links

with the business environment and participation in policy making. The first of these:
individual learning and self-development, implies that individual employees should
assume the responsibility for their own learning and career development through
opportunities provided by the organisation and with appropriate guidance. Pedler et al
(op.cit) suggest that people may control their own budgets for self-development and may
select the training opportunities they consider most useful to them. Appraisals probably
form the focus for jointly assessing individual learning needs, and appropriate
opportunities and resources should be available to everyone (ibid).

Establishing and maintaining links with the business environment is seen as the
role of boundary workers, ie. those who have direct contact with customers, clients,
suppliers or competitors. These employees are in a position to collect useful information
both about and for the organisation and to gain an outside perspective (Leitch, Harrison,
Burgoyne and Blantern 1996). One way of gaining this perspective may be through
benchmarking; another fertile source is through conversations with customers, which can
provide instant feedback, competitive comparisons and insight into changing preferences
(Garvin 1993). Calvert, Mobley and Marshall (1994) contend learning organisations need
to take in a lot of environmental information at all times and to be capable of quickly
turning this data into useful knowledge when needed.

The final element in the model is employee participation in the policy making
process. Pedler et al (1997) suggest this is where all members of the organisation
participate in policy and strategy formation and policies therefore reflect the values and
interests of everyone in the organisation, not just those of senior managers. Participation
in policy making may be perceived as a more extreme development of empowerment,
where employees assume the responsibility for making decisions, not only about matters
directly concerned with their immediate tasks, but about the direction and development of
the whole organisation. This may be aligned to Bowen and Lawler's (1992) 'high-
involvement' model of empowerment, where employees at all levels are involved in
determining organisational performance. Empowerment is undoubtedly an antecedent of

participative policy making; the authority given to employees to make job-related decisions is extended to allow them to help determine new organisational moves.

6.5 RESEARCH AIMS AND HYPOTHESES

Based on the characteristics of the model detailed above, it is possible to describe the aims of the research. The first main aim is to validate the model and in doing so to determine whether certain factors are organisation or sector specific. Most models of the learning organisation have been generic to date; it is likely however, that there are factors or influences which are only applicable to one particular firm or type of industry/service and which affect the development of learning organisation characteristics in these cases. This research will attempt to identify any factors which are exclusive to the organisations or sector studied here.

A second aim of the research is to ascertain whether the learning organisation can be used as a model for the management of change. As described in Chapter 4, although there is extensive discussion of the management of change in the literature, this is not often linked to the theory of the learning organisation. It is not clear from the literature whether the principles of the learning organisation may be introduced gradually in organisations, so that change is incremental rather than radical, or whether, as seems often to be the case, firms attempt to become learning organisations as a result of some form of crisis or environmental jolt (Meyer 1982), through a process of transformational change. The study attempts to ascertain whether, in such cases, the learning organisation may form an appropriate model for the implementation of transformational change.

It is planned to measure the extent to which a learning organisation has been implemented in the organisations studied. In order to do this it is necessary to identify the conditions and characteristics prerequisite to the development of a learning organisation and to examine the links between these. It is hoped the study will also help to determine the sequence in which learning organisation characteristics need to be implemented, ie. which characteristics are antecedents of others.

110

With these aims in mind, the research addresses nine research hypotheses which are listed below:

Where organisations conform to the theoretical notion of a learning organisation:

H1: Leadership in the organisation encourages employees to learn and demonstrates management's willingness to learn too

H2: The organisational structure facilitates learning through flexibility and a lack of rigid vertical or horizontal boundaries

H3: The organisation and its members focus on continuous improvement and the organisational climate is designed to support this aim

H4: The communication system facilitates learning at both individual and collective levels

H5: Direction and strategy are regularly modified as a result of feedback

H6: Employees are empowered and make decisions related to their work

H7: Links are fostered between the organisation and its business environment

H8 : Individual learning and self-development is encouraged for the benefit of individuals and the organisation

H9: Employees participate in policy-making and company policies reflect the interests of all organisational members

In addition to these specific hypotheses, a number of secondary research questions have also been formulated as a basis for analysis and interpretation, to be addressed using both quantitative and qualitative research techniques. These are listed as follows:

1. A shared vision is a prerequisite for the development of a learning organisation.

A vision of the desired future of the organisation has been cited as the starting point of the learning organisation by a number of writers (eg. Bass 1987, Denton and Wisdom 1991, Rockart and Hofman 1992). However, Senge (1991a) focuses on the significance of the sharing of this vision as a means of jointly developing aspirations and inspiring commitment to the aims of the organisation. It is suggested that shared vision builds on

people's individual visions, developing a common core of organisational goals and fostering commitment rather than compliance on the part of organisational members. Yet some influential British writers (eg. Pedler, Burgoyne and Boydell 1997) place little emphasis on the existence of a shared vision of the future, the notion appears to have gained more importance in the American literature, perhaps because many British organisations still rely on a top-down vision designed by one leader or senior manager.

2. Empowerment of employees is a prerequisite for the development of a learning organisation.

Marquardt and Reynolds (1994) list empowerment as a component of their learning organisational model, yet a number of other writers (eg. Pedler et al op.cit) have not considered it a characteristic of the learning organisation. It is suggested that empowerment provides employees with the opportunity and motivation for learning, and that without this opportunity such learning will be restricted (Brown and Brown 1994). Empowerment is defined here as granting employees the responsibility for making decisions and solving problems using their own ideas in order to perform their work (Bowen and Lawler 1992).The research will attempt to discover whether empowerment is necessary to the creation of a learning organisation.

3. The rewarding of appropriate behaviour is a prerequisite for the development of a learning organisation.

It is frequently claimed that reward systems fail to recognise the added contribution made by many individuals to their organisations in the current climate of participation and empowerment (Gubman 1995). Although many businesses are now exhorting their employees to create new solutions and experiment with different methods, they continue to reward people for adhering to tried and tested behaviour. As Kohn (1993) indicates, these rewards often undermine the processes they desire to promote. Yet Armstrong (1993) suggests it is possible to design rewards to reinforce behaviour and effort which contributes to the achievement of organisational goals. It is probably unlikely that a

company which does not reward the contribution of its employees in a way which motivates them to achieve organisational objectives will become a learning organisation.

4. An effective communication system is a prerequisite for the development of a learning organisation.

Communication has been termed 'the vital link' between individual and organisational learning (Miller Hosley, Lau, Levy and Tan 1994). Several writers have stressed the importance of sharing information at all levels of the organisation (Iles 1994; Leitch, Harrison, Burgoyne and Blantern 1996). This may have such aims as communicating company aims, disseminating useful knowledge, reinforcing organisational culture or discussing ideas. A good flow of communication is assumed to assist the spread of learning throughout the organisation and encourage double-loop learning (Miller Hosley et al, op.cit). Pucik (1988) maintains that poor communication is likely to provide a barrier to organisational learning; it is suggested therefore that in order to develop a central focus on learning, organisations need to consciously promote effective communication.

5. Trust between members of the organisation is a prerequisite for the development of a learning organisation.

The importance of trust has already been discussed in detail in 5.6. If employees, teams and departments are to share information and learning, then the culture which exists must foster this; one of its features should be a relationship of trust between the members of the organisation (Clutterbuck 1995). Trust in the role played by management may also help in the achievement of organisational goals as employees are more likely to believe in the worth of such goals. It is also suggested that a lack of trust may act as a barrier to the development of a learning organisation.

6. There is a relationship between effective communications and a climate of trust.

Pettit (1995) claims the development of trust is dependent on the open exchange of relevant information. Trust and good communications are probably mutually reinforcing: when organisational members are kept informed of company developments they are more likely to trust other members at any level and are more likely to pass on useful information themselves.

6.6 RESEARCH PHILOSOPHY

The aims of this research project suggest a number of practical implications for the type of methods employed. Firstly, it is necessary to consider the two main branches of research philosophy; positivism and phenomenology, before deciding on the design of the research. The positivist tradition is based on the actual observation of objective reality (Easterby-Smith, Thorpe and Lowe 1991) and is considered by its champions to provide the most efficient means of investigating human and social behaviour (Aiken 1956). This approach presents a number of advantages, in that it provides an independent, objective view of the phenomenon studied, it identifies causal links and facilitates the deduction of laws or precepts. Furthermore, through the proving or disproving of hypotheses and by the use of large samples, generalisations may be made about social or organisational behaviour (Easterby-Smith et al op.cit).

The second philosophical tradition; phenomenology, has resulted from a realisation that major advances in science are often produced by creative, non-objective thinking, rather than through logical refinements of existing knowledge (ibid). This new paradigm has evolved during the second half of the twentieth century as a reaction against the positivist tradition, and is associated with a number of sociological approaches (eg. Berger and Luckman 1966, Habermas 1970) and qualitative research methods (Taylor and Bogdan 1984). Phenomenology is based on the notion that reality is socially constructed rather than externally determined and research should therefore attempt to assess the reasons and meanings behind different people's experiences (Easterby-Smith et al op.cit).

Positivism is generally associated with the use of quantitative research methods and the collection of large data samples. As this research project involves large organisations, it is evident that it would be advantageous to collect large samples of data in order to provide as broad a viewpoint as possible. It has therefore been decided to adopt a largely positivist research design.

A case-study approach was originally considered, using several methods of data collection in an intensive study of one organisation. Hakim (1987) argues case-studies are one of the most powerful research designs because of their flexibility and their multi-faceted nature. However, case-studies require the researcher to have access to all aspects and levels of organisational information and they are highly time-consuming and may require specialised interviewing techniques and perhaps detailed prior knowledge of the business involved. More importantly however, this method would have provided little generalisable information. Much quantitative research is directed towards producing results which can be generalised to wider populations (Schofield 1993). Thus the emphasis in the quantitative tradition has been placed on external validity, whilst qualitatively-oriented researchers have focused on reliability and internal validity, and little priority has been given to generalisability. Berg (1995) for example, largely ignores the question of external validity while Denzin (1983: p134) rejects the notion of generalisability, suggesting that each subject carries 'its own logic, sense of order, structure and meaning'.

This study aims to produce findings which may be applicable generally to firms attempting to become learning organisations, albeit those of a specific size or within a particular sector. The case-study approach was therefore rejected as unsuitable for this project. Instead, a large-scale questionnaire survey is used as the main method of data collection as this provides extensive information over a large population and some of the findings may then be generalisable to other populations. This also conformed with the wishes of senior managers, who had indicated a reluctance for the use of in-depth interviews with employees other than managers at their own level. The use of questionnaires distributed within one organisation or department is popular, as it targets

the whole of a population and is reasonably inexpensive to administer and analyse, particularly for large samples (Schmitt and Klimoski 1991). Surveys are capable of generating quantifiable data from a large number of subjects in order to test hypotheses or theories (Bryman 1988). In addition, a questionnaire survey may be administered to a large number of people in a relatively short space of time.

However, there are a number of drawbacks to the survey method. Firstly, adherence to purely quantitative research methods may result in the omission of useful information or a lack of detailed insight into the organisations studied (Bryman 1988). Secondly, surveys cannot positively establish causal connections between variables, moreover they tend to be highly structured and therefore limited in scope. Their reliance on statistics may render potentially interesting data sterile. Survey-based research is 'intrinsically manipulative' and may reflect the interests or beliefs of the researcher, rather than provide objective observations. Other methods of research, such as organisational observations, case-studies or in-depth interviews with employees may be more objective, however opportunities to use these methods in the design of the research are limited by time constraints and the size of the organisations concerned. Nevertheless, some in-depth interviews with managers and non-managerial employees are incorporated into the research design in order to collect more detailed data which can be used qualitatively. These aim to provide supportive evidence, and in the case of Phase five, triangulation of the quantitative data (Todd 1979).

6.7 PHASES OF THE RESEARCH

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Method	Individual & group interviews	Questionnaire survey	Focus group interviews	Questionnaire survey	Telephone interviews
Hypotheses	-	1 - 9	-	1 - 9	-
Research qs	1	1 - 4	-	1 - 4	5, 6
Chapter	7	8	9	10	11

Table 6.1: The Phased Research Project

The research is divided into five separate phases as shown in Table 6.1. Phases 1, 2 and 3 took place in one research site, while Phases 4 and 5 were conducted in a second location. In the ideal situation the research design would have incorporated at least three phases conducted in each research site; these would comprise preliminary interviews with managers, a questionnaire survey and some form of personal interviews with staff in order to triangulate the survey data; eg. one-to-one interviews, focus groups, telephone interviews, etc. The number of research sites should include between ten and twenty different organisations in order to establish the validity of the findings and produce generalisable results. This would also provide a means of testing the model and the diagnostic tool comprehensively.

However, there were a number of constraints placed upon this study which made such a design impractical. Firstly, within the normal three to four year schedule of a PhD only nine to twelve months of this can realistically be spent in collecting data in the field, so that sufficient time is left to review the relevant literature, collate and interpret findings and write up the results. Given that it takes time to identify suitable organisations and negotiate access, it was unrealistic to plan to collect empirical data from more than two separate sites.

Secondly, it proved impossible to conduct similar phases of research in the two organisations studied, due to restrictions imposed by senior management in the first organisation. It was originally intended to administer two questionnaire surveys in two different Groups of this organisation to provide an effective comparison and then to follow this up with some personal interviews with employees in the first Group; senior managers at first agreed to two surveys but refused to allow interviews with junior staff and permission to carry out a second survey was subsequently retracted. As a result two phases were conducted in one Group and another phase in a different Group of the first organisation, while two phases were carried out in the second organisation.

The first phase attempts to provide background information about the organisation and the change programme which has been implemented there, rather than aiming to confirm any specific hypothesis; the preliminary data collected in this phase underpins

the second phase of the research. Phase 2 comprises a large-scale questionnaire survey and addresses the research questions shown in Table 6.1. Phase 3 involves focus group interviews in a different Group of the same organisation with the aim of providing comparative data. Phases 4 and 5 are carried out at a different research site and consist of a second questionnaire survey, followed by a series of telephone interviews with employees. It is intended that these interviews should provide supporting evidence or triangulation of the survey data.

6.8 RESEARCH METHOD

This section describes the data collection techniques used throughout the study. These are the methods employed to generate the data which is reported and analysed in chapters 7-11. A number of relevant issues connected with research methodology are also discussed here. The methods employed for each of the phases of the study are described in detail below, in the order in which these took place.

6.8.1 Individual and Group Interviews

The first phase of the research involves individual and group interviews, which were conducted with the aim of providing the researcher with the opportunity to explore certain relevant issues in depth and to elicit detailed and sometimes personal information which could not be produced through a written questionnaire or more highly structured interviews. Burgess (1982) advocates one-to-one interviews as a means of probing topics deeply and discovering new dimensions to problems. It is important that interviews designed to produce qualitative data are structured in a way which provides opportunities for gaining insights into how individuals' personal beliefs and value systems define the significance of their situations and determine their actions (Stewart 1982).

There were two main objectives in conducting interviews with managers. Firstly, it was hoped that through in-depth discussions it might be possible to establish the rationale underpinning the change programme which has been implemented in the group and to identify some of the organisational aspects or characteristics which have changed.

118

It was also planned to discuss the practical issues concerned with administering a large-scale questionnaire survey. It is intended that this first phase addressed the extent to which learning organisation theory is being used as a design for the management of change in this Group.

It was decided to conduct two interviews in the first instance. The aim of these was to explore the research question in greater depth with people who are involved in the change programme itself. Pettigrew (1985) confirms the value of the processes of interaction and negotiation between the interviewer and interviewee as a method of developing research ideas and emphasises the need to involve those for whom the results of the study will have most impact. Easterby-Smith, Thorpe and Lowe (1991) advocate the investigation of environments and individuals where some feeling of affinity has been established. In this case the researcher has already established a working relationship with one manager which has laid the foundations for more in-depth discussions with other managers within the Group.

The first two interviews used a loosely structured format, with an intentionally small number of prepared questions to be used as a guide for both (See Appendix 1 for question schedule) and the expectation that other topics would emerge in the course of the conversations, as the managers concerned clearly have much greater knowledge than the researcher of practical issues within the organisation. As Easterby-Smith et al (op.cit) point out, the subjects of research into management are likely to hold more powerful positions than the researcher interviewing them and are also likely to be aware of the value of information about their company and their ways of working. It is therefore adavantageous if the researcher can indicate to managers some benefits they are likely to gain from the research. Through the first two interviews it was hoped to explore the background to the changes in greater depth; to gain some understanding of the current position and to use this as a basis for implementing the second phase of the research.

The focus group interview was carried out using a format similar to that employed for the two individual interviews, with a semi-structured question schedule. A group interview technique was chosen in order to stimulate interaction and generate topics for

discussion which might not have emerged through one-to-one interviews or through a more structured method of data collection (Hedges 1985). The questions or probes used during the focus group were very general (Miller 1991) and there were only a small number of them; it was expected that these would generate sufficient further discussion. It was important that the researcher was seen to act purely as a facilitator during this session, rather than as the leader of the discussion, as the managers who are the subjects of the focus group hold senior positions and are aware that by taking part they are 'doing the researcher a favour' (Easterby-Smith et al 1991: p45). It would clearly be inappropriate therefore, for the researcher to overtly take control of the interview. The data from the interviews and focus group was scrutinised interpretively to provide an overview of the organisational situation and then analysed using both intra- and inter-interview categorical indexing (Mason 1996). A series of categories was devised for collection and storage of information, which was then available for cross referencing with other data obtained at various stages of the study.

6.8.2 Questionnaire Survey 1

It had been decided to test numbers 1-7 of the hypotheses derived from the model by means of a questionnaire survey in Group A of this company. Mid-level and senior managers were not included in the study as it is felt that their views would not be representative of the workforce as a whole and some of these views have already been procured through individual and group interviews. The questionnaire therefore aimed to examine the views of First Line Managers and employees below management status. The decision to use a questionnaire was arrived at for two reasons; this method seemed most appropriate in order to survey a large population and it also complied with the wishes of senior managers.

Questionnaires comprising closed questions can be rapidly completed and analysed but there is a risk that the data thus obtained may be superficial (Easterby-Smith,Thorpe and Lowe 1991) or may omit significant issues (Henerson, Morris and Fitz-Gibbon 1987). Moreover, if all responses in the study are collected via

120

questionnaires the study may suffer from response bias; i.e. similar types of responses produced for large numbers of questions (Schmitt and Klimoski, op.cit.). It was decided to address this potential problem through the collection of additional qualitative data. It was hoped to obtain a substantial amount of further information through respondents' comments, which would support and provide insight into the findings of the questionnaire and highlight any significant issues which had been omitted.

Managers were providing support for the survey (Easterby-Smith et al. op.cit.) which might enhance the response rate in that employees perceived the questionnaire as a vehicle for expressing their views to management. However, a more effective factor in determining response rate is the salience of the research; i.e. the value and relevance of the questions as perceived by the individual respondent (Foddy 1993). Feelings of salience are likely to be enhanced if the employees targeted believe feedback from the survey will be provided and action taken based on the results (Schmitt and Klimoski 1991). First Line Managers were therefore asked to indicate to their work teams that they could expect feedback from the results of the study.

The validity of the items and of the questionnaire as a whole was an important consideration. Patchen (1965) suggests three ways of estimating validity; through face validity, i.e. whether the items or instrument itself are plausible; through convergent validity or comparison with other available research tools and through validation by known groups; comparison with groups known to differ on specific factors. The first two types of validity were tested for in this phase of the research.

Questionnaires may carry inherent drawbacks such as typically poor response rates, incomplete or missed responses and lack of control over the context in which the questions are answered; e.g. group responses (Judd, Smith and Kidder 1991). However, it was felt that the benefits of a questionnaire in producing a large amount of data, in providing anonymity for respondents and a situation where individuals would have time to consider their answers and were not under any pressure to respond immediately, easily outweighed the disadvantages. The use of a questionnaire survey also conformed with the wishes of management.

6.8.2.1 *Design of Research Instrument*

Schmitt and Klimoski (1991) advocate the utilisation of measurement tools already available. Only one existing questionnaire was found which is specifically designed to measure the learning organisation, however. This was the Eleven Characteristics Questionnaire, created by Pedler, Burgoyne and Boydell (1991) and marketed by the Learning Company. Unfortunately this instrument appeared to be unsuitable for the project as at this time it was only issued on the proviso that it was scored by the Learning Company at a cost of approximately £12 per questionnaire. This was clearly a prohibitive cost for this study; furthermore, lack of access to the raw data would preclude more extensive analysis.

It was decided then, to develop a research instrument specifically designed to measure orientation towards a learning organisation. Attributes which have emerged from the literature as characteristic of learning organisations were identified and compared with qualities or factors listed by a number of writers (eg. Garratt 1987, Beck 1989, Leonard-Barton 1992, Garvin 1993, Iles 1994, Marquardt and Reynolds 1994, Nevis, DiBella and Gould 1995, Pedler, Burgoyne and Boydell 1997). The broad group of factors was refined and modified as a result of the interviews with managers in Engineering Company 1 to form nine conceptual clusters initially, under which individual questions could be grouped. These nine concepts corresponded broadly with the characteristics listed by Pedler et al (1997) and Marquardt and Reynolds (1994) as illustrated in Table 6.2. Pedler et al's (op. cit.) concept of 'formative accounting and control' was not included as a separate concept in this research instrument as it was felt to be less relevant to lower level employees to whom this questionnaire was addressed, though two indicators from this concept were framed as questions within the conceptual category of organisational structure.

The concepts were operationalised into the questionnaire through a combination of methods. Firstly, the research questions were re-examined, as suggested by Czaja and Blair (1996) in order to ascertain the precise nature of the data needed. Concepts and individual questions from other pretested surveys were also examined so that, where

relevant, these could be borrowed, while ensuring that they were still measuring the intended variables. It was also important to define the concepts clearly for the purposes of this research before indicators for these concepts could be selected. De Vaus (1996) describes the process of developing indicators as moving from the abstract to the more concrete through refinement, and careful selection.

After deciding on the nine concepts, a number of questions were devised for each concept, some based on previously tested questionnaires, but with the wording altered for copyright reasons, others based on aspects of these concepts which had been discussed on a number of occasions in the literature. the list of individual items was then refined and modified. It was found that there were more indicators for certain concepts than for others, which resulted in some categories containing larger numbers of individual questions. The concept of learning climate, for example, was addressed through fifteen questions in the questionnaire (version 1) probably because aspects of reward systems and quality were included in this concept, while the concept of employee participation comprised only four questions.

The validity of the research instrument was then assessed using face or content validation. The researcher questioned whether the questionnaire was capable of measuring the concepts it intended to measure and whether individual items provided an adequate indication of those concepts (Bailey 1994). As Bailey (op.cit: p69) notes, face validity is 'ultimately a matter of judgement' on the part of the researcher. As de Vaus (op.cit) explains, 'in the end there is no ideal way of determining the validity of a measure, however, the researcher was satisfied in this case, that the research instrument could be considered a valid measure of learning organisation characteristics.

Individual items were grouped under the nine conceptual headings, however two categories; leadership and structure were very small and there appeared to be some overlap in the individual questions they contained; the two categories were therefore amalgamated into one. The number of items in each category varied, but added up to an overall total of 67 questions, including 3 which asked for personal details of employees. The questionnaire was printed on three double-sided, numbered sheets and called the

Learning Organisation Inventory (See Appendix 3). Instructions for completion were included at the top of the first page rather than adding a covering letter on a separate page; this was partly to keep the number of sheets to a minimum; it was also felt that employees would have been given some information already about the survey by their First Line Managers and explanations could therefore be brief.

The sequence of questions in any questionnaire may create contextual effects (Judd, Smith and Kidder, 1991); for this reason questions were grouped within their eight conceptual categories, with an explanatory heading at the beginning of each group. Within the sections, general questions were posed first, followed by more specific questions. With the aim of making the questionnaire straightforward and relatively quick to complete, all the questions were presented in the same format, with the exception of respondent details which were requested at the front of the form, and an open question at the end which asked for the respondents' own comments. This homogeneity was specifically aimed at enhancing the response rate, by making the questionnaire easy and rapid to answer. Easterby-Smith et al (op.cit) suggest the types of question and the overall format are very important in securing a good response rate.

The majority of the questions in the survey were attitudinal; rather than asking for objective facts they were testing employees' perceptions and opinions. Attitude rating scales were therefore employed for each of the eight sections, subjects being asked to judge a set of ordered categories with a quantifying response. A five-point Likert Scale was used, ranging from 'strongly agree' to 'strongly disagree'. It is often difficult to decide how many categories of answer to offer the respondent in surveys of this type; as Bailey (1994) points out, it is up to the researcher to decide. The number of points most frequently provided on Likert-type scales is five. If too many possible answers are offered the respondent may have difficulty in selecting the most appropriate reply and may decline to answer altogether; response categories should be easy to answer and should supply enough but not too much detail (ibid).

It was taken into account that responses to the attitudinal questions are inevitably subjective; this type of question is often the most difficult to formulate (Moser and

Kalton 1972) and may be subject to doubts about its construct validity, ie. the influence of existing psychological concepts, such as motivation or culture, on respondents' performance or responses (Schmitt and Klimoski op.cit). Dean and Whyte (1978) suggest a number of factors which are likely to influence attitudinal responses; the individual's own beliefs and values, his/her emotional state and his or her tendency to behave in a certain way in specific situations. Added to these is the impact of the organisational culture; the attitudes, precepts and values of the workplace affect individual attitudes in turn, and may exert a powerful influence on the way employees respond to questions about their work (ibid). Attitudinal responses are more dependent on wording and order of questions than factual answers for a number of reasons (Judd et al 1991). It is possible that an employee may not have considered a particular question before and therefore does not possess a view on it, or his/her attitude to it may be 'complex and multidimensional' (ibid: p231) leading to difficulties in selecting the most appropriate response.

Questions were worded as statements and respondents were asked to indicate the extent of their agreement with each statement. A number of writers recommend the addition of a neutral response or filter to provide respondents with a way out of difficult questions (Henerson et al, op.cit, Judd et al, op.cit). This may be worded as 'do not know' or 'not applicable' and may avoid responses being omitted from the form. However, Bishop, Oldendick and Tuchfarber (1983) argue that the inclusion of such neutral responses may alter the relative balance of the agreement/ disagreement responses. it was decided initially to include a 'not applicable' option.

Tick boxes were provided for responses; the use of designated boxes meant that should respondents fail to read the instructions and answer using a slash, a cross or another mark, their selected response would still be clear when the data was coded (Bourque and Fielder 1995). It was also decided, after some consideration, not to use coloured paper as a background for the questionnaire although this would have had the benefit of distinguishing it from other surveys, as it might incur potential difficulties in reading the questions, particularly if the photocopying quality were less than perfect on some of the forms. Instead, the conventional black print on a white background was

employed for maximum clarity, with bold type used for section headings and italics for names (e.g. the Group and company newsletters) as recommended by Bourque and Fielder (op.cit.).

The layout was presented in as attractive a format as possible and efforts made to make the forms easy to read (Schmitt and Klimoski, op.cit). No attempt was made to reduce the number of pages from six by decreasing the amount of white space or using smaller print. Bourque and Fielder (op.cit) advise against using a very small font or squashing questions together. Rather than encouraging individuals to reply because the questionnaire is 'short', this is likely to lower the response rate because respondents may not take the trouble to decipher close print. Similarly, Bourque and Fielder (op.cit) warn against indicating the amount of time needed to complete the questionnaire: respondents read and write at different speeds and may resent spending longer on the questions than the time specified. Instead, the benefits of completing the questionnaire need to be clear and should outweigh the time taken or the inconvenience generated (Easterby-Smith et al, op.cit).

It was decided not to ask for respondents' names and to request only a minimal amount of personal information due to anticipated resistance on the part of employees. It was felt that respondents might be reluctant either to fill in details which could identify them, or to express strong or honest opinions if they felt they might not remain anonymous. Previous research appears to indicate that respondents are more likely to reply truthfully to the questions if they are allowed to remain anonymous. Futrell and Swan (1977) found that respondents who are not identified are less likely to omit items from the questionnaire than those who are identified by name.

6.8.2.2 Pilot Study   Questionnaire 1

Before carrying out the main questionnaire study it was considered necessary to conduct a pilot study in order to test the research instrument and obviate any problems or ambiguities. The pilot targeted twenty randomly distributed individuals. Bourque and Fielder (1995) emphasise the importance of employing representative members of the

target population in the pilot, even though these results may not then be included in the overall findings, as they may highlight the necessity for changes to the questionnaire or its administration. The pilot questionnaires were numbered by hand in the top right corner; it was intended to follow this procedure in the administration of the main survey to facilitate counting of surveys issued to and returned from each department. A Freepost envelope was attached to each questionnaire so that forms could be posted directly back to the University. This was to encourage a high response rate as it was felt that individuals were more likely to reply and also to answer questions honestly if they were assured that managers had no access to the completed forms.

6.8.2.3 *Modifications to Questionnaire 1*

In the meantime the senior managers involved in the focus group expressed a wish to examine the questionnaire before the administration of the major part of the survey. A meeting was convened with these managers to consider the proposed changes and discuss the wording. A small number of modifications to the wording of certain questions were suggested. The term 'department' was to be replaced by 'Group' throughout and a clear distinction to be made between Group and company managers. This is because a survey conducted in the same Group some months previously had not specified whether questions referred to Group A or the company as a whole. The results of the survey were consequently confused and of limited value; there was clearly a desire not to repeat the mistake.

As a result of the pilot study and the discussions with managers, a number of modifications were made to the questionnaire. More space was included for comments as it appeared from the pilot that there awere likely to be plenty of these. The information at the top of the first page was also expanded slightly following respondents' evident anxiety about identification, and no individual numbers were marked on the forms. However, it was considered useful to know to which department individual respondents belonged so questionnaires were marked to indicate this to the researcher.

Four questions were added to the new version of the questionnaire, as their inclusion had been requested by managers. Two related to in-house publications while two others referred to stress in the workplace, which was felt to be a topical issue of concern to both managers and shop floor employees. After consideration, two further questions were reworded and one omitted. The revised version of the questionnaire now consisted of 70 questions; this was considered an acceptable round number. The modified questionnaire was then pilot tested on a further six employees, all of whom completed the forms and returned them without comment, suggesting that any initial problems, fears or ambiguities have largely been resolved.(See Appendix 4 for version (ii) of questionnaire).

6.8.2.4 *Distribution and Collection   Questionnaire 1*

after thr questionnaire had been piloted satisfactorily, it was decided to proceed with the main survey. The forms were to be distributed in the same way as during the pilot study through First Line Managers, who were not considered likely to be perceived as a threat to anonymity as they were themselves being asked to complete the questionnaire. However, it was planned to collect completed forms from the research site rather than use Freepost envelopes, due to concern about high costs. It was arranged that respondents should seal their forms in the envelopes provided and place them in one of several boxes provided in the workshops, the boxes would then be collected by the researcher in person. It was not thought that this method of collection would pose any additional problems, as once the forms had been completed and placed in the boxes there would be no means of tracing them back to individual respondents. The questionnaires were collected in two stages; a second collection took place after a reminder has been issued.

6.8.2.5 *Coding and Analysis   Questionnaire 1*

Responses were coded and entered into SPSS (the Statistical Package for Social Scientists) version 6.1 using numbers one to five for the Likert scale answers: 5 for 'strongly agree' down to 1 for ' strongly disagree'. It had been decided to code 'not

applicable' as a missing variable to prevent interference with scoring procedures, however there were no such responses in the pilot study, consequently 'not applicable' was dropped, as it entailed extra work in recoding this option as a missing response, and it was felt that the mid-point of the scale; 'neither agree nor disagree' already provided a suitable 'escape' response for those who felt genuinely ambivalent. The two items covering respondent details (Questions 1 and 2) were coded 1-2 and 1-4 accordingly. On the data sheet 72 variables were created; 70 from the questions, one more indicating whether respondents had made additional comments and another to denote the department where the respondent worked as this data was not obtained through a numbered question (see 6.6.2.3). Eight extra variables were then been added which summarised the frequencies in each category. Frequencies were computed from the data and category variables intercorrelated against each other in order to provide comparisons. The eight category variables were also analysed in terms of their relationship with the independent variables of department, job type and number of years' service, using t-tests and one-way analysis of variance and any significant relationships noted. Percentages used were valid percents, ie. percentages of total responses given, with missing values discounted.

6.8.3 Focus Group Interviews

It was originally intended to conduct a second questionnaire survey in a second section of the same organisation to compare and contrast the findings and thereby to discern to what extent the development of learning organisation characteristics could be attributed to the management of change. As a precursor to this a small number of focus group interviews were conducted with employees in the second Group in order to assess what changes, if any, have taken place there recently, and to explore employees' views on this and other issues.

Focus groups were selected to provide a social dimension, i.e. to maximise the impact of social interaction, and to stimulate discussion and diversity of opinion (Hedges 1985). However, the disadvantages of group interviewing must also be noted. Subjects'

129

responses tend to be more extreme than in one-to-one interviews (Sussman, Burton, Dent, Stacy and Flay 1991) and probably elicit fewer original ideas (Fern 1982). Furthermore, there is a risk that respondents will feel constrained by social pressures and moderate the representation of their views (Hedges op.cit.). Nevertheless it was felt that the benefits of participant interaction and spontaneity outweighed any obvious disadvantages. Moreover, the use of focus groups may enhance this project by contributing either confirmatory data or insights into areas not hitherto identified (Berg 1995).

The researcher acted as moderator during the interviews, intentionally drawing out information on relevant issues from the subjects and encouraging discussion and interchange of opinions (Berg 1995). Two groups were convened, one of blue collar workers and one consisting of a number of first line and middle managers; each group consisted of three people. Hence there is a simultaneous focus on several aspects of two units at two different levels; each group of four participants comprising a unit, and the aspects including cognitions and emotions (Lofland and Lofland 1995); the combination of these provides a framework for use in analysing the data. The approach taken used a set of questions or 'feelers' to allow flexibility and to foster personal views and ideas (Easterby-Smith, Thorpe and Lowe 1991). The 'feelers' or probes used in the focus groups were similar for each group and were based around the eight conceptual categories used in the design of the questionnaire (see Appendix 6 for interview schedule). Questions or probes were intentionally presented in an open-ended format which required more than simple dichotomous answers, so that discussion and opinions would be generated (Berg op.cit.). Hedges (op.cit.) advises against the use of a formal schedule or questionnaire in group interviews as this restricts the potential of the qualitative approach; he proposes instead following a broadly defined topic guide.

It was decided not to tape the interviews as this might have inhibited responses; it had been noted during receipt of the questionnaires and from additional comments made during the survey that employees in this organisation tended to be wary of expressing honest opinions if there was a possibility of these being traced to their owners. Instead, detailed notes were taken while interviewees were talking. The data was examined

interpretively and reflexively to obtain as broad a view as possible of the participants and their environment (Mason 1996). Categorical indexing was used to cross-reference pieces of data both within each interview and between interviews. This was done to provide an objective perspective on the data (Mason op.cit.) and to develop analytical categories which could be contrasted and compared with those occurring through the collection of numerical data.

Although these interviews had been conducted with the aim of proceeding on to a second questionnaire survey, reservations were then expressed on the part of senior managers as to the advisability of further questionnaires at a point when an organisation-wide survey connected with gaining *Investors in People* (IIP) recognition was taking place. It was thus decided not to carry out another survey and the data collected from the focus groups were to be used instead to provide some form of comparison with the findings from the questionnaire, although the usefulness of this would be limited due to differences in the methods of data collection.

6.8.4 Questionnaire Survey 2

The primary aims of the second large-scale survey were to test the relevance of the model and to examine the existence of learning organisation characteristics in another organisation. It was hoped to make some form of comparison between the findings of the two surveys and to identify any items which might be organisation-specific. It was also planned to carry out factor analysis on the data from the second survey and if appropriate, to use the factors extracted as a basis for analysis in place of the conceptual categories employed in the first survey.

6.8.4.1 *Design of Questionnaire 2*

The questionnaire was to be administered to all members in this section of Company 2, using similar methods to those employed in the first survey. However, the questionnaire was revised before its application in the second organisation for several reasons. Firstly, it had been decided that there would not be sufficient time to conduct a

second survey at a later date for comparative purposes as part of a longitudinal study. This questionnaire was therefore designed to incorporate two sets of replies to each question; one concerning the current organisational position and the other the ideal situation as perceived by employees. Hence, the subsequent interpretation of the data would involve analysing both sets of replies and also analysis of the gaps between replies. This 'gap' approach has been used in the measurement of service quality in the hospitality industry, where service quality is defined as 'the degree of discrepancy between customers' normative expectations for the service and their perceptions of the service performance' (Parasuraman, Zeithaml and Berry 1994). The technique was also employed by Pedler, Burgoyne and Boydell (1993) in their Eleven Characteristics questionnaire.

Several questions were replaced or discarded as it was felt that they were ambiguous or were duplicated elsewhere in the questionnaire. The wording of a small number of other questions was modified slightly to be more concise or to apply more specifically to this organisation. Four questions on the new version of the questionnaire were not 'gap' questions, ie. they only related to the current organisational situation, not the ideal position. These were placed after the gap questions. Three questions which requested respondent details were situated at the end of the questionnaire. As in the first version of the questionnaire, a section on the last page invited respondents to add any comments they wished to make; a box was provided for these. (A copy of the modified questionnaire is contained in Appendix 8.)

Although the general format of the questionnaire was similar, the layout was redesigned for the new version using *Harvard Graphics*. Individual questions were placed in random order on the form and not in categories, to avoid creating a response set, ie. a tendency to reply to connected items in a similar way (Bailey 1994). Instructions for filling out and returning the forms was included in a separate letter attached to the front page of the questionnaire; a copy of this letter can also be found in Appendix 8. Sellitz et al (1959) include attractiveness of the questionnaire format and the nature of the accompanying letter as factors in the success of mail surveys. The letter was thus worded carefully to clarify the reasons for the survey, and emphasise the confidentiality of replies

in language intended to be clear but not patronising, as advocated by Bailey (1994). Respondents were promised feedback on the results; it was felt this promise might enhance the response rate as suggested by Schmitt and Klimoski (1991).

6.8.4.2 *Pilot Study   Questionnaire 2*

As a number of modifications had been made to the questionnaire it was considered necessary to conduct a pilot study to check that respondents found the wording of individual questions straightforward and that all the items were clearly relevant to Engineering Company 2. There was also a clear need to try out the new format of the form with gap questions and ensure that respondents were able to clearly differentiate between the two parts of the gap questions.

Accordingly, fifteen questionnaires were sent out to the Manufacturing Director who arranged for their distribution in five different departments. This was a slightly smaller sample than that of the first pilot study because the overall target population was smaller in this organisation. The survey forms were presented with a Freepost return envelope attached.

Questionnaires were distributed randomly in five of the thirteen departments of Engineering Company 2. Within one week of the forms being issued, nine completed questionnaires had been returned to the researcher. Another two were received during the following few days, providing a response rate of eleven out of fifteen, or 73.3%, which was satisfactory for the purposes of a pilot study. There appeared to be no obvious problems of comprehension or ambiguity over the format of the questionnaire or individual items.

6.8.4.3 *Distribution and Collection   Quesionnaire 2*

Having conducted a satisfactory pilot study, the main part of the second study could then proceed. Survey forms were sent in bulk by post and distributed within the company. Because of the geographic location of the organisation, completed questionnaires were not able to be collected from the company and there would have been

little or no advantage in returning them by post collectively. It was decided therefore that completed forms should be mailed individually to the researcher at Plymouth Business School; a detachable Freepost envelope was therefore attached to each form for ease of return. After a period of two weeks following the distribution of the questionnaires a verbal reminder was issued and twelve more survey forms were then received.

6.8.4.4 *Coding and Analysis Questionnaire 2*

Individual items were coded in the same way as for the previous questionnaire, using numbers 5 through to 1 for strongly agree to strongly disagree, 5 to 1 for categories of respondents' ages; (5= under 30, 4=31-40, 3=41-50, 2=51-60 and 1=over 60), 4 to 1 for the number of years worked in the company (4=0-1 years, 3=1-5years, 2=5-10 years and 1=over 10 years) and 13 down to 1 for the department specified. The same variable names were also applied where possible. However, there was an additional variable for questions 1 - 57, as each question had a second answer which referred to the ideal organisational position. These were allotted similar variable names preceded by the letter 'i' representing the word ideal. Questions 58-61 were not applicable to the ideal organisational situation and so had only one variable each. An additional variable was added for comments, as in the first survey, this was coded from 4-1, depending whether the comments were positive, negative, both or nonexistent.

Frequencies of individual items were computed using SPSS Version 6.1 and mean scores were calculated for the present organisational situation, the ideal position and the gap between the two. Factor analysis was then carried out with the aim of reducing the data into 'clusters of sizeable correlations' (Kinnear and Gray 1994). This analysis used only the variables relating to the present organisational situation, and excluding those which addressed the ideal situation; there were sixty-one of these, as stated. The first stage of the analysis produced an unrotated solution and a correlation matrix was constructed. A scree plot was produced to help determine the number of factors to extract and on the basis of this it was decided to extract nine factors. The extracted factors were then rotated using the Varimax method (Kaiser 1958). The effectiveness of the groupings

produced by this method would indicate whether this would be a more reliable method of determining categories for analysis than the conceptual categories.

Mean scores were also computed for the conceptual categories, as for the findings in Engineering Company 1, except that the category 'Leadership and structure' was divided into two separate categories, as the results of the first survey had indicated that although small, these categories were better not combined as results for one differed widely from those of the second. There were therefore nine categories for this second survey.

Mean scores for the current situation and the ideal situation were calculated and a 'Dissatisfaction Index' (DI.) was added (Pedler, Burgoyne and Boydell 1993). This was calculated from the two previous scores using the formula $DI = (1 - (S1 \div S2)) \times 100$ to provide a measure of the difference between the two organisational situations. The means of these nine categories were also compared with the independent variables of age, years of service and department, using one way analysis of variance.

6.8.5 Telephone Interviews

Additional information was to be gathered from employees at the second organisation for two reasons; firstly the researcher wished to explore certain issues in greater depth and to ensure that salient issues had not been omitted from the questionnaire. Secondly, this was intended to provide triangulation of data as suggested by Webb, Campbell, Schwartz and Sechrest (1966). A combination of research methods in order to provide corroboration of findings has been advocated by a number of writers in the social sciences, eg. Campbell and Fisk (1959), Bouchard (1976) and Denzin (1978).

It was decided that the most effective form of triangulation would be a series of one-to-one interviews, so that employees' opinions and attitides could be explored in depth. However, the organisation was located some distance away from the University and conducting such interviews would have entailed travel and overnight costs and a considerable amount of time. Interviewing employees by telephone appeared to be an

acceptable alternative and the Manufacturing Director at the company was approached. He was enthusiastic about the idea of pursuing significant issues raised by the questionnaire in greater depth and arranged for the Personnel Manager to set up a series of interviews on an agreed date.

Bailey (1994) discusses a number of advantages of telephone interviews. Like mailed questionnaires, they are non-intrusive, and have the added benefits of being quicker and often cheaper and more convenient to carry out than other methods of data collection. Moreover, during telephone interviews it is difficult, if not impossible for interviewees to consult or be influenced by other people's views. However, the lack of visual cues, ie. facial expressions, gestures, etc., can be a disadvantage, but this is probably outweighed by the ability of the interviewer to probe more deeply for clarification of responses. Sudman and Bradburn (1982) maintain that interviews by telephone can take as much time as both parties require and may certainly be as lengthy as face-to-face interviews. Alreck and Settle (1995) disagree with this however, and advocate relatively short telephone interviews, arguing that if the time is extended beyond fifteen minutes, the respondent is likely to resist questions or terminate the interview.

Some researchers have found that telephone interviews have compared unfavourably with face-to-face interviews. Groves and Kahn (1979) reported fewer responses, a termination rate by interviewees of about 5% and a faster pace, resulting in less satisfactory answers to open-ended questions. Other writers (Jordan, Marcus and Reeder 1980, Sudman and Bradburn 1982) found little difference in the type or quality of information gained through both types of interviews. In the case of Engineering Company 2, most of these potential problems did not apply, as respondents had agreed to be interviewed and were unlikely to terminate the interviews as these followed on from each other.

Groves and Kahn (op.cit) found that telephone survey respondents disliked interacting with an unseen interviewer, were suspicious and showed little interest in the topics discussed. This was not the experience of the researcher in this study however, respondents at Engineering Company 2 appeared interested in the issues raised, were

136

friendly and helpful and several times extended the interviews voluntarily in order to discuss topics in greater depth or offer further information. This may have been because these interviewees were familiar with the questionnaire (although not all of them had completed it) and knew the name of the researcher and her connection with the company. Furthermore, the issues under discussion were salient to the organisation and to these employees, who thus probably possessed a genuine interest in stating their opinions.

The lack of visual reactions in telephone interviews was compensated for by the establishment of a good rapport between the researcher and interviewees and other forms of non-verbal communication such as laughter. Frey and Oishi (1995) confirm the importance of establishing a smooth conversational flow. Bailey (op.cit) suggests that although the trust and rapport possible in personal interviews may not be achieved to the same degree in telephone interviews, any decrease in rapport is probably slight and does not appear to affect the richness of the data obtained. Wilson (1994: p94) supports this viewpoint, arguing that telephone interviews 'have much in common with true face-to face interviews in terms of a personal and social interaction between respondent and interviewer'.

6.8.5.1 *Triangulation of Data*

There are a number of advantages to employing qualitative data from interviews to support the findings of a questionnaire survey; firstly it can add reliability and convergent validation to existing data (Jick 1983). Secondly, personal interviews with employees impart a contextual background to the issues studied (ibid.) and add colour to the overall picture of the organisation through anecdotes, jokes, etc. Triangulation of data, as defined by Denzin (op.cit) should incorporate perspectives of the entity being studied at both a micro and a macro level.

Sieber (1973) suggests qualitative data are valuable in adding substance to numerical information from the same organisational setting in order to achieve a more comprehensive analysis. Bryman (1988) argues that qualitative data adds to existing

findings by indicating features which may have been inadvertently omitted from questionnaires or by highlighting aspects which previously appeared unimportant.

In using combined research strategies one method of data collection normally acquires greater prominence (Sieber op.cit). In this study, although the questionnaire was the major focus, the qualitative research was designed to support the use of the questionnaire survey, to confirm findings, indicate discrepancies or question assumptions. Bryman (op.cit: p134) submits that 'it is in the spirit of the idea of triangulation that inconsistent results may emerge' and warns that where this occurs, it is inadvisable to emphasise one set of findings over another. Likewise, Silverman (1985) advises against exclusive selection of data which support the research hypotheses.

Hakim (1987) confirms there is a case for combining different forms of data collection, but advocates multiple triangulation where possible; simultaneous combinations of research agents sources of data and theoretical perspectives to form an overall picture. Unfortunately, due to constraints of time and cost it is rarely possible to conduct such a comprehensive research programme. In this instance it was only possible to triangulate methods of data collection, but the two forms of information gathering used in this organisation encompassed both micro and macro perspectives of the organisation as recommended by Denzin (op.cit).

6.8.5.2 Procedure for Telephone Interviews

The interviews were scheduled for one morning midweek, beginning at 9.30 am. A room was set aside in the company so that interviewees could talk freely without being overheard. It was arranged that interviews would follow on one after another and a provisional time of fifteen minutes was allowed for each interview. It was arranged that the employees being interviewed would arrive at approximately fifteen minute intervals and wait outside the room until the previous interview had finished. There were no breaks between interviews so that the whole series comprised one telephone call. There were no facilities for effective taping of telephone conversations so information was recorded in note form, but verbatim so that there was no modification of the actual terms used.

There was no formal interview schedule, as recommended by Hedges (1985), but respondents were asked about four topics which had emerged from the questionnaire as significant issues and of relevance to the development of a learning organisation. These were communications, employee empowerment, management-employee relations and leadership in the company. Questions were presented in an informal and non-prejudicial manner, but in a similar way to each individual to avoid interviewer bias as far as possible. Probes or 'feelers' were added where appropriate to encourage interviewees to clarify their answers or elaborate further (Berg 1995). Although the researcher was careful to do this in as neutral and non-directive a manner as was feasible, it was inevitable that respondents would vary in their interpretations of questions and their depth of understanding (Wilson 1996). The interview schedule can be seen in Appendix 10.

Three extra questions were included in the interviews. By way of introduction respondents were asked in which department they worked. They were then asked if they had responded to the questionnaire; if the reply was no, they were asked if they would mind explaining why not. This was to provide additional information on response rates for the researcher and to address the issue of non-response. Several interviewees volunteered opinions about the value of the questionnaire at this point, which were noted by the researcher. The conversations were then steered towards the four topics outlined above. Most of the talking was done by the interviewees rather than the interviewer and the next topic was only introduced when the employee appeared to have exhausted his comments and opinions on the previous one. Finally, interviewees were asked whether they had any suggestions of their own for improving the present situation in the company.

All the employees interviewed seemed very keen to express their opinions about the company and the changes taking place. No time limit was placed on interviews but each appeared to have a natural limit of about fifteen minutes. After the eleventh interview had taken place, there was found to be no twelfth employee waiting, so the interviews were terminated at this point. They had taken two hours and forty-three minutes in total. A small number of minor disadvantages to telephone interviewing were noted; the process was tiring for the interviewer as it comprised continuous, intensive

discussion and simultaneous writing for over two hours, the interviews resulted in a rather expensive telephone bill and the number of interviews possible was limited. These drawbacks were largely outweighed though, by the convenience and speed of this method of data collection.

6.8.5.3 *Data Analysis   Telephone Interviews*

The data was typed in full shortly following the interviews to ensure that reporting was as near to the original as possible. The reports were then examined using content analysis. Categorical indexing was used to itemise and compare topics and points of view and associations between different topics were noted (Mason 1996). The findings of the interviews were reported using the analytical categories in order of significance; ie. according to the number of times to which they were referred by the eleven respondents. The in-depth information obtained from the telephone interviews was then compared with the data resulting from the second questionnaire survey. Similarities in the two data sets were noted and a small number of issues were identified which had not emerged from the quantitative data or which now assumed greater significance.

6.9 SUMMARY

This chapter has described how a review of the more recent literature on organisational learning, the learning organisation and the management of change led to the development of several broad research aims. A number of gaps in the research have been noted; this thesis attempts to focus on addressing two of these, namely a dearth of empirically based studies of the learning organisation and the lack of a clearly-defined model of the learning organisation. A generic model of the learning organisation was designed, based on aspects derived from the literature; the model consisted of nine elements. The two central components of the model were a learning climate and employee empowerment, these have been discussed in detail.

A number of specific hypotheses have been identified from the model which are to be addressed during the course of the research, together with some more general

research questions. The methods employed for each phase of the study have been described in detail, together with a justification for their use in each case and a consideration of the wider issues of research ideology. The following five chapters describe the results obtained from putting these methods into practice in two large organisations in the engineering sector.

CHAPTER SEVEN

INDIVIDUAL AND GROUP INTERVIEWS

ENGINEERING COMPANY 1

7.1 INTRODUCTION

As discussed in Chapter 4, there is, with very few exceptions, a lack of empirical work which seeks to evaluate organisational change from a learning organisation perspective. This thesis aims to address this issue through a series of studies in two organisations currently attempting to develop along learning organisation lines. The first phase of these studies consists of individual and group interviews with managers in the first organisation and is described in detail in this chapter.

The site chosen was a large Engineering Company, which will be referred to henceforth as Engineering Company 1. The company is situated in Devonport Royal Dockyard, Plymouth. This chapter first describes the history of the dockyard in an attempt to set the company in its local context and demonstrate its strategic importance as an employer in the South West. Then a brief description is given of the particular Group within the company, which will be called Group A, where the first phase of the research took place.

Phase One of the study is presented in terms of sample, method, results and discussion. The interviews which comprise this phase are analysed qualitatively in order to provide an overview of the Group and the changes which had been implemented, and to act as a preliminary investigation to the major part of the research in Engineering Company 1.

7.2 HISTORY OF THE COMPANY

Devonport Dockyard was constructed in the 1690s under orders from William of Orange, the first dry dock being commissioned in 1690 and the yard subsequently planned and built around it to include workshops, offices and storehouses. In 1700 the first houses were built outside the North end of the dockyard which formed the basis of the town of Plymouth Dock, now known as Devonport (Coad 1992). The yard underwent a number of expansions and developments from the eighteenth century up to the 1970s.

The construction of ships gradually changed from all-wooden sailing vessels in the eighteenth century to the development of steam-powered ships in the early nineteenth

century. North yard, originally called the Steam Yard, was opened in 1853. It was separate from the existing dockyard and had different working conditions and rates of pay (Hilditch 1994). During the second half of the 1800s there was a change to all-metal ships, again requiring major reorganisation throughout the dockyard.

The men employed in the dockyard were all drawn from Greater Plymouth and from the early eighteenth century until recently, the dockyard was the primary employer in the area. The dockyard workforce rose in number from 54 in 1691 and by 1814, 3,800 people were employed there (Coad, op.cit.), a similar number of employees to that of the present day. The number of employees rose in surges rather than at a steady rate, to keep pace with wars and times of naval need. During the 1870s, one third of working men in Greater Plymouth were employed by the Admiralty (Walkowitz 1980). The size of the workforce continued to increase, reaching a peak during the 1914-18 War when over 20,000 men were employed in the dockyard. The workforce has traditionally been all male; even in the 1990s only a small number of women are employed in the dockyard, and although there is a very small number of female engineers, most female positions are secretarial.

Following extensive bomb damage in the Second World War, a number of dockyard buildings were modernised or rebuilt (Hilditch, op.cit.). The Government Defence Reviews of the late 1960s resulted in a concentration on maintenance of frigates and regular refitting of submarines at Devonport and its use as a Fleet Maintenance base and an operational base for nuclear submarines. This decision was to secure the future of Devonport as a naval base.

In 1987, the dockyard came under commercial management although the land continued to be owned by the Ministry of Defence (MOD). It was to be 'GoCo' (government-owned, commercially-operated), managed by a consortium of three companies for a period of seven years, which was later extended to nine years. The MOD maintained a presence there and continued to control the security of the Naval base, nuclear submarines and the gates to the dockyard. Privatisation led to severe job losses,

approximately 8,000 workers being made redundant, which had a debilitating effect on the local economy and on the morale of the remaining workforce.

Towards the end of the contract the consortium came under pressure to become more commercially competitive. With the achievement of the contract to refit Trident submarines, work was secured, at least in the short term; in early 1997 some departments of Engineering Company 1 were undergoing their busiest time ever. In March 1997, the consortium became owners of Devonport Dockyard, with an undertaking to keep the facility open and to increase production by 15% over the next three years. Engineering Company 1 currently has an annual turnover of between £200 and £250 million and employs a workforce of approximately 3,500.

7.3 BACKGROUND TO GROUP 'A'

The first site chosen for the research was the Engineering Workshops, one of three main operating divisions of Engineering Company 1. This Group, situated in the North Yard, is termed Group A for the purposes of this chapter and is referred to as a *Group* to avoid confusion with the use of the word *group* as used in discussion of focus groups. At the time of the study it had 650 employees working in the factories and workshops, about 90% of whose work was for the Ministry of Defence, the remaining 10% of work coming from small private contracts to refit yachts, etc. Performance in this Group had been poor, there were problems of late delivery, high costs and long lead times prior to 1992, when a new Group Manager was appointed from outside the company. His task was to improve the performance of the Group through major reorganisation.

There were particular reasons for transformative change at this time; rivalry with the other naval base at Rosyth was intense, both dockyards competing for the contract to refit Trident, aware that failure to win this might lead to closure. Further pressure was caused by the decision to put refitting work out to tender, so that Engineering Company 1 had to bid for naval contracts; this was compounded by the general decline in the naval fleet, which meant that there was less work available in real terms. Furthermore the call

for highly specialised skills, on which the dockyard prided itself, was decreasing in line with the more uniform construction of ships worldwide.

A number of changes were put into action beginning in October 1992. These were specifically designed to address the problems which existed in the Group; lack of overall vision and strategic planning, a confused hierarchical structure with many management layers, poor communication and lack of information-sharing, top-down decision making with no consultation and over-specialised employees with a narrow skills base. The way in which the Group was reorganised incorporated many of the principles of learning organisation theory.

The emphasis was on a shared vision for the future and departmental goals towards which everyone would work. The management structure was flattened so that there were only two middle management layers instead of the original six; approximately 50% of First Line Managers left or were replaced. (For plan of new management structure see Appendix 2). People with highly specialised expertise were encouraged to learn a wider range of skills and to become multi-functional, so that when there was no call for their particular specialisation they could be temporarily redeployed elsewhere. Shop floor workers were organised in teams and authorised to carry out work without direct supervision. Individuals and teams were encouraged to be innovative and to try new ways of working, with the implicit understanding that mistakes would not be penalised but treated as opportunities for learning.

7.4 USE OF GROUP 'A' AS A RESEARCH SITE

Early on in the research process a fortuitous meeting took place at a business conference in London which led to discussions with a Group Manager from Engineering Company 1. The manager expressed interest in the learning organisation and in this research project, indicating that he was attempting to implement a major change programme in his Group following many of the principles of learning organisation theory. Several visits to the dockyard ensued and it was suggested that this particular

Group of Engineering Company 1 should be used as a research site for the first phase of the study.

Unfortunately, during the first stage of the discussions the Group Manager who had been the original contact announced his intention to move to a new position with an engineering firm in Leicester. An introduction was arranged to the Fabrications Manager at Group A however, who agreed to arrange for the study to go ahead. A number of further meetings took place and a guided tour of Group A workshops was organised for the researcher.

7.5 RATIONALE BEHIND INTERVIEWS AND FOCUS GROUP

The individual interviews and group interviews were conducted with the aim of providing the researcher with the opportunity to explore certain relevant issues in depth and to elicit detailed and sometimes personal information which would not have been produced through a written questionnaire or more highly structured interviews. Burgess (1982) advocates one-to-one interviews as a means of probing topics deeply and discovering new dimensions to problems. It is important that interviews designed to produce qualitative data are structured in a way which provides opportunities for gaining insights into how individuals' personal beliefs and value systems define the significance of their situations and determine their actions (Stewart 1982). One of the aims of these interviews was to develop an overview of the organisation and the group within it, so that the research might also provide an input to the change process through feedback and collaboration.

7.6 SAMPLE

The sample taking part in the interviews and focus group was composed entirely of managers at three different levels. One-to-one interviews were conducted with a Group Manager and the Fabrications manager, both of whom worked in Group A, the Group Manager being in charge of the group. The focus group was composed of four senior managers, who were involved in the running of Engineering Company 1 as a whole,

rather than Group A in particular. This group comprised the Personnel Director, the Training and Development Manager, the Director of Information and Communications and the Commercial Manager.

Two of the senior managers were in their fifties, the other two senior managers and the Group Manager and Fabrications Manager were in their late thirties or early forties. Apart from the Group Manager, all had worked in the company for over ten years and probably planned to stay there. The Group Manager however, had been appointed from outside Engineering Company 1 three years previously to bring about major change within the group and having achieved this to a large extent was planning to move to a new job in the near future. The Group Manager and the Fabrications Manager had been actively involved in implementing the change programme in Group A. The senior management group (ie. the board of directors) had been apprised of the changes and had approved them, but had not played any part in their execution.

7.7 RESULTS

The findings of the two in-depth interviews with managers and the focus group of senior managers are presented in the following section. As a number of similar issues were discussed in the three sessions, there was a lot of crossover between the interviews; the findings are therefore compared and analysed together.

The changes that have taken place in Group A over the past three years were discussed in both the interviews and the focus group. The Group Manager claimed that a fundamental shift had occurred in the focus of his group, from an emphasis on functions to one on products. The Fabrications Manager thought that many of the major changes had been structural, involving members of the management team (see Appendix 2 for chart of revised management structure). The four members of the focus group felt that Group A had moved forward ahead of other sectors of the company. The group manager cited a number of modifications to the structure of the group. He described the original structure as a typical bureaucracy; inward-looking and composed of many layers, this had been flattened considerably by removing a number of strata of middle managers, some of

whom had left the company. This had produced the disadvantage of making vertical promotion very difficult to achieve, so that low level managers seeking to jump levels were forced to look outside the organisation. Clearly, this could mean that many of the best young managers would not remain in the organisation for long.

The Fabrications Manager mentioned that he was the only member left of a management team of six which had existed under the previous group manager. The Group Manager explained that the revised structure involved the formation of a number of different types of teams; project teams were in charge of planning and co-ordinating jobs, quality-improvement teams had been concerned with implementing Total Quality Management (TQM) in the group and there were also other product co-ordinating teams and multi-functional work teams.

The Group Manager had been particularly involved in bringing about structural changes as he felt there had been too much emphasis on function, many employees had formerly only been capable of performing one job and when their particular work was not available there was little for them to do. The Fabrications Manager argued, furthermore, that the role of First Line Managers had been poorly defined and clouded by the effects of overall structure before the changes were put into place and the job redefined.

The results that had been achieved in Group A through the change programme were noted by all the managers concerned. The Group Manager claimed he had begun to change the group into a learning organisation whereas a system of 'direct and control' had previously been in existence. He believed he had encouraged managers in the group to think in a new and different way. The Fabrications Manager agreed that great achievements had been made in this group. From a position as one of the poorest performing areas in the dockyard it had been transformed into one of the highest performers, with a much improved record of completing on time and a more efficient ordering system. Senior managers in the focus group confirmed that Group A had moved far ahead of other groups and was now in danger of being constrained by the lack of progress in other sectors. The Group Manager suggested the current situation of the group was like being joined to the rest of the organisation by an elastic band by now stretched

tightly; the elasticity was reaching its limit. This metaphor is similar to Senge's (1990a) notion of creative tension. He also uses the analogy of a rubber band to represent the tension between the current organisational state and a vision of the ideal situation. Members of the focus group hoped that the achievements of Group A would act as a model for other groups in the company; they expected a number of other groups to introduce similar change programmes in the near future as a result of visible improvements in the performance of this group.

The Group Manager talked about cultural changes that had taken place in the group; ie changes in the underlying beliefs, values and behaviour within the group (Schein 1985), and associated these with the change of focus from specialisation to multi-skilling of employees. He claimed that this manifested itself in things like the dress code among middle managers; 'scruffy sweaters' had been replaced by suits; there was also more consultation now between management and shop-floor employees and the self-esteem of many managers had been raised. There had been attempts to improve communications with six-monthly discussions amonst the whole group to present objectives and listen to employees' ideas and opinions, and informal events such as quiz nights and competitions to involve all the workforce and enhance the general atmosphere.

It appeared however, that the changes had not always been implemented as smoothly as first suggested. The Fabrications Manager described a number of problems which had occurred in the initial stages of the change programme. The Group Manager, who had been externally appointed, was given the specific remit of reorganising the the group and its personnel with the aim of increasing efficiency. His predecessor had held the same position for a number of years and had blamed the group's poor performance and lack of development on the increasing diversity of the work. When the new Group manager took over the previous manager retired and changes began to be introduced with the help of a management consultant. A number of team-building weekends were organised which produced mixed success, according to the Fabrications Manager, because of the management style of the new Group Manager which was rather authoritarian; with the replacement of certain members of the management team and

modifications to the style of the Group Manager, the atmosphere of the group began to improve rapidly. The Fabrications Manager claimed that the appointment of several new young managers strengthened the management team, internal customers were more satisfied due to improved efficiency and managers were then able to spend time looking at the overall strategy of the group.

The Group Manager identified what he perceived as the main barriers to change. These were the interdependence of the different sectors of the company, a poor communication system throughout the organisation and the gap that now existed between Group A and other Groups. He contended that the latter constraint in particular was his main reason for leaving the company at this juncture. The Fabrications Manager, however, intimated that the Group Manager was leaving due to a disagreement over his salary, following the amalgamation of another department into the Group.

The Group Manager suggested several possible outcomes following his departure; a new manager could replace him, who would continue implementing change along similar lines or who could revert to the old ideas and unravel the new system; the management team might resist this approach though and convert him/her. Alternatively the Group Manager proposed that he should not be replaced and the group should continue under a joint management team with no overall leader. The Fabrications Manager knew of this proposal but doubted whether the existing team without a group manager would be capable of sustaining the new approach. The focus group indicated that they would be willing to try out the idea of a self-managed group to see what transpired.

When asked whether any relevant research had been carried out in this Group recently, the Fabrications Manager described a survey which had been administered twelve months earlier by an external consultant to assess the effects of the change programme in Group A. The results of his research were 'surprising' and very negative; it was thought that employees had been confused by the way the questions were worded and had responded in terms of the corporate image rather than the situation in the group. Another project was mentioned by the Group Manager; a preliminary questionnaire

connected with gaining *Investors In People* (IIP) recognition, a copy of which was shown to the researcher. The Group Manager also referred to the earlier survey and suggested the researcher might contact the consultant concerned.

With regard to the limited success of previous studies, all the managers in question had views on the usefulness of the proposed learning organisation research. The Group Manager thought a new survey administered at this stage would be helpful in demonstrating what had been achieved in his area of the company; he suggested the results could act as feedback to other groups of Engineering Company 1. The Fabrications Manager felt that a detailed study could assess the current position in Group A and evaluate the success of the changes in terms of a learning organisation. A questionnaire survey was decided upon as the most appropriate method of examining the views of employees throughout the group. Managers in the focus group reiterated these ideas, adding that a presentation of the results to managers throughout the company could help publicise the achievements of Group A, provide useful feedback in relation to IIP and clarify the need for change organisation-wide.

7.8 DISCUSSION

In the interviews described above, there was clearly a focus by managers on how much had been achieved in this one group. There seemed little doubt that the situation was considerably improved from when the new Group Manager was brought in and from management's point of view, it was now a much better place in which to work. However, from the perspective of shop floor employees, there had been many significant changes which had affected their jobs. Some of these had been threatening; the replacement of a number of managers and the voluntary and compulsory redundancies of employees throughout the group, for example. These actions must have had a significant impact on the general atmosphere of the workplace, and on feelings of job security, commitment and morale throughout the group. Cartwright and Cooper (1993) describe the outcome of many management initiatives of the 1990s as a state of psychological havoc among employees.

In the light of this, it seems unlikely that having recently undergone a major programme of restructuring, Engineering Company 1 employees would currently possess a great deal of trust in the management or loyalty to the company. The Group Manager claimed to be working towards a focus on learning in his group, however, as Gardiner and Whiting (1997) point out, one of the most effective means of persuading the workforce of the worth of learning is through the development of a relationship of trust, particularly between employees and management. Coopey (1996: p2) contends a lack of trust is a 'crucial deficit' in an organisation and suggests that low-trust managerial cultures inevitably inhibit employee learning and commitment (Coopey 1995b). Paradoxically, it seems that now when Group A most needs a high-trust climate in order to promote learning, the Group may be most unlikely to achieve this objective, due to employees' feelings of job insecurity resulting from the current change programme.

The Group Manager had clearly indicated his wish to develop the group into a learning organisation, and wished the evaluation of the change programme to be based on this premise although his reasons for this were not clearly specified. It was agreed that the questionnaire survey would focus on learning organisation characteristics and the degree to which these had been achieved in the group to date. Many of the changes which had taken place appeared to be structural, neither the Group Manager nor the Fabrications manager mentioned consultation with or participation of employees in the new initiatives, although this might be expected if this group is to develop into a learning organisation. As Watkins and Marsick (1992) point out, learning organisations are characterised by a high degree of employee involvement and collaborative change. The Group Manager appeared to view the changes he had introduced as completely successful and recollected their implementation as having been smoothly accomplished. The Fabrications Manager was more pragmatic, however, realising that the changes had not been beneficial for everyone perhaps, and admitting that at times there had been problems with putting ideas into practice.

The restructuring of the group and the changes in its style of working had clearly been largely the work of the newly appointed Group Manager, who possessed some of

the characteristics of a visionary leader (Senge 1990a) and was a potent driving force. This fits the model of the leader of a learning organisation as suggested by Kim (1993b: p34); someone 'at the vanguard of organisational change, questioning long-held corporate beliefs and assumptions'. However learning organisations depend on *shared* beliefs and vision; the group would need to develop mechanisms for sharing aims and ideas and developing participative strategies rather than relying on one leader or champion. Nevis, DiBella and Gould (1995) insist that organisations which are learning systems require more than a single champion, otherwise they are in danger of failing to achieve their aims. Instead they need to focus on jointly agreed ideals and collective learning (Senge 1990b). Nevis et al (op.cit: p81) found that one of the major factors leading to the success of major change initiatives was 'the early identification, empowerment and encouragement of a number of advocates' of the programme.

This stage of the change process at Engineering Company 1 was a very interesting one and was thought to be a particularly apposite point at which to conduct an evaluation, as almost three years had passed since the reorganisation had begun, most of the major changes had been accomplished and perhaps most significantly, the Group Manager was about to leave. None of the managers interviewed seemed to have a clear picture of what would happen when he left, there seemed to be a 'wait and see' attitude; it appeared likely that he would not be replaced, at least in the short term. The situation in the group following the Group Manager's departure would unquestionably reflect the depth and permanence of the measures he had introduced. Whether the Group would continue to focus on learning and continuous development and the management team would recognise the need for ongoing transformation, was dependent on how effectively the culture had changed within the Group. It was clear that the culture of the Group, and to some extent the organisation as a whole, needed to be more overtly supportive of learning and the behaviour associated with this (Iles 1994). The future working style of the Group would also indicate to what extent the Group Manager had been able to communicate his ideas and plans to other managers in the Group. Consideration of this issue also underlines the importance of shared vision; a shared picture of the desired

future which can help to foster commitment to the specified aims of the company or Group rather than mere compliance (Senge, 1990a, Pedler, Burgoyne and Boydell 1997).

One conclusion that could be drawn from the findings of these interviews is that there appeared to be a need for an evaluative study of Group A at this time. Although managers within the group and senior managers in the company seemed to have accepted the idea of the learning organisation as an aspiration, initial moves in this direction had tended to focus on more limited mechanical interventions (Leitch, Harrison, Burgoyne and Blantern 1996) such as restructuring the management team. It was concluded by the researcher and management that it would be beneficial to conduct an audit at this point to provide information about the changes achieved and the degree of learning taking place in the group. It was decided that this would take the form of a questionnaire survey. This decision was based on several factors; firstly the wishes of the senior management team, particularly the Managing Director who had expressed a wish for no personal interviews with industrial employees. The emphasis on this point was interesting; the reasons behind such a decision may have been due to pressure of work and lack of spare man-hours, or it may have been that management was reluctant to allow employees to express their (possibly strong) feelings publicly. Secondly, due to the large size of the target population, it was thought that an overall survey would prove more representative than a small number of interviews and would enable the views of potentially all lower level employees in Group A to be incorporated.

The findings of the survey were to be presented to management in a report, which was intended to act as feedback for the ongoing change programme in Group A. It was hoped these results would act as an indicator of aspects of the group which were beginning to conform to the concept of a learning organisation and those to which further attention needed to be paid in order to focus on shared learning overall. A new strategy could then be devised to utilise this information to develop a learning system at all levels of the group, incorporating aspects of all the learning organisation characteristics identified, and focusing particularly on those which did not appear to be very highly developed at this stage.

7.9 SUMMARY

This chapter has described the first research site of the study; a large engineering company in the South West. A brief history of the company in its geographic location was presented in order to place the organisation in its context and to demonstrate the strategic importance of the company as a major employer in the area. The Group selected for the first phase of the research (Group A) had been undergoing a change programme aimed at developing the Group into a learning organisation; these changes had begun approximately three years earlier.

Two in-depth interviews were conducted with individual managers in the Group; one of whom had led the change process, and a focus group interview was carried out with four senior managers. From a management point of view the changes implemented had been extensive and successful in that the performance of the Group had greatly improved. Many of the changes appeared to have been structural and there had been little consultation with the workforce. A number of redundancies had been imposed and these had resulted in feelings of insecurity among employees.

The Group Manager was now about to leave the company; he and other managers speculated whether the changes he had introduced would remain in place, particularly if he was not replaced. It was agreed to carry out a questionnaire survey of employees in the group to evaluate the change programme to date and ascertain the opinions of the workforce on these changes.

CHAPTER EIGHT

QUESTIONNAIRE SURVEY

GROUP 'A'
ENGINEERING COMPANY 1

8.1 INTRODUCTION

This chapter describes the second phase of the research, a large-scale questionnaire survey in Group A and a pilot study carried out beforehand to test the research instrument. The results of the questionnaire are presented both in terms of individual items and conceptual categories. Category variables are then intercorrelated to examine relationships between categories and the relationship between each category and variables of 'job type', 'years' (number of years' service) and 'department' is analysed. Respondents' comments, where they have been added in response to question 67, are presented and interpreted using content analysis. The final section brings together the findings of both sets of results and summarises the main points made in the chapter.

8.2 SAMPLE

The target population for the main questionnaire survey was all the employees in Group A, including first level supervisors, or First Line Managers (FLMS). The total number of employees was approximately 540. These included both 'blue collar' and 'white collar' workers, who were to be categorised as industrial and non-industrial workers in the questionnaire. Respondents were not to be asked to specify their gender as the vast majority of workers at Engineering Company 1 are male; there was only one female industrial worker in this Group, and to ask her to state her gender would have removed any anonymity for her; the effect of one female in a sample of 510 would have been minimal, in any case.

8.3 AIMS

The aim of this phase was to examine employee attitudes towards the changes which have been implemented at Group A over the past three years and to assess to what extent this Group of Engineering Company 1 could be considered a learning organisation. This was based on the notion that organisations need to emphasise and build a central focus on learning in order to enhance performance and sustain competitive advantage. Moreover, this learning needs to be relevant and to occur at every level of the

organisation. It was also intended to identify the areas in which the Group could be said to be (most) like a learning organisation. The research attempted to address the following hypothesis and sub-hypotheses:

Group A conforms to the theoretical notion of a learning organisation in that:

a: Individual learning and self-development is encouraged for the benefit of individuals and the organisation

b The Group direction and strategy are regularly modified as a result of feedback

c The Group and its members focus on continuous improvement and the climate is designed to support this aim

d: Employees participate in policy-making and Group policies reflect everyone's interests

e Communication systems facilitate learning at both individual and collective levels

f: Employees are empowered and make decisions related to their work

g: Leadership in the Group encourages employees to learn

h: The Group's structure facilitates learning

i: Links with the business environmentare fostered

It should be noted that the survey was designed to measure respondents' construction of reality rather than objective facts. Black (1993: p63) advises that 'survey data can provide opinions, attitudes, intentions and beliefs, but all are recording data about the subjects' *perceptions* of the issues'. Hence the hypotheses are tested only in terms of the perceptions of reality of employees in Group A.

8.4 PILOT STUDY

It was decided to conduct a pilot study of the questionnaire to establish the validity of individual items and to check that questions were appropriately worded and unambiguous. Bourque and Fielder (1995) argue that it is essential to pilot or pretest any questionnaire using the same administrative procedures that will be used in the main study. Piloting a survey can serve several purposes; firstly it is useful in identifying

problems with wording or sequence of questions which might affect the validity of the results (Judd, Smith and Kidder 1991). Secondly, it can highlight potential dangers in the method by which the questionnaire is administered, thereby avoiding a poor response rate and thirdly, a pilot study may indicate the need for additional questions to clarify topics or include issues previously omitted (ibid). Pretests or pilot tests can also be useful in demonstrating the amount of time the main survey is likely to take or what rate of response might be expected.

Nineteen of the twenty forms were completed and returned, thus providing a response rate of 95%. Although this seemed rather surprising, upon reflection it was decided that the First line Managers had probably asked for 'volunteers'; the respondents were therefore interested in the questionnaire and likely to return it. Although all the respondents had filled in details of their job type and how long they had worked for the company, four had declined to indicate the department they worked in. The handwritten numbers which had been added to the top right hand corners of the forms had been scribbled out in seven cases. Twelve of the twenty respondents (60%) had added comments at the end of the forms, one respondent explaining why he had erased the number on the form: 'We don't trust each other. These papers were marked in the top right hand corner, we suspect for monitoring by (Engineering Company 1)'. A small number of modifications were consequently made to the questionnaire, the revised version was then piloted on a further six employees and was found to be satisfactory.

8.5 RESPONSE RATE

502 forms were issued altogether to employees in six departments, with 33 individuals known to have refused to accept the questionnaires. In all, 318 were returned, a response rate of 63.4% which is high for a survey of this type and which may have indicated a desire to co-operate and to express opinions on the changes taking place in the Group, or may have been due to management coercion. The response rate varied between individual departments as shown in Table 8.1 on the following page. The table illustrates that between 68% and 88% of questionnaires were returned from most departments with

the exception of Department 5 which had a response rate of 52% and Department 3, where the response rate was only 38%, although this would be only 31% if the 33 employees who declined to take part were included.

Department	No. Issued	No. Returned	% Response Rate
1	86	76	88.4
2	62	51	82.3
3	149	57	38.3
4	71	50	70.4
5	44	23	52.3
6	90	61	67.8
Totals	502	318	63.4

Table 8.1: Distribution and Response Rates for Departments in Group A

Employees in this department have particularly low morale according to managers, and are resentful of the other departments in many cases because Department 3 was added on to the rest of the group fairly recently without consultation with employees or middle managers.

Survey forms were returned sealed in the envelopes provided, but 7% of the envelopes were double sealed or marked in some way to avoid tampering; a number of employees clearly believed this was a threat. A number of protests were made against the survey, though the forms were returned completed; some respondents made negative or rude comments in the space provided or at the side of certain questions, although not all comments were negative. Individual items were left unanswered in some cases, one respondent answered 'neither agree nor disagree' to all questions and another returned the questionnaire completed but cut up into small pieces. However, a majority of the target population returned questionnaires completed satisfactorily.

8.6 RESULTS

The data was analysed using SPSS Version 6.1. Results are discussed first in terms of individual questions or items and then within the eight conceptual categories, or scales.

8.6.1 Results by Individual Item

Table 8.2 (over the next three pages) shows frequencies of types of response to each individual item. the numbers in the left-hand column indicate the number of the item on the questionnaire and the frequencies are expressed as valid percentages, ie. percentages with missing values discounted. This table highlights a number of individual variables which carry notably high or low frequencies. These are discussed briefly here, positive characteristics first, followed by negative indications; both are discussed in the order in which they occur in the questionnaire.

Question 6, which asked whether employees are given the opportunity to solve problems, shows fairly high percentages strongly agreeing and agreeing with the statement; 19.9% and 50.3% respectively, but more significantly, very low percentages disagreeing (9.0%) and strongly disagreeing (only 4.8%). Question 9, 'employees work without close supervision' shows a similar positive tendency, with 42.9% strongly agreeing and 46.0% agreeing with the statement. Only 2.9% and 2.2% disagreed and strongly disagreed respectively.

Question 13 showed positive responses, indicating that a large percentage of respondents read the Group newsletter regularly; although only 17.3% strongly agreed, 58.2% agreed and negative responses were very small; 9.9% disagreeing and only 3.4% strongly disagreeing. Another question demonstrating a positive response overall was 40 'standards are high, everyone tries to produce good quality work'. 52.7% agreed with the statement, 16.5% strongly agreed, and only 11.1% disagreed with 6.0% disagreeing strongly. Question 41 on pride in the quality of work also indicated positive responses, with 19.7% strongly agreeing, 46.3% agreeing and only 7.9% and 5.1% disagreeing and strongly disagreeing respectively.

162

No	Item	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
3	Job satisfaction	9.3	47.6	26.5	13.7	2.9
4	Sense of belonging	8.0	45.3	18.0	21.2	7.4
5	Contribute ideas	6.6	36.4	28.2	22.0	6.9
6	Opportunities to solve problems	19.9	50.3	16.0	9.0	4.8
7	Responsible for own T & D	8.0	35.0	23.2	23.9	9.6
8	Feel valued	5.4	25.8	23.2	25.2	20.4
9	Work without supervision	42.9	46.0	6.0	2.9	2.2
10	Supervisor provides support	12.5	41.7	20.5	15.1	10.3
11	Annual appraisal given	11.0	47.7	8.4	21.4	11.4
12	Personal aims considered	6.4	33.1	24.1	22.1	14.4
13	Read (the Group newsletter)	17.3	58.2	11.2	9.9	3.4
14	Regular feedback given	1.9	19.4	21.9	38.4	18.4
15	Training frequent	3.2	30.2	25.1	28.3	13.2
16	Aware of educational opportunities	7.5	37.7	16.2	26.6	12.0
17	Understand the changes	8.4	50.2	18.1	17.5	5.8
18	Changes were necessary	13.1	32.4	31.4	17.0	6.1
19	Clear vision exists	2.9	17.5	29.6	32.2	17.5
20	Everyone aware of vision	1.3	9.6	28.2	42.0	18.9
21	Working towards Group goals	3.8	27.2	31.6	24.9	12.5
22	Strategic plans often revised	5.3	28.7	37.3	20.8	7.9
23	Consulted on success of plans	1.0	14.3	25.6	36.7	22.4
24	New ideas incorporated into plans	4.2	41.7	29.1	17.5	7.4
25	No unwritten rules to follow	2.6	30.1	33.0	26.5	7.8
26	Atmosphere has improved	1.0	13.8	25.0	31.1	29.2

Table 8.2a: Descriptive Frequencies for Individual Items

No	Item	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
27	No increase in stress	2.1	17.1	20.6	28.2	32.1
28	Individual approach encouraged	5.7	40.9	32.1	17.6	3.7
29	Encouraged to experiment	4.2	34.7	30.9	23.2	7.1
30	Not penalised for mistakes	8.6	41.9	27.6	16.5	5.4
31	People learn from mistakes	8.0	50.6	27.7	10.2	3.5
32	Employees rewarded for effort	1.9	9.7	17.1	37.1	34.2
33	Not under excessive pressure	2.4	8.8	18.2	34.1	36.5
34	Given freedom to solve problems	10.5	51.4	22.0	10.2	5.8
35	Employees' opinions valued	3.5	27.0	31.4	21.9	16.2
36	Working relations good	10.9	57.2	21.4	6.4	4.2
37	Supportive atmosphere	6.1	42.7	25.2	15.9	10.2
38	Knowledge & resources shared	7.3	47.1	23.2	15.0	7.3
39	Other teams offer support	3.8	31.1	26.0	27.2	11.9
40	Standards are high	16.5	52.7	13.7	11.1	6.0
41	Proud of work quality	19.7	46.3	21.0	7.9	5.1
42	Participate in policy decisions	1.6	4.9	19.4	44.4	29.6
43	Employees' views considered	0.3	12.2	30.2	38.3	19.0
44	Policies cater for everyone	1.0	8.9	30.9	37.6	21.7
45	Differing opinions voiced	0.6	18.2	26.8	39.6	14.7
46	Employees share information	4.2	30.7	27.2	25.2	12.8
47	Info. shared across departments	1.6	23.8	33.8	29.9	10.9
48	Read (the company magazine)	18.4	64.6	7.8	7.1	2.0
49	Effective communication systems	1.3	25.7	35.0	28.3	9.6
50	I.T. provides feedback	2.3	25.9	38.5	27.2	6.1

Table 8.2b: Descriptive Frequencies for Individual Items

No	Item	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
51	Free flow of communication	1.3	16.4	32.2	35.0	15.1
52	Employees not checked up on	7.1	45.2	22.4	19.6	5.8
53	Responsibility granted if required	6.7	44.6	28.2	15.7	4.8
54	Unwanted responsibility not given	3.2	37.5	34.6	19.7	4.9
55	Possess necessary expertise	33.1	57.0	6.1	3.2	0.6
56	Supervisor provides coaching	14.0	43.6	19.7	13.4	9.2
57	Team makes decisions	6.8	36.8	32.6	17.4	6.5
58	Team committed to work	13.8	49.0	24.7	10.6	1.9
59	Good employee-manager relations	2.5	24.5	28.7	23.6	20.7
60	Managers honest with employees	5.1	27.4	24.8	24.8	17.8
61	Company managers visit workshop	1.6	18.3	19.6	37.6	22.8
62	Management motivates employees	3.5	18.6	29.2	27.9	20.8
63	Depts. responsible for own budgets	4.7	54.1	32.1	7.4	1.7
64	Depts. seen as customers/suppliers	7.4	52.8	23.0	11.3	5.5
65	Roles & jobs are flexible	8.6	62.0	17.9	8.6	2.9
66	Rules altered following discussion	3.5	46.2	32.1	12.2	6.1
67	Info. shared with other companies	1.4	33.8	38.7	19.2	7.0
68	Info. collected about environment	4.7	25.0	34.1	27.7	8.4
69	Read magazines on external issues	2.6	11.6	19.7	40.3	25.8
70	Man. informs on ext. developments	2.3	29.1	22.3	28.5	17.8

Table 8.2c: Descriptive Frequencies for Individual Items

A high percentage of respondents was also found to read the company magazine (Question 48). 64.6% agreed that they read this frequently and 18.4% strongly agreed with this, while only 7.1% and 2.0% disagreed and strongly disagreed respectively. The most positive responses were to Question 55; 33.1% and 57.0% of respondents strongly

agreed and agreed respectively that they possessed the necessary skills and expertise for their jobs. One more variable produced a significantly positive response; Question 65 showed that 62% of respondents agreed their roles and jobs were flexible and a further 8.6% strongly agreed with this.

A greater number of variables indicated overall negative results. Question 8, indicated that only a small percent of respondents felt valued in their organisation; only 8% strongly agreed with this, though a further 35% agreed. The two questions on vision, numbers 19 and 20, both produced negative responses. Only 17.5% agreed that a clear departmental vision existed and only 2.9% agreed strongly that this was so. Even fewer respondents agreed (9.6%) or strongly agreed (1.3%) that everyone was aware of this vision. Question 23 also produced negative results; only 14.3% thought that they were consulted on the success of plans implemented and only 1% strongly agreed with this. Similarly in question 27, only 13.8% agreed that the atmosphere in the Group had improved and only 1% strongly agreed.

Respondents disagreed that there had been no increase in stress in the Group (question 27). Only 2.1% strongly agreed that stress levels had not risen and 17.7% agreed, while over 60% disagreed or strongly disagreed. Question 32 also indicated negative results; only 1.9% strongly agreed and 9.7% agreed that employees were rewarded for effort. The following question, 33, also showed negative results. Only 2.4% and 8.8% strongly agreed and agreed respectively that employees in the Group were not under excessive presuure.

Questions 43 and 44 both produced negative findings. Only 0.3% of respondents strongly agreed and 12.2% agreed that employees views were reflected in policy statements, while only 1% strongly agreed and 8.9% agreed that company policies catered for employees at all levels. Similarly, few respondents agreed with question 45, that people's differing opinions were aired and discussed openly; only 18.2% and only 0.6% strongly agreed with this. Asked whether there was a free flow of communication in the Group (question 51) most disagreed, only 16.4% agreeing and 1.3% strongly agreeing with the statement. Similarly, few people thought that company managers visited

workshops regularly; only 18.3% agreed that this was the case and only 1.6% strongly agreed. Finally, question 69 additionally produced a negative overall result. Only 11.6% of respondents agreed they were encouraged to read magazines on external issues and only 2.6% strongly agreed with this.

Following examination of these preliminary findings, a second table was produced (Table 8.3 below) which shows mean scores for each of the 68 individual questions, excluding the independent variables of job type, number of years served and department. Findings from this table are largely similar to those derived from Table 8.2 above. Questions which showed the highest scores (above 3.5) were number 9; employees work without close supervision, which produced a mean score of 4.24 and number 55; which indicated confidence in respondents' own skills and expertise and gave a mean score of 4.19.

Other questions which scored highly were number 13, 'I read (the group newsletter) regularly' (3.76), number 36, 'people have good working relationships' (3.64), numbers 40 and 41; 'standards are high' (3.63) and 'we are proud of the quality of our work' (3.68). Question 48, on (the company magazine), also had a high mean score; 3.90, as did questions 58, 'as members of a team we are committed' (3.62), and 65, 'people's roles and jobs are flexible' (3.65).

The only variable showing a high mean score in Table 8.3 which did not appear to indicate significant positive results in Table 8.2 was number 63; 'departments are responsible for their own budgets' which had a mean score of 3.53.

A number of variables also indicated low scores (below 2.5). The following variable numbers had mean scores of 2.49-2.20; number 14, 'I am given regular feedback on my performance' (2.48), number 20, 'everyone is aware of the vision' (2.32), number 23, 'we are asked how well plans are working out' (2.35), number 26' the atmosphere has improved (2.26), number 27, 'I don't feel I am experiencing more stress' (2.29), number 43, 'employees' views are reflected in policy statements' (2.37) and number 69, 'we are encouraged to read magazines about external issues' (2.25).

No	Variable	Mean	Std. deviation	Cases
3	Job satisfaction	3.47	0.94	313
4	Sense of belonging	3.25	1.11	311
5	Contribute ideas	3.14	1.05	305
6	Opportunities to solve problems	3.71	1.04	312
7	Responsible for own T & D	3.09	1.14	314
8	Feel valued	2.71	1.21	314
9	Work without supervision	4.24	0.86	315
10	Supervisor provides support	3.31	1.18	312
11	Annual appraisal given	3.26	1.24	308
12	Personal aims considered	2.95	1.18	299
13	Read (the Group newsletter)	3.76	0.97	294
14	Regular feedback given	2.48	1.06	315
15	Training frequent	2.82	1.10	311
16	Aware of educational opportunities	3.02	1.19	308
17	Understand the changes	3.38	1.05	309
18	Changes were necessary	3.29	1.09	312
19	Clear vision exists	2.56	1.06	314
20	Everyone aware of vision	2.32	0.93	312
21	Working towards Group goals	2.85	1.07	313
22	Strategic plans often revised	3.03	1.01	303
23	Consulted on success of plans	2.35	1.01	308
24	New ideas incorporated into plans	3.18	1.01	309
25	No unwritten rules to follow	2.93	0.99	309
26	Atmosphere has improved	2.26	1.06	312
27	No increase in stress	2.29	1.15	287

Table 8.3a: Mean Scores of Individual Items

No	Item	Mean score	Std. deviation	Cases
28	Individual approach encouraged	3.27	0.94	296
29	Encouraged to experiment	3.06	1.01	311
30	Not penalised for mistakes	3.32	1.02	315
31	People learn from mistakes	3.49	0.91	314
32	Employees rewarded for effort	2.08	1.03	310
33	Not under excessive pressure	2.06	1.05	296
34	Given freedom to solve problems	3.51	1.01	313
35	Employees' opinions valued	2.80	1.11	315
36	Working relations good	3.64	0.91	313
37	Supportive atmosphere	3.18	1.10	314
38	Knowledge & resources shared	3.32	1.05	314
39	Other teams offer support	2.88	1.10	312
40	Standards are high	3.63	1.07	315
41	Proud of work quality	3.68	1.04	315
42	Participate in policy decisions	2.05	0.91	304
43	Employees' views considered	2.37	0.94	311
44	Policies cater for everyone	2.30	0.94	314
45	Differing opiniond voiced	2.50	0.97	313
46	Employees share information	2.88	1.11	313
47	Info. shared across departments	2.75	0.99	311
48	Read (the company magazine)	3.90	0.85	294
49	Effective communication systems	2.81	0.97	311
50	I.T.provides feedback	2.91	0.93	309
51	Free flow of communication	2.54	0.98	311
52	Employees not checked up on	3.28	1.04	312

Table 8.3b: Mean Scores of Individual Items

No	Item	Mean score	Std. deviation	Cases
53	Responsibility granted if required	3.33	0.98	312
54	Unwanted responsibility not given	3.15	0.94	309
55	Possess necessary expertise	4.19	0.74	314
56	Supervisor provides coaching	3.40	1.16	314
57	Team makes decisions	3.20	1.02	310
58	Team committed to work	3.62	0.92	312
59	Good employee-manager relations	2.65	1.14	314
60	Managers honest with employees	2.77	1.18	314
61	Company managers visit workshop	2.38	1.08	311
62	Management motivates employees	2.56	1.12	312
63	Depts. responsible for own budgets	3.53	0.77	296
64	Depts. seen as customers/suppliers	3.45	0.98	309
65	Roles & jobs are flexible	3.65	0.86	313
66	Rules altered following discussion	3.29	0.94	312
67	Info. shared with other companies	3.03	0.93	287
68	Info. collected about environment	2.90	1.02	296
69	Read magazines on external issues	2.25	1.05	310
70	Man. informs on ext. developments	2.70	1.14	309

Table 8.3c: Mean Scores of Individual Items

There were 3 more variables which displayed very low scores; number 32, 'employees are rewarded for effort' (2.08), number 33, 'we are not under a great deal of pressure' (2.06) and number 42, 'everyone takes part in policy decisions'.

8.6.2 Results by Category

Results are presented next in terms of descriptive statistics for each category of the questionnaire. The data within each of the eight conceptual categories of the

questionnaire were summarised and a mean overall score calculated for each group on a scale of 1-5, the mid point of the scale being 3.0 (See Table 8.4). Scores are presented here in descending numerical order with standard deviation figures and the number of cases also given.

Category	Mean	Std Dev.	Cases
Empowerment	3.47	0.55	302
Individual learning	3.23	0.63	255
Leadership & structure	3.05	0.64	290
Learning climate	3.01	0.58	268
Use of information	2.94	0.69	288
Strategy	2.87	0.72	287
Environmental links	2.73	0.67	280
Participation in policy	2.30	0.77	302

Table 8.4: Mean Scores of Categories

The category of 'Empowerment' had the highest score with a mean of 3.47. 'Individual learning' also scored fairly highly (3.23) while 'Leadership and structure' and 'Learning climate' both scored above the mid-point of the scale. For the purpose of addressing the hypotheses, the category 'Leadership and structure' then had to be split into its two component parts; 'structure' was found to have a mean score of 3.48, which was high. Four categories produced mean scores of below the mid-point. These were 'Use of information (2.94), 'Strategy' (2.87), 'Environmental links' (2.73), and 'Participation in policy', which had the lowest score (2.30). 'Leadership', which formed half the original category of 'leadership and structure, also had a low score of 2.59. The number of cases varied between categories due to a small number of missing variables.

The main hypothesis; that *Group A conforms to the theoretical notion of a learning organisation* was rejected because only certain of the characteristics of such

organisations were shown to exist. Based upon the mean scores of the eight categories, four of the null hypotheses were rejected. It is suggested therefore that in this Group:

a. Individual learning and self-development was encouraged

c. The Group climate had a central focus on learning

f. Employees were empowered and made decisions related to their work

h. The Group's structure facilitated learning.

The other five null hypotheses were accepted.

8.6.3 Inter-Category Correlations

Relationship with Job Type

The category variables or scales were next analysed in terms of their relationship with the individual variable 'job type'. The independent samples t-test was used for the purposes of this analysis as job type comprised two levels (industrial and non-industrial). One of the assumptions of this test is that variation is homogenous. The two sets of means were therefore tested for homogeneity of variance using the Levene test. The values were found to be greater than 0.05 in all cases and were therefore not significant. This indicated that in all these tests the variances could be assumed to be homogenous and meant that the valid statistic in this instance was the equal variances t statistic.

Cronbach's Alpha standardised correlation figures (α) were also computed to test for reliability of the data. The Cronbach's Alpha figures ranged from 0.57 to 0.87 as shown in the table. The α value should exceed 0.7, Nunnally's (1978) threshold for adequate internal reliability. The reliability coefficient was high (>0.7) for six of the eight categories; 'Individual learning', 'Leadership and structure', 'Learning climate', 'Use of information', 'Strategy' and 'Participation in policy making', indicating a high level of correlation between items in these categories. However, in two categories; 'Empowerment' and 'Environmental links', the coefficient was < 0.7. 'Empowerment' had an a coefficient of 0.65 and 'Environmental links' produced a coefficient of only 0.57, which would suggest that questions within these two categories are not sufficiently consistent to produce internal reliability.

Category	Indus.	cv%	Non-In.	cv%	α	t	df	p
Individual learning	3.05 (0.61)	20	3.55 (0.54)	15.2	0.85	-6.40	244	0.001
Strategy	2.75 (0.71)	25.8	3.11 (0.71)	22.8	0.85	-4.06	273	0.001
Learning climate	2.95 (0.61	20.7	3.11 (0.50)	16.1	0.87	-2.16	256	0.03
Participation in policy	2.21 (0.75)	33.9	2.49 (0.82)	32.9	0.85	-2.80	288	0.01
Use of information	2.78 (0.67)	24.1	3.25 (0.66)	20.3	0.80	-5.65	273	<0.001
Empowerment	3.38 (0.55)	16.3	3.66 (0.48)	13.1	0.65	-4.23	287	<0.001
Leadership & structure	2.93 (0.63)	25.9	3.28 (0.60)	18.3	0.78	-4.51	275	<0.001
Environmental links	2.66 (0.69)	25.9	2.84 (0.65)	22.9	0.57	-2.09	266	0.04

Key : α Cronbach's Alpha   *p* Significance value
cv Coefficient variation   **df** Degrees of freedom
t   t-test

Table 8.5: Relationship between Categories and Job Type using the t-test

Table 8.5 shows the mean scores for each of the two job types in all eight categories, Cronbach's α, the *t* values, degrees of freedom (df) and the significance (*p*) values. The figures in brackets represent the standard deviations from the means; the coefficient variation (cv) for both sets of means has also been included to indicate more clearly the relevance of the standard deviation figures.

The table demonstrates that there was a significant effect of 'Job type' on each of the nine categories. The effect was significant for the category of 'Individual learning'(*t* = -6.40, df=244, *p* =0.001) and similarly for 'Strategy'(*t* =-4.06, df=273, *p* =0.001). For the categories of 'Learning climate' and 'Participation in policy' the effect was also significant (*t* =2.16, df=256, *p* =0.03) and (*t* =-2.80, df=288, *p* =0.01). For the last category, 'Job type' showed a slightly significant effect (*t* =-2.09, df=266, *p* =0.04). However, the effect of 'Job type' was most significant for the categories of 'Use of information' (*t* =-5.65, df=273, *p* <0.001), 'Empowerment'(*t* =-4.23, df=287, *p* <0.001) and 'Leadership and Structure'(*t* =4.51,df=275, *p* <0.001).

The standard deviations for both sets of means were relatively high; because of this the mean scores must be viewed with caution. Where there is a lower standard deviation the researcher can be more confident that the mean does not contain much variability. In order to examine more carefully the variations within the means, the coefficient variations were calculated (Wisniewski 1994). The relative variation in the non-industrial sample was lower than that of the industrial sample in each category, indicating more consistency in the perceptions of non-industrial employees towards the eight concepts.

Table 8.5 shows that in all cases $p < 0.05$ and in all but two tests, $p < 0.01$. It can be concluded therefore, that the difference between the means of 'jobtype' and 'learning climate' and between 'jobtype' and 'environmental links' is significant and the difference between the independent variable 'jobtype' and the other six scales is highly significant. Mean responses of non-industrial workers appeared to be more positive than those of industrial workers in each of the eight categories and the table shows that these differences were statistically significant. The differences between perceptions of industrial and non-industrial employees did not appear to be connected with sample size; the percentage of industrial workers in Group A (67.1%) was much greater than that of non-industrials in the Group (32.9%).

The differences in responses between blue collar and white collar workers may be due to the greater status enjoyed by non-industrial employees in the organisation, which resulted in more positive responses from this group. One of the first actions of the Group Manager had been to restructure the Planning department, where large numbers of non-industrial workers were employed; if the resulting changes were perceived as beneficial, this might explain the more positive responses of these employees.

One reason for less positive responses among industrial respondents may be that more redundancies took place among this group of workers. It is likely that greater numbers of redundancies did occur within the industrial sector as one of the problems in the group before reorganisation had been the existence of over-specialised employees, whose expertise could only be used at certain times and who had little to do when their

specific skills were not called upon. Although some of these workers were encouraged to become multi-skilled, it is also likely that others were made redundant, which has led to insecurity and negative feeling towards the company.

Relationship with Number of Years' Service

The eight scales were then compared with the independent variable of 'years' (number of years employee had worked in the company). For this purpose a one-way analysis of variance (ANOVA) was used; the t-test was inappropriate in this case as there were four levels of the independent variable. The variable of 'years' was subsequently recoded (Kinnear and Gray 1994) as it was found that there were a number of cells with frequencies of less than five cases, which rendered them invalid. The sample was thus divided into three ranges of years' service; 0-5 years, 5-10 years and more than 10 years. Table 8.6 illustrates the results of the one-way ANOVA test to compare means between the eight scales and the number of years worked.

Category	0-5yrs	6-10yrs	10+yrs	F ratio	df	p
Individual learning	3.29 (0.81)	3.19 (0.56	3.23 (0.65)	0.12	245	0.89
Strategy	3.13 (0.72)	3.01 (0.68)	2.82 (0.73)	2.11	274	0.12
Learning climate	3.28 (0.55)	3.00 (0.56)	3.01 (0.59)	0.96	259	0.38
Participation in policy	2.68 (0.95)	2.31 (0.81)	2.28 (0.77)	1.22	290	0.30
Use of information	3.41 (0.66)	2.88 (0.72)	2.92 (0.68)	2.84	274	0.06
Empowerment	3.30 (0.51)	3.47 (0.51)	3.47 (0.56)	0.47	289	0.63
Leadership & structure	3.54 (0.62)	3.03 (0.65)	3.03 (0.63)	3.06	278	0.48
Environmental links	2.62 (0.72)	2.74 (0.57)	2.72 (0.70)	0.12	269	0.89

Key : **df** Degrees of freedom
p Significance value

Table 8.6: Relationship between Categories and Number of Years using One-way

ANOVA

Most of the sample; 225 individuals (77%) had worked for the company for over ten years, 57 (20%) had been there for between six and ten years and only 10 respondents (3%) had worked at the company for less than five years. The table suggests that employees tended to respond more positively when they were relatively new to the company. There were no significant effects of 'Years' on the eight categories, although there may be a slight effect on the 'Use of information' (F =2.84, df=274, p =0.06). Where the F ratio is higher than 1.0 it is more likely that the differences between means do not occur by chance, but may be statistically significant (Wright 1997). In Table 8.6 F >1.0 in four categories; however these figures are still relatively low. The significance values indicate that none of the differences between means is statistically significant, as p > 0.05 in all cases, however, the category of Use of information may indicate a marginal significance (p =0.06). It would appear that the number of years respondents had worked for the company did not have a significant effect on the way they responded to the eight categories.

Relationship with Department

A similar test was carried out between the eight scales and the independent variable 'department' (the department in which the employee worked) using one-way analysis of variance (ANOVA) once again. Table 8.7 (on the next page) illustrates the relationship between the mean scores for each category. Standard deviation figures are given in brackets.

There were six departments (numbered 1-6) each consisting of between 21 and 66 respondents. These numbers were not necessarily representative of the total populations of each department, however, as response rates varied widely between departments; Department 3 having a response rate of only 38%, for example, while Department 6 had a response rate of 88% (see section 8.5 for further details of response rates).

Table 8.7 shows that for each category the means are highest for Departments 2 and 6, with the exception of 'Environmental links' where only Departtment 6 is significantly higher than the other means.

Categ.	Dept. 1	Dept. 2	Dept.3	Dept 4	Dept. 5	Dept. 6	F	df	p
Ind. L.	3.21 (0.72)	3.45 (0.37)	3.07 (0.59)	3.14 (0.58)	3.21 (0.76)	3.34 (0.67)	2.08	249	0.07
Strat.	2.82 90.78)	3.01 (0.64)	2.71 (0.65)	2.66 (0.66)	2.86 (0.59)	3.13 (0.78)	3.28	281	0.01
L. Cli.	2.96 90.65)	3.04 90.48)	3.02 (0.49)	2.88 (0.62)	3.02 (0.56)	3.21 (0.54)	1.50	262	0.19
P in P.	2.36 (0.82)	2.46 (0.73)	2.07 (0.79)	2.11 (0.68)	2.18 (0.77)	2.49 (0.74)	2.90	296	0.01
Use I.	2.89 (0.76)	3.30 (0.66)	2.87 (0.61)	2.76 (0.68)	2.89 (0.59)	2.96 (0.67)	3.58	282	0.01
Empo.	3.41 (0.52)	3.62 (0.47)	3.34 (0.56)	3.34 (0.70)	3.45 (0.45)	3.63 (0.47)	3.28	296	0.01
L & S.	2.97 90.71)	3.22 (0.48)	2.84 (0.61)	2.97 (0.58)	3.13 (0.51)	3.24 (0.69)	3.40	284	0.01
Env. L	2.68 (0.70)	2.70 (0.09)	2.71 (0.64)	2.65 (0.72)	2.61 (0.73)	2.93 (0.64)	1.34	274	0.25

Key : F F ratio
          df   Degrees of freedom
          p   Significance value

Table 8.7: Relationship between Categories and Departments using One-way ANOVA

There was a significant effect of 'Department' on the categories of 'Strategy' (F =3.28, df=281, p=0.01), 'Participation in policy' (F =2.90, df=296,p <0.01), 'Use of information' (F =3.58, df=282, p =0.01), 'Empowerment' (F =3.28, df=296, p <0.01) and 'Leadership and structure'(F =3.40, df=284, p =0.01). It could be concluded therefore, that the department in which respondents worked had a significant influence on the way they responded to questions within these conceptual categories and that respondents in Departments Two and Six had more positive feelings about the way the Group worked.

8.7 ANALYSIS OF RESPONDENTS' COMMENTS

Sixty-seven people (21% of respondents) added comments on the back of the questionnaire. Most comments tended to be negative, which is to be expected, but a few individuals included positive remarks. The greatest number of comments referred to morale in Group A; 13 respondents claimed that morale was low and motivation poor. Another two people stated they did not feel valued. This was linked to feelings of anxiety about job security, mentioned by six people, poor promotion prospects (three people) and

a general lack of trust between management and shop floor workers (four respondents). Two people also maintained that there was little contact between managers and employees.

Another topic which invited a lot of criticism was communication within the group. Twelve people felt there was a general lack of communication at all levels, but two thought it was a complex issue which management was attempting to improve. A lack of clear vision was noted by four respondents and a need for more feedback was cited by two others. Another two argued that there was not enough forward planning and one individual suggested a more objective approach was needed to make the organisation more efficient.

Seven people claimed that managers failed to listen to the opinions and experience of shop-floor workers and two felt that ideas and opportunities should come from an industrial level as a matter of course rather than being implemented top-down. A further three employees pointed out that they felt management didn't fully use the skills and experience of its workforce. Five respondents stated that they were given no advice on career advancement and that information on training opportunities was poor. Three people thought training courses were ineffective and often repeated previous lectures or videos. One person recommended more training in technical skills, while another maintained training was only offered when it benefited the company, not the employee. One respondent suggested that training opportunities were limited by lack of time when employees could be spared; this in turn related to a lack of resources and smaller numbers of employees doing the job. Six people maintained that work was frequently hindered by lack of resources, and another three claimed that too many good employees had been made redundant and their skills lost.

A large number of comments implied criticism of the way Engineering Company 1 was managed. Eight respondents complained of the way in which management positions were filled by graduates with no knowledge of the job, rather than experienced employees who had moved up through the company. Three individuals thought that organisational learning occurred for the benefit of managers, not employees, and one

person stated that he had little faith in management's capabilities. Two employees from Department 3 contended that FLMs interfered unnecessarily in their jobs, though they were quite capable of working without close supervision. A further two respondents were sorry that the Group Manager had left and felt the group was now leaderless.

Several employees (four) accused managers, particularly FLMs, of favouritism towards certain subordinates and one person felt that opportunities were only offered to favoured workers. Three people felt that there was a 'them and us' situation between industrial and project or planning workers, with industrial employees being treated in an inferior way. One person claimed the pay system was unfair and didn't reward skills and experience adequately. Four respondents noted feelings of resentment among permanent employees towards short-term contracted staff paid at a different rate, some of whom were ex-Engineering Company 1 employees who had been paid redundancy money.

On the change process in general, seven respondents stated that in their opinion, Group A is better now than before the changes or that things are slowly improving; one person mentioned the pride many workers feel about being part of the Dockyard. However, eight people thought that Engineering Company 1 was less efficient and professional today and that more changes are needed. One employee declared that he had no confidence in Engineering Company 1's ability to manage the Dockyard. Two people felt that Engineering Company 1 was too dependent on Government policy, one suggested that the age and design of the buildings hindered progress and another that the change process is hampered by resistance at all levels. The fact that change is taking place at different rates in various sections of the company is causing problems, another employee pointed out. Many of these comments appear to refer to the whole of Engineering Company 1, not just this Group. This may be because there has been a focus historically on the dockyard as a whole. Although the questionnaire was carefully worded to refer to Group A, rather than the company as a whole, it may be that some questions were interpreted by respondents as applying to Engineering Company 1 generally.

Two respondents maintained there was currently too much responsibility without any increase in reward, one felt that Health and Safety regulations were less stringently

adhered to than in the past and another mentioned the increased stress among workers now. One employee commented on the anxiety felt throughout the organisation about terms and conditions of employment. One person mentioned that the current focus on adaptability and flexibility was unpopular while another thought that there was too much emphasis on inter-trade working. Other miscellaneous comments included remarks about the inefficiency of the planning department (two people), the opinion that there is no learning in the group (one) and the fact that the questionnaire was a waste of time, or worse (four respondents).

8.8 DISCUSSION

Results from this phase of the research indicate that although Group A could not claim to 'be' a learning organisation, it had moved towards a learning orientation in some respects. However, as there was no data available from before the time the new Group Manager joined the company or from another Group where changes of this type had not taken place, it cannot necessarily be assumed that the development of learning organisation characteristics was entirely due to the initiatives introduced by this Group Manager. The Group appeared to be most like a learning organisation in the area of empowerment and in terms of employees' individual learning and self-development (mean scores for the 8 scales showed that empowerment scored most highly, followed by individual learning). However, the reliability coefficient of the category of empowerment was low, suggesting that there may have been too much disparity between individual questions and hence the positive score of this category may have been misleading.

The most positive responses were also given to questions in these two categories. The only statement with which over 40% of respondents strongly agreed was the assertion that employees were allowed to get on with their work without close supervision. Over 30% of respondents strongly agreed that they possessed the necessary skills and expertise for their jobs. Mean scores for individual items confirmed the most positive responses were to these two statements. Employees appeared to be happy with their degree of empowerment and were capable of working in teams, with supervisors

180

providing coaching and support, rather than control. Many respondents indicated a positive attitude towards their own learning and development and seemed confident to take responsibility for their own education and training needs within the group but felt that more trust and openness needed to be generated between management and employees.

Other individual items which produced very positive responses (ie. over 65% agreed) were the regular reading of the two in-house magazines, the flexibility of people's jobs and roles, high standards of work and good working relations. Mean scores of individual items confirmed these positive findings; two more statements also produced high mean scores (ie. over 3.60); respondents were proud of the quality of their work and as members of work teams were committed to the job.

The scale with the lowest mean score was employee participation in policy making, this was the only category in which the mean score was below 2.50. The lowest number of respondents strongly agreed to three statements all connected with employee participation in policy making; very few thought that employees' views were reflected in policy statements, that company policies catered for everyone, or that people voiced differing opinions. Low or very low mean scores for individual variables in this category corroborate these findings. It may be that this is one of the directions in which the company has chosen not to move at present, perhaps because other groups in the company have not yet undergone the same level of reorganisation.

Nevertheless, the chance for all employees to take part and contribute to policy decisions would be a logical extension to the process of empowerment already under way in the company and would foster open debate on important issues and working through conflicts as a means of reaching decisions through consensus (Pedler et al 1997). The extent to which this would be possible may be limited by the lack of change in other Groups of Engineering Company 1 though, or by the lack of shared information throughout the Group. Other barriers to employee participation in policy making might be a reluctance on the part of managers to relinquish control and adopt an advisory role, or

resistance by staff to this type of involvement due to lack of trust or inappropriate reward systems geared to recompensing individuals who conform to management expectations.

Other individual items which demonstrated negative responses (ie under 20% agreed with the statements) were an improvement in the atmosphere, no increase in stress and no excessive pressure, a free flow of communications in the organisation, rewards for effort, consultation on the success of plans implemented and awareness of the Group/ company vision. These negative findings were confirmed by low mean scores on these items. Clearly stress was a significant issue in this Group and one which had probably been exacerbated by recent changes and the associated insecurity over the future of jobs and the dockyard in general. These fears had also affected the atmosphere within the Group, which many felt had deteriorated. These views were of course influenced by the informal culture of the organisation; 77.1% of respondents had worked in the organisation for over ten years and most had had expectations on starting work there of a job for life, these factors inevitably produced an impact on attitudes towards major changes.

Respondents' views on the way they were rewarded were again rather negative. There is a strong argument for linking rewards and incentives to corporate aims and values; where such links are in place, organisational objectives are reinforced, but where they are not conflicting signals are passed to the workforce (Bradley 1995). It would appear also that the management needs to seek ways of articulating their vision more clearly to employees, many of whom are perhaps unsure of the direction in which the Group and the company as a whole is attempting to move. The perceived lack of shared vision here is clearly a significant problem. Senge (1990b) claims that vision provides the energy behind organisational learning and highlights the importance of *shared* vision as the means of inspiring commitment, as distinct from imposed vision which is only likely to achieve compliance.

The category 'use of information' also produced negative results, respondents particularly disagreeing that there was a good flow of communication in the Group. Again findings from this section may have been influenced by recent uncertainty

threatening the future of the organisation, when some employees felt they were not kept informed of events. Moreover, a deeply entrenched culture had traditionally assumed that management did not share information with the workforce. This assumption might be altered by the growth of a climate based on trust, and shared information which would benefit both managers and shop-floor employees (Miller Hosley et al 1994). If this Group is to continue in its efforts to become a learning organisation a greater recognition of the importance of such issues is essential (West 1994a).

There appeared to be a relationship between responses to each of the eight categories and whether respondents were industrial or non-industrial workers. A significant relationship was also found between these categories and the respondent's work department in five out of eight cases. However there was little relationship between categories and the number of years respondents had worked in the dockyard.

8.9 RECOMMENDATIONS

Following the completion of the questionnaire survey a number of recommendations were made which, it was felt, would have assisted the smoother implementation of the changes in Group A and might apply to any further reorganisations in this or another Group. Firstly, it was recommended that a concisely-worded Group vision for the future should be designed as the initial stage of any future change programme. This should express the aims, both short and long-term for the Group. This vision then needs to be communicated clearly to all members of the Group, whatever their status, through a variety of methods, both formal and informal. Management behaviour should also demonstrate a commitment to this vision.

Secondly, the workforce as a whole should be well-informed at all times of developments within the company and external opportunities or threats. Again, this information needs to be disseminated through a variety of methods, so that communication throughout the company becomes more systematic. Improved communication of useful information is likely to enhance the atmosphere in the Group and encourage a climate of trust.

Both employees and managers perceived the empowerment initiative as having been successful. If this were the case, this sharing of power should be extended to a wider involvement in decision-making relating to the Group as a whole. Shop-floor workers appeared to have derived greater job satisfaction than previously from an empowered approach to their own jobs, it is suggested that they might now participate in larger scale policy making.

Changes to the reward system currently operating in the Group are also advocated. The present system of both financial and non-financial rewards reinforces old established methods of behaving and tends to discourage new ideas and extra enthusiasm. It is recommended that the system of rewarding members of the Group be modified to compensate people for contributing ideas and effort and experimenting with different approaches.

8.10 SUMMARY

The main indications from the questionnaire survey are that Group A could not at this time be said to conform to the notion of a learning organisation overall. However, certain characteristics of the Group had developed in line with learning organisation principles. The results indicated that to some extent employees were empowered and made decisions relating to their own work, individual learning and self-development was encouraged, the Group's structure facilitated learning and the Group's climate focused on learning. Other hypotheses were disproved. Group A proved to be like a learning organisation in fewer aspects than anticipated; many changes would need to be made to the communication system, Group strategy and leadership style and employees would need to be involved in policy making and in establishing links with the external environment before this was the case. Unfortunately, these changes appeared unlikely to take place as little progress had been made since the Group Manager left.

The results of the questionnaire proved to be disappointing to managers in Group A, who had perceived the changes they had implemented as successful, particularly in improving the performance of the Group. The questionnaire did not attempt to measure

organisational or group performance, however. It appeared that lower level employees were less confident about the value of the changes or the degree of learning taking place within the Group.

CHAPTER NINE

FOCUS GROUP INTERVIEWS

GROUP 'B'
ENGINEERING COMPANY 1

9.1 INTRODUCTION

It was suggested during an early meeting with senior managers at Engineering Company 1 that it would be beneficial to both the company and the research project to carry out a second questionnaire study a few months after the first in another Group where changes had not taken place. As a preliminary to this a meeting was arranged with the senior Manager of a second Group (henceforth referred to as Group B). It was decided to conduct several focus groups to explore issues that had emerged from the questionnaire survey in Group A in order to provide a comparison between Groups and to identify features specific to Group A which were likely to have resulted from the change programme implemented there.

9.2 BACKGROUND TO GROUP B

Group B, as part of the dockyard, came under private management in 1987 and over the next few years underwent a number of changes, the greatest being a significant reduction in staff numbers through voluntary and enforced redundancies. In 1997 following this process, the group consisted of around 180 engineering staff, working primarily on ship and submarine projects at Devonport, but also with increasing frequency off-site in the UK and in support of Naval vessels throughout the world.

The Group was founded on a reservoir of specialist skills and expertise largely unique to Engineering Company 1. However the value of these skills may not always have been recognised by the company; this is reflected in the fact that a number of highly skilled personnel were offered redundancy on financially attractive terms between 1987 and 1995. This led to two problems; a shortage of fully trained skilled workers, particularly noticeable in early 1997, when the workload was high, and a great deal of resentment and low morale as a result of the redundancies. Employees were invited to apply for voluntary redundancy, but it was not granted to all those who applied, and many members of the remaining workforce felt that those who were granted redundancy were not necessarily those who deserved to go, or those whom the Group could afford to lose. Some of those who left, accepted their 'lump sums' and were back working in the same

jobs on temporary contracts within a few weeks, albeit under less advantageous rates of pay and conditions. This created, understandably, a great deal of bad feeling in the Group.

The management structure had remained the same since privatisation (see Appendix 5 for chart). There were five levels of management with one Group manager at the top. Under the previous Group manager, two Groups had been amalgamated into one and renamed, though the two Groups largely retained separate identities. In 1995, a merger with another section was proposed and although a number of moves were undertaken in connection with this integration, the final implementation of the amalgamation under one senior manager had not taken place when this study was undertaken. In April 1996 a new Group Manager had been appointed from a naval background, who was attempting to integrate the different departments more successfully into one group.

The management structure remained extremely complex (See Appendix 5) and was further compounded by the existence of a number of Project Managers who were not part of this group but who regularly requisitioned workers from Group B for their projects (each project being a ship or submarine refit). Each Project Manager was responsible for organising his own project only to fit in with time schedules and work deadlines. Project managers did not appear to liaise with each other or with managers within Group B, consequently there were occasions when there was not enough manpower available to complete the projects. There were regular instances of up to three ships all needing to be worked on urgently but with only enough labour available to supply one, or at most two. This situation added to the stress felt in the workplace. There was clearly a need for better integration in this Group and a system by which employees could be made to feel more valued and better motivated.

9.3 SAMPLE

This part of the study comprised the use of two focus groups, consisting of four individuals in each group. It was originally intended to conduct another two focus groups, following the first two, but Group B was inundated with a huge workload following the

first focus group interviews and it did not become possible to spare members of the workforce from their duties again at that time.

The two focus groups differed in their membership, in that one was composed of four middle managers and the other of four industrial workers. Members of both groups were in their late twenties or early thirties; the management group was composed entirely of males but the industrial group included one female engineer.

9.4 AIMS

The focus groups were conducted with the aim of providing additional data of a qualitative and in-depth nature from a different Group within Engineering Company 1, to provide a preliminary comparison with Group A, in order to discern to what extent the development of learning organisation characteristics could be attributed to the management of change in Group A. It had originally been intended to use focus groups as a preliminary to a second questionnaire survey. However, the second survey did not take place, due to reservations on the part of senior management as to the advisability of further questionnaires at a point when an organisation-wide survey connected with gaining *Investors in People* (IIP) recognition was being conducted.

It was expected that the findings of this part of the study would contradict the results of the study in Group A in some aspects at least, as the major changes which had been implemented in Group A had not been carried out in this Group. It was not expected that at this time Group B would conform with the theoretical notion of a learning organisation.

9.5 RESULTS

This section describes in detail the findings of the focus groups on a wide range of relevant issues. Questions or 'probes' were kept as general as possible, so the topics covered in these interviews were largely decided by the interviewees. Results are presented here according to how many references were made to each topic; those issues which elicited most discussion are presented first. There are thirteen separate issues about

which a number of comments were made, then a final section describes remarks referring to other issues which were only mentioned by one or two individuals. Where certain topics were related to others during the course of the interviews this relationship has been indicated and attempts made to explain the association.

9.5.1 Pay and Rewards

The category which produced the greatest number of comments was the issue of rewards and the pay structure of the Group; these observations are illustrated in Table 9.1

No.	Comments
6	Plenty of overtime available but this causes stress
5	Many disparities exist within pay structure
4	Present system causes dissatisfaction
3	Current pay structure too complex
3	Insufficient & ineffective financial incentives
3	Other non-financial rewards needed
2	Unfair reward system means employees don't feel valued
2	Pay system requires complete overhaul
1	Poor rewards result in lower standards

Table 9.1: Employees' Comments on Pay and Rewards

There were twenty-nine remarks altogether which referred to rewards. Middle managers felt that the system of financial rewards currently in place caused a significant amount of dissatisfaction among employees and was unneccessarily complex. One individual observed that the old Civil Service pay system had been fairer than the present one. A large number of the statements referred to inconsistencies or unfairness within the pay scales; the system was described variously as confused, ineffective, unfair, inefficient and poor.

The issue of rewards was linked to motivation by several individuals. One person said that financial motivation was not effective in the Group and two others felt that there were insufficient incentives, financial or otherwise, for meeting deadlines or working overtime. One respondent from the management focus group argued that the Group did not currently possess the facility to reward willing workers. Another individual maintained that employees would feel happier if they understood how they fitted into the system and felt a more clearly defined pay structure would clarify this. Several interviewees mentioned disparities within the system and claimed that different rates of pay existed for doing the same job; the higher rate was only offered if the boss was prepared to argue his employee's case, which frequently did not happen.

Respondents intimated that there was plenty of overtime available which carried with it extra pay, but this was also related to stress; employees often felt under a lot of pressure to work overtime in order to keep up with the job and meet deadlines. Financial rewards were also mentioned in conjunction with the atmosphere within the Group: two individuals argued that inconsistent rates of pay and working conditions had an adverse effect on the general atmosphere in Group B. One person complained that the pay system was non-incremental and the scale had been frozen for the past four to five years.

There were four observations which referred to non-financial rewards. One interviewee advocated an increased use of praise and 'pats on the back', emphasising that employees wanted to be told when they had done a job well. Another individual suggested other kinds of rewards and 'thank yous' would be appreciated and a third proposed the idea of a buffet lunch for middle managers on successful completion of a major project.

Rewards were also associated with the quality of work within the Group by one person who maintained that work was not being done to the highest standards because effective rewards were lacking. Another two respondents felt that an unfair reward system contributed to employees' lack of belief that they were valued by the company. When asked what most needed changing in the Group, one individual recommended a

complete overhaul of the pay structure while another argued the most urgent need was for a more efficient pay scheme.

9.5.2 Communications

The second highest number of observations made by interviewees in these focus groups concerned communications and the use of information in the Group; there were twenty-seven statements which were associated with this issue (see Table 9.2).

No.	Comments
6	Information not shared
5	Communication system needs improving
4	Communications good in theory, poor in practice
3	Information from management discussions doesn't filter down
2	Some managers do not possess information themselves
2	Employees feel undervalued through lack of information
2	Verbal information often distorted
1	More information from local TV News than from the company
1	Poor communications affect pride in the job
1	Managers do not communicate company/Group vision

Table 9.2: Employees' Comments on Information and Communications

People in one of the interviews agreed that their department had a good communication system on paper, but in practice it was less than effective. Three individuals asserted that information from management discussions failed to filter down to the shop floor, while four comments suggested that employees doubted whether managers always possessed the appropriate information themselves. One respondent claimed that managers sent computer memos to each other but questioned whether the information contained in these was relevant.

When asked whether information was shared throughout the Group, respondents in one interview all laughed, while in the other group people suggested that information was shared to a lesser extent than one would expect. One individual suggested that more information was obtained through the local TV News than from the company, but noted that sometimes employees received an 'emergency brief' just before information was released to the media.

Several respondents indicated that communications was one of the areas within the Group most in need of change. Two people contended internal communications needed improvement throughout the company, while another advocated more team briefings and discussion meetings as a means of dispersing important information. One middle manager proposed monthly meetings to discuss *Investors in People* and other similar issues and another person asserted that there was currently no forum for discussion in the workplace.

Two individuals linked poor communications to the fact that many employees do not feel valued by the company; they suggested that people's sense of worth would be improved if they were informed regularly about what was going on in the Group and in the company. A number of observations also associated lack of communication with management-employee relations; there was said to be little personal communication downwards from top managers and what information there was often became distorted as it was passed on verbally; one individual suggested that direct information would be preferable to the interpretations of four intermediate people.

One respondent linked a lack of regular discussions to poor motivation among employees and managers, while another associated poor communication skills with ineffective company vision, claiming many employees were not aware of long term strategy and goals because managers failed to communicate these. One person observed that employees' pride in their job was often complicated by other factors such as poor communication. Asked what most needed changing in the Group, three individuals mentioned aspects of communications, advocating a better flow of information and more

co-ordinated working through improved communications, particularly with project managers.

9.5.3 Appraisals

Interviewees made twenty comments which referred to annual appraisals (see Table 9.3). Four people said that appraisals rarely took place or that they had not had one in the past few years. One manager remarked he had heard that only 14% of employees underwent appraisals throughout the dockyard. In one focus group the response to the question: 'Do you have annual appraisals?' was laughter.

No.	Comments
4	Appraisals rarely take place
4	Present appraisal system too time-consuming
4	Appraisal reports influenced by workplace relations
3	Some form of appraisal a good idea
2	System can be unfair; dependent on personal views of boss
1	Decisions on redundancies were based on appraisals
1	Appraisals often not followed up
1	Could be a useful opportunity for discussion

Table 9.3: Employees' Comments on Appraisals

Two people in one group said they had not had any appraisals and one in the other group claimed his last appraisal had taken place four years previously. However, the other members of both groups had had regular annual appraisals. Six people agreed that annual appraisals were a good idea; two said they provided useful feedback and should take place regularly, but one expressed doubt about the way appraisals were used.

Two employees thought that appraisals were unfair because they relied on the personal views of one boss and his opinion could affect your chances of promotion. One person suggested that information from appraisals had been used to make decisions on

194

redundancies. Another individual felt that appraisals were often a waste of time because nothing was done about them. Four people, two from each focus group, maintained reports from appraisals were coloured by workplace relations and that this was too subjective.

Only three respondents agreed that appraisals were always helpful; one person thought they provided a useful opportunity for discussion. The management group felt that their ongoing two-weekly staff assessments and maintenance of competency and training record cards was too time-consuming and suggested a compromise between this and annual appraisals. The same group of people advocated some form of simplified regular appraisal with the aim of improving the performance of the Group and implementing performance-related pay. Appraisals were clearly linked with rewards and promotion, which would be expected as the latter are some of the potential outcomes of the appraisal process.

9.5.4 Training

During the focus group interviews 18 comments were made which referred to training. These are shown in Table 9.4 below.

No.	Comments
4	Training courses offered regularly
3	Employees aware of trainng and educational opportunities
3	Often lose money through attending courses
2	Opportunities limited by lack of time available & expense
2	MBA the only useful qualification for managers
1	Amount of training is increasing
1	Would like a list of courses available
1	Need more choice in order to widen horizons
1	Problems with funding for MBAs

Table 9.4: Employees' Comments on Training

Generally speaking, the management group felt more positively about training than the shop-floor employees. Three people agreed that employees were aware of training and educational opportunities and were not reluctant to take advantage of these but it was sometimes difficult for them to be spared because they were needed to complete a project.

Individuals in the management focus group agreed that courses were offered to them on a regular basis, these were often associated with health and safety issues, and that the amount of training available appeared to be increasing. However, one individual pointed out that they had never been shown a list of educational courses and suggested this would be useful. Another claimed that some of the courses offered were very boring and employees would like more choice to enable them to widen their horizons.

Several remarks about training concerned financial considerations. One person argued that it was not worth employees going on courses as they lost money through having to travel in their own time and through missing overtime while another intimated that Engineering Company 1 was not always willing to pay course fees. It was pointed out that buying in replacement labour while someone was away on a course was expensive which tended to limit training opportunities. Another employee indicated that although the company normally paid training fees, if you failed a course or took a break in a long-term course it was rarely possible to continue.

The management group were concerned with the issue of MBAs (Master of Business Administration), claiming that this was the only qualification at management level which was of any value and it was the primary path to promotion. One person indicated that there was a certain amount of ill-feeling surrounding MBAs among middle management; those who did not possess the qualification were resentful of the promotion of others who did. Engineering Company 1 had become more reluctant to pay MBA course fees, which were quite expensive, and many individuals could not afford to fund themselves. There was also a general comment about improvements needed in the Group; several people agreed that more and adequate training was needed overall.

196

9.5.5 Project Management

Another topic which inspired a large number of observations was project management. This was an issue probably specific to Group B; project management was not mentioned in connection with the questionnaire survey in Group A. Eighteen references were made here to project management, these are illustrated in Table 9.5.

No.	Comments
8	Lack of liaison by Project mans. causes conflict in Group
3	Project managers don't co-ordinate time schedules
2	Lack of liaison leads to missed deadlines
2	Project management system needs to change
1	Projects should be better organised
1	Often too much work for manpower available
1	Project mans. cause employees unnecessary pressure

Table 9.5: Employees' Comments on Project Management

Concern over this issue was probably due to the internal structure whereby Project Managers worked parallel to, but not under the direction of the Group and as such frequently made amendments to the working schedule of Group B. At the time these interviews took place there seemed to be uncertainty as to where Project Managers fitted in; the researcher was informed that the system was shortly to change. Table 9.5 illustrates employees' comments on this issue.

One employee asserted that projects needed to be better organised and two individuals contended Project Managers failed to liaise with other managers and did not communicate their plans adequately. Problems of insufficient manpower occurred frequently; one manager cited a situation where there were three ships all reqiring work to be done on them within one week, with only enough man hours available to complete one ship in time to meet the deadline. It was suggested that project management had been 'flavour of the month for the past few years' and this had led to lack of accountability,

which had caused problems. Two people asserted that failure to meet deadlines was frequently due to lack of communication on the part of Project Managers. One individual claimed that Project Managers were responsible for causing unnecessary pressure at work because of their failure to co-ordinate timetables with other managers and intimated that it was difficult to disagree with them as some Project Managers 'could be threatening'.

Everyone in the focus groups agreed that much of the conflict in the Group was due to poor management of labour caused by a lack of liaison between Project Managers and other managers in the Group. One manager described a situation where 'you hope one ship will be delayed so that you can just about manage two simultaneously; three would be impossible.' Project management was described as needing to change or requiring reorganisation generally by respondents in both sets of focus groups.

9.5.6 Management Style

A number of comments on management style also emerged from the interviews; there were thirteen of these, which are shown in Table 9.6. Three related to relations between employees and management and the general work atmosphere. Employees were rather guarded about their comments, implying that some managers were helpful and trustworthy, while with others you had to be more careful. Everyone agreed that some of the management team were very supportive and approachable, although two employees maintained there was always friction somewhere.

No.	Comments
4	Some of management team supportive and approachable
3	Poor employee-management relations assoc. with man. style
2	There is always friction somewhere
2	Open management style leads to better workplace relations
1	Top managers should walk around more
1	Amount of empowerment depends on individual boss

Table 9.6: Employees' Comments on Management Style

One individual thought that top managers should 'walk around more' and get to know their employees and that this would also improve communications.

One of the groups mentioned a link between empowerment and management style, claiming that although many aspects of the job were dictated by work documents (WODS) there was a certain amount of leeway as to how the work was done, which depended largely on the style of the individual boss. The frequency of appraisals was also dependent on management style; two people remarked that the honesty/openness of individual managers was important, as it influenced workplace relations and the effectiveness of appraisals.

9.5.7 Job Security and Organisational Change

References to redundancy, job security and organisational change were combined here because the three isues were linked by respondents in their answers. There were eleven references to these topics altogether; these are illustrated in Table 9.7. Redundancies were mentioned in conjunction with the general atmosphere in the Group. Three people observed that there was a lot of bad feeling about voluntary redundancies in particular; many employees had applied for this as the terms were financially favourable; those who were not successful felt resentful towards those who were.

No.	Comments
3	Bad feelings about voluntary redundancies
3	Many employees insecure and anxious
2	People have had too much change
2	A lot of wastage formerly; things needed to change
1	Redundant employees who returned caused discontent

Table 9.7: Employees' Comments on Job Security and Organisational Change

One person cited examples of individuals who had accepted redundancy packages and left and who were now back working in the company; this inevitably led to discontent.

Three employees discussed their worries of enforced redundancy, contending this was their main concern every time changes were implemented, and that most employees now felt insecure about the future of their jobs. Fears of redundancy were also linked to stress, these worries were thought to be an important factor in determining the level of stress in the workplace.

Respondents complained about the amount of change taking place in the Group, claiming that everyone had had enough of change and many employees were failing to cope with constant uncertainty. However, two individuals noted that there had previously been a lot of wastage and things probably needed to change. Unfortunately this had led to feelings of uncertainty among employees in the Group.

9.5.8 Deadlines

Working to deadlines appeared to be a significant factor in the culture of Engineering Company 1 generally and of Group B in particular. Although the relevance of this issue to the learning organisation is not immediately apparent, the comments of employees about deadlines have been included as they relate to other factors such as the atmosphere of the workplace and the level of stress. Ten comments were made during the course of the focus groups which referred to deadlines, these are illustrated in Table 9.8. Two people indicated that concern over meeting deadlines had a detrimental effect on the work atmosphere, while another implied that achieving deadlines assumed more importance than putting right mistakes and learning from them.

No.	Comments
4	Trying to complete jobs on time causes problems
3	Deadlines lead to stress
2	Need to meet deadlines results in poor work atmosphere
1	Achieving deadlines sometimes overrides quality

Table 9.8: Employees' Comments on Deadlines

Almost everyone in both groups agreed that trying to complete jobs on time caused problems. One person suggested that managers sometimes found it difficult to motivate the workforce when there was a constant pressure to keep up. Everyone in one focus group agreed there was a lot of stress in the job which was a direct result of trying to meet deadlines. Three employees argued that the problem of tight time schedules was exacerbated by Project Managers' lack of accountability and their failure to liaise with other managers on timing and allocation of work. Most people advocated co-ordination of time schedules as a means of improving performance and relieving pressure generally.

9.5.9 Atmosphere and Morale

There were ten observations which referred to atmosphere or morale; because of the way in which the two issues were linked by respondents it was decided to record and present these together (see Table 9.9). Employees in one group asserted morale and atmosphere was poor throughout the Group and thought this was true throughout the dockyard. One individual claimed the atmosphere was not supportive and that the main concern in the Group was to meet deadlines. Another felt that low morale was affecting the standard of work produced.

No.	Comments
4	Morale and atmosphere poor throughout Group
2	Interaction with other groups detracts from good team atmos.
1	Low morale affects standards of work
1	Association between dockyard and Navy causes resentment
1	Atmosphere not supportive; main concern to meet deadlines
1	Between workers in Group atmosphere is good

Table 9.9: Employees' Comments on Atmosphere and Morale

The responses in the second focus group composed of industrial workers, differed slightly, respondents claiming the atmosphere within their work teams was good but that

interaction with other sections of the dockyard detracted significantly from this. One individual argued that specific problems were caused through association with the Navy. Another indicated that competition between Groups within the dockyard affected morale within Group B. However, it was felt that between employees inside the Group there was a supportive atmosphere.

9.5.10 Feeling Valued

Also mentioned a number of times was the extent to which employees feel valued by the Group or by the company; there were nine references to this (see Table 9.10) Employees in one focus group thought they were not valued on the whole, though some managers showed considerable appreciation of their staff. It was felt that financial concerns often overrode human considerations; employees were merely seen as a 'means to an end'.

No.	Comments
3	Industrial employees not valued
3	Financial considerations more important than people
1	Some managers appreciate their staff
1	Better communications could lead to more trust
1	More feedback would make employees feel more valued

Table 9.10: Employees' Comments on Feeling Valued

Many bosses were just trying to get work done quickly and cheaply and assumed employees would do as they were told without question.

An association was made between feeling valued and workplace relations. Three employees observed that relations sometimes suffered from an overemphasis on financial value; they argued the company looked at what people were 'worth' in financial terms, while remaining unaware of the individual potential of their employees; talent, skills, expertise, specialised understanding, etc.

One respondent advocated more feedback from management, suggesting employees would like to know what their managers think of them; this would enhance feelings of value. Another individual linked lack of feeling valued to poor communications, arguing that people would feel more trusted and valued if they were kept informed of what was happening. There was a general feeling that employees were not sufficiently valued by their immediate managers or by the company, but this was linked to a number of other problem areas in the Group.

9.5.11 Stress/ Pressure of Work

A number of references were made to stress or pressure during the course of the focus groups; 8 comments mentioned this topic, these are shown in Table 9.11. Respondents confirmed that people in the Group felt very stressed at work and that pressure was tending to increase. One individual suggested that this was because authorisation forms did not provide guidelines on the number of hours available for each job and another person linked stress to poor planning and lack of liaison between Project and other managers. Pressure was also associated with lack of job satisfaction; one employee felt people enjoyed their work on the whole but extreme pressure was liable to take away the pleasure.

No.	Comments
4	A lot of stress, pressure is increasing
2	Pressure limits management's ability to motivate staff
1	Stress related to poor planning
1	Pressure reduces job satisfaction

Table 9.11: Employees' Comments on Stress

Not surprisingly, stress was also linked to issues of motivation and deadlines. Two individuals said the amount of pressure affected management's ability to motivate their employees, constant stress tended to lead to poor motivation. Three employees

argued that stress was directly related to trying to meet deadlines and that delays always caused stress. One focus group enlarged on this, suggesting that working on three ships at a given time was acceptable more than that was likely to induce unbearable pressure particularly for middle managers. Others maintained working on three ships simultaneously was too much and said they often hoped something would go wrong on one ship so that it would be possible to complete the other two on target.

9.5.12 Job Satisfaction

Job satisfaction was mentioned eight times during the focus groups; when asked whether most employees found their jobs satisfying, replies were mixed (see Table 9.12). People in one group thought that work was no longer as pleasant for most employees as it had been previously due to stress and job insecurity. Respondents in the other focus group agreed with the fact that many did not enjoy the job as much as before but thought that nevertheless employees did derive a certain amount of satisfaction from their work. A decrease in this was linked to pressure of work.

No.	Comments
3	Stress & job insecurity have reduced job satisfaction
2	Completion of large projects can be rewarding
2	Pride in work spoilt by disruption & lack of continuity
1	Everyone doing several jobs simultaneously

Table 9.12: Employees' Comments on Job Satisfaction

Two managers pointed out that for those in responsible positions the completion of large projects was certainly rewarding; employees at a lower level did not appear to feel the same way, however. They claimed that everyone was primarily there for the money and that there was little satisfaction for them in achieving organisational goals.

Lack of enjoyment of work was also linked to pride in the job and the absence of effective overall planning. Two employees claimed they felt proud of their work, but that

this was sometimes spoilt by disruption of the work schedule which meant they were unable to complete jobs, which then led to feelings of frustration. One individual commented that everyone was trying to do several jobs at the same time and this removed any sense of job satisfaction.

9.5.13 Vision and Overall Planning

These two subject areas were grouped together for purposes of analysis because of similarities in the way focus groups responded and the way they linked the two issues in their answers. Vision and planning were referred to six times in all, with a number of people recommending improvements to the current situation (see Table 9.13 for comments). Most respondents in both focus groups disagreed that a Group or company vision existed. Two employees thought there was a vision but that the workforce were not aware of it. One individual commented 'What vision?'

No.	Comments
3	Lack of overall planning
2	Group vision exists but employees not aware of it
1	There is a need to look at the whole picture

Table 9.13: Employees' Comments on Vision and Overall Planning

A lack of overall planning was referred to three times; one person thought this was the result of differing management styles, bosses each had 'their own ways of doing things'. Two others proposed the notion of a long-term co-ordinated business plan, with smaller short-term plane organised around it. Another employee linked overall planning with the need to meet deadlines and thought that with a more holistic strategy jobs could be staggered, which would mean deadlines were more likely to be met and pressure would be reduced.

9.5.14 Other Issues

A number of other topics of concern within the Group arose during the course of the interviews, these issues each inspired four comments or less and are analysed in descending order. There were four references to skills; people in both interviews thought that there was a lot of confidence in the skills and expertise possessed by employees and that everyone recognised the value of these. On the other hand, it was felt that a lot of skills had been lost through redundancy and that this was now affecting standards of work in the Group.

Respondents discussed what happened when mistakes occurred. It was suggested that minor failures were sometimes covered up but everyone knew when expensive mistakes took place. Most interviewees agreed that individuals were not blamed for mistakes; these were rectified where possible and action taken to prevent a recurrence, but it was also noted that sometimes the Group did not learn from mistakes; the same kind of problems might occur on every ship.

Obtaining components was seen as a frequent problem; employees claimed materials were often difficult to obtain and they might have to make do. They mentioned a ship that was currently being worked on, noting that a lot of components needed were not available. This problem clearly emanated from the traditional method of issuing parts from the Stores, a system inherited from the Ministry of Defence. Employees exlained that Groups were not allowed to hold components but had to requisition them from Stores via a complicated process which frequently resulted in long delays and a need to reorder.

Contractors were mentioned in a derogatory sense by two employees. One manager suggested people had a lot of 'gripes' about contractors who were not very knowledgeable about the job. Another employee claimed it could be difficult when contractors came to work in the group as someone had to oversee their job. One individual qualified this, arguing that they were frequently able to choose contractors they knew and could work with, thus avoiding potential problems.

Three comments referred to ideas contributed by employees. Two individuals described the use of a suggestions box, ideas from which were passed on to the Personnel

206

Group. They said that managers also asked for suggestions about certain issues; though this was thought to be a good method, it was conceded that few employees bothered to offer any suggestions. Individuals in the managers' focus group felt more negatively about the value of employees' ideas, claiming that many ideas offered were not helpful and good ideas were rarely put into practice.

On the question of empowerment, interviewees gave mixed responses. People in one focus group felt they had relative control over their work and were trusted to get on alone, but much of the work was also bound by statutory regulations to do with the military nature of the job. One person claimed employees were quite highly empowered but another thought there was less empowerment than in pre-privatisation days and that some people would like more responsibility than was currently granted.

Interviewees in both focus groups asserted that relationships in the workplace were generally good, particularly among those who had worked in the dockyard for many years. Several people thought that standards, while reasonably high, were not as good as they had been in the past, due partly to some of the factors mentioned previously; pressure of work, tight deadlines and loss of skills through redundancies.

One person mentioned the Unions, claiming that they had little power or influence in the workplace today. Another maintained that employees played no part in policy making in the Group; management implemented its own policies. There was also a comment about overtime; employees were instructed formally in their contracts to do overtime, but in practice they could decline. One individual contended that employees were not encouraged to experiment or try out new ideas in their jobs although they might like to, he maintained they would be penalised if they failed to follow set procedures. Again, these are obviously related to the highly specialised military nature of much of the work.

9.6 DISCUSSION

There was extensive dissatisfacton with the way rewards were allocated within this Group, blue collar workers felt that rewards were often unfair and not commensurate

with effort or achievement. Kohn (1993: p54) argues that rewards in many organisations 'undermine the very processes they are intended to enhance.' It would appear that there is a need to link rewards in this Group to the achievement of Group objectives in order to secure the commitment of its employees. Armstrong (1993) advocates the utilisation of reward systems specifically designed to encourage the accomplishment of organisational goals.

The climate in Group B is geared to overtime working because of the focus on meeting deadlines, which tends to carry increased stress for employees. The constant pressure of work may also remove many opportunities for learning, such as adopting an individual approach to work or trying out new ways of working. Many minor mistakes appeared to be hidden and often repeated, unless they were expensive and highly publicised; this suggested that neither individuals nor the group as a whole were learning from these experiences. Several people mentioned taking pride in their work but it seemed that frequent interruptions in the work schedule detracted from this.

Furthermore, the atmosphere in the Group appeared to be poor generally, although within certain work teams this was not the case, and interaction with employees from other Groups or with the Navy caused friction. These factors would suggest that Group B does not at this time possess a climate favourable for learning.

A high number of negative observations about communications indicated that the communication system was poor. Some individuals implied that they rarely received information through official channels, others that information was often distorted. Kaye (1995) recommends that information is co-ordinated and presented in a consistent manner so that organisational decisions and actions may be aligned to external circumstances. He maintains moreover that one of the main purposes of sharing information is learning and understanding. The way in which information was communicated around this Group appeared to vary between departments, depending on managerial style, but there was clearly no effective overall system. Respondents all disagreed that information was shared. Considered collectively these observations imply that the use of information here does not conform to the concept of a learning organisation.

The lack of a useful or practical appraisal system suggested that regular assessment of employees and discussion of their personal career aims did not take place, though a number of employees thought some form of feedback was required. Similarly, training, although offered to employees on a regular basis, did not take into account their personal needs or career objectives but was geared specifically to the job or focused on health and safety issues. Several employees indicated that they would like more choice of educational opportunities. Furthermore, members of the Group who took advantage of training offered often found it financially disadvantageous, which was a discouraging factor. In the light of these observations it would seem that the Group is not at present orientated towards the individual learning and development of its members.

The degree of empowerment among employees in Group B appeared to be limited and varied between departments. The problems inherent in developing empowered employees are often the result of long established roles of direction and control which are hard for managers to relinquish (Gardiner 1996). Although some members of the focus groups felt they possessed a degree of autonomy in their jobs, most conceded that the work was controlled by statutory regulations which left little leeway for different ways of working or extra responsibility. Industrial employees appeared to take charge of ordering materials but this was often an unwelcome responsibility as the process was compounded by the inefficiency of the central stores.

Employees clearly recognised the talent and expertise of members of their Group but management was perhaps only beginning to understand the value of its human component, its 'most powerful, creative, innovative asset' (Leppitt 1993). Ripley and Ripley (1992) argue that an empowered workforce enables the strength of all its members to be harnessed and utilised for the benefit of the organisation. The Group had a long way to go before it could claim to be fully exploiting this potential. The current lack of appreciation of employees' skills and the low degree of control most individuals possessed over their work suggests that employees in the Group could not be considered empowered.

The large number of problems surrounding project management indicated that strategy within the Group was disorganised and there was little or no overall planning. This was also linked to difficulties in achieving deadlines, which seemed to cause constant pressure and conflict in the workplace. Members of both focus groups doubted the existence of a Group vision and were sure that employees throughout the Group were unaware of such a vision. This would also seem to indicate a poorly co-ordinated strategy in the Group at present and a lack of orientation of this strategy towards learning.

Opinions on management style varied; some managers were seen as effective leaders, supportive and approachable, while others were perceived as less helpful. It was also felt that more frequent visits by senior managers would improve workplace relations. Vyakarnam and Jacobs (1996: p 675) highlight the 'clear leadership' evident in successful firms and suggest that this is best achieved through frequent non-confrontational meetings, based on a shared vision. They suggest furthermore that one of the roles of leaders is to 'build and manage relationships' (ibid: p676). In this Group relations between employees and management were viewed as generally poor and requiring more openness. It would be difficult to claim therefore that the leadership of Group B is one which encourages employees to learn, either individually or collectively.

Employee participation in policy making was mentioned by only one employee in the focus groups who stated that employees played no part in policy making. If this is the case, the Group could not be said to conform to a learning organisation in this respect.

Other characteristics of learning organisations; an organisational structure which facilitates learning, and links with the external environment were not mentioned in the focus groups. It would be difficult to draw any conclusions regarding these issues, except that they were clearly perceived as unimportant to employees in the Group and it is unlikely therefore that such characteristics are in place at this time. It was not expected that Group B would prove to possess learning organisation characteristics as no attempts had been made to move in that direction. The findings from this group were intended to act as a comparison with Group A. The new Group manager of Group B had announced

his intention to develop the Group as a learning organisation and to use these findings as a basis for putting learning organisation theory into practice.

9.7 COMPARISON BETWEEN GROUP A AND GROUP B

From the results of the research in Group B it is possible to compare Group B with Group A, to highlight some significant differences and to note some similarities. There were a number of initial differences between the two groups which would be expected to influence the findings of the research in each. Firstly, Group A had appointed a new Group Manager in 1992, with the specific task of reorganising the Group, while Group B had remained under the leadership of one manager from privatisation in 1987 until 1996, when the new Group Manager was appointed; hence Group A was likely to be three years ahead of Group B in the change process. Secondly, the management structure of Group A had been radically altered, with a number of middle management layers removed, while Group B had retained the traditional structure with five levels of management between shop floor employees and the Managing Director. Furthermore, the Group Manager of Group A had attempted to develop the Group according to the principles of a learning organisation, while no such development had been attempted in Group B. In order to achieve more effective use of manpower, Group A had encouraged employees to become multi-skilled and to move from department to department; in Group B, employees possessed highly specialised skills, which at the time of the focus groups appeared to be constantly in demand. It would probably not be realistic, therefore to foster multi-skilling of employees in Group B.

In Group A employees' perception was that they were empowered and possessed a degree of authority over their jobs. This was probably not true of employees in Group B, the military nature of much of the work, tight deadlines and poor liaison between managers meant that few opportunities were provided for employees to make decisions about their work.

Facilities for individual learning in Group A were seen as reasonably good overall. However, a number of respondents mentioned dissatisfaction with the provision

of training; a majority of employees did not feel this took place regularly and several individuals added adverse comments about the content of training courses provided. 50% of employees in the focus groups in Group B thought training was offered frequently and employees were aware of educational opportunities. There were a number of other criticisms of training provision however; as courses were often outside Plymouth, opportunities tended to be limited by time available from the job and participants often lost money through off-site training. There appeared to be dissatisfaction with the process of training throughout Engineering Company 1, though employees in Group B were probably more critical than those in Group A.

Employees in both Groups commented on the appraisal system. Most respondents in Group A claimed to have received annual appraisals, but fewer in Group B agreed this was the case. A number of employees in Group A felt that their appraisals were not satisfactory in that they did not incorporate the personal career aims of the employee concerned. in Group B employees expressed concern over the way appraisals relied on the employee's relationship with one manager, and the way appraisals could be used to make decisions on promotion or even redundancy.

Little information was obtained on rewards from Group A; only one item in the questionnaire was concerned with this topic and it was only mentioned in the additional comments of one employee from this Group, who claimed the pay system was unfair and did not reward skills and experience. The mention of pay and rewards in Group B however, stimulated extensive discussion. Taking into consideration the strong feelings expressed by most of the interviewees in Group B about the inconsistencies and complexities of the pay system and the dissatisfaction caused by this, perhaps the questionnaire should have addressed the issue of financial rewards in more detail. It may be that this is a company-wide problem; more probably though, it is an issue of particular concern in Group B because of disparities which have arisen through the amalgamation of several Groups into one.

The way in which information is used appears to be a problem throughout Engineering Company 1. Respondents to the questionnaire (Group A) indicated their

dissatisfaction with the communication system and few believed that information was openly shared throughout the Group. A number of individuals also added comments expressing criticism of communications within Group A. In Group B employees similarly disputed that information was shared or that communications were effective. Several individuals in Group B suggested that this was one of the areas of the group most in need of change.

In Group A respondents were a little dissatisfied with the leadership style in the group and the relationship between employees and management was felt to be lacking in trust. Group B were similarly critical of the management style and the general work atmosphere, though some managers were described as supportive. Neither Group thought there was enough contact between shop floor workers and senior company managers.

The results of the questionnaire suggested individuals in Group A found the atmosphere generally supportive and friendly. In Group B, though the focus groups provided too small a sample to be considered representative, the results suggested the atmosphere was felt to be less supportive and morale was poor within the Group. It might be speculated that the better atmosphere in Group A was a result of the implementation of learning organisation principles, though it would be difficult to demonstrate conclusively that this was so.

There was a small number of features common to both Group A and Group B, indicating that these might be characteristic of the company as a whole. Respondents in both groups were confident of their skills and expertise and their ability to perform their work well. However, redundancies had lowered morale and introduced a high level of job insecurity in both Groups. At the time of both sets of research the future of the dockyard was still uncertain, although this has largely been resolved since then, but the problems associated with this had influenced security, stress and the general work atmosphere. Fairly high levels of stress were evident within both Groups, though these were perhaps greater in Group B due to the additional problems caused by project management and the necessity for constant overtime.

It can be concluded therefore, that although neither of these Groups conformed to the theoretical notion of a learning organisation, while Group A may have been said to possess some learning organisation characteristics, Group B probably did not at this time. Furthermore, it is probably fair to say that the extent of development of a learning organisation in Group A did not match the claims of the Group Manager or meet the expectations of other managers interviewed. However, progress made in Group A towards becoming a learning organisation would appear to have been achieved as a result of the change programme, as there was little or no evidence of similar progress in Group B.

9.8 SUMMARY

This chapter has described the research undertaken in Group B. The conclusions which may be drawn from this study are necessarily limited due to the small sample size and should be viewed with caution. However, these findings acted as a useful comparator to the findings of the research in Group A.

Employees felt generally positive about the store of skills and expertise held by members of the Group and felt that the value of these was recognised within the group. However, the results highlighted a number of areas in the Group where the present systems are unsatisfactory, and pointed to the need for change. There was perceived to be a great deal of disparity and unfairness in the present system of pay and rewards, which affected a number of other issues in the Group. Communications were also felt to be inefficient, verbal information was often distorted and employees felt that much information was not shared with them.

It was felt that appraisals could provide useful feedback to employees, but they needed to be undertaken on a regular basis with all employees and in a consistent manner, which was not currently the case. A number of problems were caused by the lack of alignment between project management and management of the Group generally. These were probably exclusive to Group B; the project management system was due to be reviewed in mid-1997. Reorganisation of the system should relieve some of the stress in

the group. Training provision was perceived as generally satisfactory but opportunities were limited by a lack of spare man-hours. If the pay system were revised this might perhaps take into account compensation for time spent travelling to training centres and for lost overtime.

There appeared to be dissatisfaction with the atmosphere and low morale in the Group. This was associated with stress, partly caused by lack of long term planning and job insecurity. Work was also considered to be less satisfying for many employees than previously for a number of reasons. Employees' perception was that they were undervalued by their Group and by the company; this only related to industrial employees. There were criticisms of the overall planning process and the lack of a Group vision. Views on management style in the Group varied but a number of managers were described as helpful and approachable. The Group possessed few characteristics commensurate with the notion of a learning organisation at this time.

The differences between the two groups appeared to support the fact that development towards a learning organisation in Group A was directly due to the implementation of the change programme in that group.

CHAPTER TEN

QUESTIONNAIRE SURVEY
ENGINEERING COMPANY 2

10.1 INTRODUCTION

Chapter nine described three phases of the study which took place in an engineering company in Plymouth. Following this, it was decided to conduct another questionnaire survey in a second company, which will be referred to as Engineering Company 2, using a modified version of the same questionnaire. The changes which were made to the existing questionnaire and the reasons for making them are described in full in Section 10.5 below. The broad aim of this second survey was to validate the questionnaire through application in another company and thereby eliminate any items which may have been specific to Engineering Company 1. It was also intended to provide another large sample of responses on which further statistical analysis could be carried out, with the aim of producing a sector-specific tool for the evaluation of learning organisation characteristics in companies.

As few large companies existed in the South-West, and those which employed a sufficiently large number of workers were involved in businesses very different from the engineering industry of Company 1, which would make any form of comparison problematic, it was decided to search further afield. At this time, the Group Manager from Engineering Company 1, who had left just before the questionnaire survey was carried out, mentioned in a telephone call that he was attempting to introduce a similar programme of change in the engineering company where he now worked in Leicester. He intimated that he would be interested in carrying out some research in his new company in his new capacity as Manufacturing Director. It was decided after some discussion that this would be a suitable site for the second major study. It was recognised that the overall leadership style would be similar to that of Engineering Company 1, but that this could prove an advantage as a more reliable comparison could be made between the results of the two companies. Senge (1990b) describes leaders of learning organisations as responsible for designing organisations which facilitate the individual development and learning of their members and for building a shared vision of the future of the organisation. In his new post as Manufacturing Director of the company, this manager now perceived his role as envisioning the future and establishing a climate in which

217

employees could develop behaviour which would benefit the company as a whole. This manager described his vision and the background to the company in a preliminary interview which can be seen in Appendix 7.

10.2 BACKGROUND TO THE COMPANY

Engineering Company 2 was started in 1898 as a factory producing shoemaking machinery. Its existence was related to the concentration óf boot and shoe production centred in the Midlands, particularly in Northampton, a short distance away, and to a lesser extent in Leicester. Engineering Company 2 is the world's largest producer of shoe-making machinery, which it sells all over the world, with particularly large outlets in the Far East, which it is currently expanding. The machinery is used to make mass-produced cheap shoes of all types, there is no hand finishing required on footwear of this type, which renders it economical to produce. The company was owned by the original family until the 1960s, but was then sold to a portfolio management organisation. In 1988, there was a management buyout, which was followed by two good profit-making years. Unfortunately, large debts had been incurred during the buyout and during the years of economic recession in the early 1990s, the company went into financial difficulties. During this period a number of changes were introduced with the aim of making the company more efficient, but many of these were short-term solutions and were not successful in relieving the financial problems. The company was then sold to a venture capitalist in 1995.

Engineering Company 2 was situated near the city centre, in the heart of what has now become the Asian district of Leicester. The buildings were very old and separated from each other, although all on one site. Many employees and senior managers had worked in the company for many years and there had been a traditional expectation of 'jobs for life'. A number of employees had only ever worked for this company and some members of the current workforce were third generation employees. About 40% of the overall company workforce was of Asian origin, but the proportion varied from department to department. The company had formerly been run on very hierarchical lines,

with up to eight levels of management, but following the management buyout the structure was flattened. Senior managers who had been with the company for many years had little contact with other staff, and worked in a separate suite of enclosed offices. The culture was old and established and male-dominated, with only one female senior product manager and a very small number of female workers throughout the company.

The present owners of the company had been largely concerned with improving the financial situation and there was a recognition that in order for this to take place a programme of organisational change was needed. With this in mind, the Manufacturing Director was appointed to lead the change. He quickly began to make changes to the management structure and the communication system among managers. A three stage planning process was introduced, where formerly there had been only short-term planning; the new system comprised short-term (up to one year), medium-term (a one-to-two year span) and long-term plans which covered a five-year period. Team-based project groups were initiated, which were known as 'task forces', managers began to present regular, formal progress reports and there was a greater emphasis on change throughout the company.

Although managers recognised that this was a critical period for the company and that greater efficiency and improved quality and productivity were essential if the company were to survive, there were a number of problems associated with the introduction of change programmes. The main difficulty was that many of the initiatives the Director was attempting to implement had been introduced before, but had been allowed to decline and employees had reverted to their former ways of working. The reintroduction of these schemes was in many ways harder because the terms were familiar to people and the ideas did not seem new or exciting. Fortunately, there had been no need for large-scale redundancies among employees, so fears about job security were not a major influence on the work atmosphere. The new Director was now planning to introduce company-wide teamworking, empowerment of all employees and a focus on continuous learning and change in the company, with the aim of making Engineering Company 2 a world-class organisation within five years.

10.3 SAMPLE

The target population was the workforce of Engineering Company 2, which consisted of 268 individuals. As in Engineering Company 1, the sample only included employees at First Line Manager level and below; senior managers were not included for the purposes of the survey, as it was felt that their views would not be representative of the workforce as a whole. The employees worked in thirteen different departments of the Group, which comprised between two and forty individual members of the workforce.

There were only two female employees in the group, it was not known to which department these belonged, or whether in fact they responded. As previously stated, about 40% of the workforce in the Group were Asian, but employees were not required to specify ethnic origin or gender as these were considered to be potentially sensitive issues which, if included, might have an adverse effect on the response rate.

10.4 AIMS

The objectives of this second study were to measure the development of Engineering Company 2 towards a learning organisation and to identify the individual aspects which needed to be improved before this could be said to be the case. It was not expected that the company would have become a learning organisation at this point in time as the programme of change had only begun nine months previously. The research aimed to illustrate those areas where the greatest progress had been achieved and those where further development would be advantageous to the workforce and would help the company to advance.

This study was not designed merely to replicate the first piece of research, although a second data set would of course be useful for comparison. The aims of this second phase of the study were firstly to utilise the modified questionnaire and to incorporate a gap technique, ie. it was intended to measure employees' perceptions of the present situation in the organisation and the situation as they would like it to be, and to assess the gaps between the two sets of responses; the gap technique is described more fully in Section 10.5. It was planned that the company should use this information as

feedback during the change process. Secondly this study targeted a different population in a similar industry, but in a different geographical area, which would highlight any features which may have been specific to Engineering Company 1 but did not apply to the second organisation. This firm, Engineering Company 2, was again a large organisation in the engineering industry, and a specialist in its type of manufacture. It was planned to compare those learning organisation characteristics which were most highly evolved in Company 2 with those of Company 1, and to speculate as to why these might differ or be similar.

The following hypotheses were addressed:

Engineering Company 2 conforms to the theoretical notion of a learning organisation in that:

a. Individual learning and self-development is encouraged

b. Company strategy is regularly modified as a result of feedback

c. The organisation and all its members aim for continuous improvement and the climate supports this

d. Employees participate in policy making

e. Communication systems facilitate learning at both individual and collective levels

f. Employees are empowered and make decisions relating to their work

g. Leadership in the company encourages employees to learn

h. The organisational structure facilitates learning

i. Links with the business environment are fostered.

A third aim of this research in Engineering Company 2 was to further test the validity of the diagnostic instrument. A second fairly large sample was required for this purpose, so that any ambiguities or problems arising from this second set of responses might be identified and the questionnaire modified accordingly. It was decided to carry out factor analysis on this sample in order to explore the groupings in the data from an empirical rather than a theoretical point of view.

10.5 RESPONSE RATE

In total, 268 questionnaires were distributed in Engineering Company 2, of which 113 were returned; an overall response rate of 42.2%, which may be considered satisfactory for a survey of this type. Responses varied according to the department in which respondents worked; this is illustrated in Table 10.2.

Wilson (1996) notes that response rates for postal questionnaires are usually low unless the questions engage the interest of respondents or are clearly of direct value. It was also hoped in this study to conduct some kind of follow-up research in which it might be possible to investigate why some employees did not respond to the questionnaire (see 11.5.1). The response rate differed between departments as shown in Table 10.1 below.

Department	No. issued	No. returned	Response rate
1	34	8	23%
2	2	1	50%
3	28	14	50%
4	22	8	36%
5	3	1	33%
6	19	5	26%
7	13	8	62%
8	17	16	94%
9	36	11	30%
10	12	4	33%
11	24	9	36%
12	40	16	40%
13	18	7	39%
Missing info.		5	
Totals	**268**	**113**	**42%**

Table 10.1: Response Rates of Departments

222

The size of departments ranged from two to forty employees. The rate of response varied from 23% in Department 1 to 94% in Department 8; the average response rate was 42%. At the end of the questionnaire thirty respondents (26.5%) added comments, of these four were positive in nature, twenty-three were negative and three contained both positive and negative elements. Analysis of respondents' comments can be found in Section 10.7.

10.6 RESULTS

Data from this second study were entered into a spreadsheet on SPSS Version 6.1 and analysed by individual item, by factor analysis then by conceptual category. This analysis is described in detail in the following sections.

10.6.1 Results by Individual Item

Frequencies

Frequencies of responses to each individual item are illustrated in Table 10.3 below. This table refers to the present organisational position, frequencies for the ideal organisational position are shown in a separate table (see Table 10.4) The items are presented in the order in which they appear on the questionnaire. Frequencies are shown as valid percentages, ie. percentages with the missing values discounted.

Table 10.2 (see next pages) shows that the most positive responses were to question 2; 'My supervisor lets me work without close supervision', question 61; 'Organisational changes are necessary', question 31; 'I possess the necessary skills and expertise to perform my job' and question 58; 'I read (the company newsletter) regularly'. Of these items, two; numbers 2 and 31, come under the category of 'Empowerment', while the other two are non-gap questions, ie. they only refer to the organisation as it is at present, and fall into the category of 'Learning climate'.

The individual questions which produced the least positive results were question 33 on the existence of a vision of the organisational future, question 51 on the extent to which company magazines are used to acquire external information, question 57 on

awareness of the company vision, question 16 on employees' participation in policy decisions and question 37 on the effectiveness and openness of the information flow in the organisation.

No	Question	Strongly agree	Agree	Neither	Disagree	Strongly disagree
1	Contribute ideas	11.6	38.4	18.8	25.9	5.4
2	Work without supervision	40.7	53.1	2.7	0.9	2.7
3	Aware of educ. opportunities	4.4	2.1	10.6	35.4	27.4
4	Employees not checked up on	9.8	33.0	25.9	18.8	12.5
5	Manag. motivates employees	6.2	17.7	26.5	30.1	19.5
6	Employees' opinions valued	2.7	27.0	24.3	28.8	17.1
7	Co. managers visit workshops	4.4	23.9	17.7	33.6	20.4
8	Standards are high	14.3	45.5	21.4	13.4	5.4
9	Training frequent	2.7	12.4	19.5	35.4	30.1
10	Job satisfaction	7.2	42.3	27.0	14.4	9.0
11	New ideas incorpor. into work	1.8	33.9	35.8	20.2	8.3
12	Employees rewarded for effort	1.8	16.8	18.6	36.8	26.5
13	Roles & jobs are flexible	4.4	58.4	19.5	9.7	8.0
14	Regular feedback given	2.7	20.4	15.9	38.1	23.0
15	Teams, depts. share information	0.0	22.1	23.0	30.1	24.8
16	Participate in policy decisions	2.7	14.4	14.4	38.7	29.7
17	People learn from mistakes	7.1	35.4	31.9	19.5	6.2
18	Sense of belonging	8.0	23.9	17.7	30.1	20.4
19	Effective comms. system	4.4	11.5	25.7	36.3	22.1
20	Personal career aims considered	9.7	26.5	25.7	22.1	15.9
21	Proud of work quality	28.6	40.2	25.0	3.6	2.7
22	Differing opinions voiced	4.5	23.2	26.6	28.6	7.1
23	Supervisor provides support	10.8	33.3	23.4	18.0	14.4

Table 10.2a: Frequencies for individual Items: Present Organisational Position

No	Question	Strongly agree	Agree	Neither	Disagree	Strongly disagree
24	Not penalised for mistakes	16.8	40.7	24.8	11.5	6.2
25	Responsible for own T & D	9.8	26.8	29.5	24.1	9.8
26	IT. provides feedback	4.6	20.7	36.0	20.7	18.0
27	Annual appraisal given	11.8	31.8	10.0	24.5	21.8
28	Team committed to work	7.1	50.9	25.0	14.3	2.7
29	Man. informs on ext. developm.	4.5	26.4	20.9	24.5	23.6
30	Mans. honest with employees	2.7	13.5	23.4	30.6	29.7
31	Possess necessary expertise	39.3	47.3	7.1	2.7	3.6
32	Respons. granted if required	4.5	27.0	29.7	30.6	8.1
33	Clear org. vision exists	2.7	8.0	17.0	33.9	38.4
34	No increase in stress	2.7	12.5	24.1	33.0	27.7
35	Other teams offer support	0.9	29.5	32.1	25.9	11.6
36	Info. shared with other cos.	7.1	25.9	33.9	15.2	17.9
37	Free flow of communication	2.7	4.5	27.0	37.8	27.9
38	Knowledge & resources shared	3.6	34.8	26.8	21.4	13.4
39	Employees feel valued	4.5	12.5	30.4	25.0	27.7
40	Working towards Group goals	8.0	46.0	22.1	19.5	4.4
41	Info. collected about environ.	4.5	20.5	30.4	34.8	9.8
42	Contrib. to policy part of job	4.4	29.2	28.3	28.3	9.7
43	Encouraged to think for oneself	11.5	56.6	14.2	14.2	3.5
44	Employees' views considered	2.7	6.2	20.4	46.0	24.8
45	Good employee-man. relations	7.1	23.0	23.9	26.5	19.5
46	Rules altered foll. discussion	3.6	33.9	39.3	14.3	8.9
47	Policies cater for everyone	0.9	13.3	27.4	34.5	23.9
48	Individual approach encouraged	8.0	29.2	35.4	23.0	4.4

Table 10.2b: Frequencies for Individual Items: Present Organisational Position

No	Question	Strongly agree	Agree	Neither	Disagree	Strongly disagree
49	Working relations good	17.7	51.3	19.5	8.8	2.7
50	Team makes decisions	8.0	31.0	29.2	27.4	4.4
51	Read mags. on external issues	2.7	14.2	11.5	37.2	34.5
52	Supportive atmosphere	7.1	39.8	22.1	23.9	7.1
53	Depts. respons. for own budgets	19.6	53.6	18.8	7.1	0.9
54	All involved in reward systems	3.6	7.1	9.8	46.4	33.0
55	Depts. seen as cust./ suppliers	7.1	34.8	31.3	21.4	5.4
56	Encouraged to experiment	4.4	21.2	26.5	37.2	10.6
57	Everyone aware of vision	1.8	10.6	17.7	37.2	32.7
58	Read co. newsletter regularly	25.2	52.3	11.7	4.5	6.3
59	Co. is forward-looking	8.9	22.3	33.9	23.2	11.6
60	Understand reasons for changes	8.9	25.9	11.6	33.9	19.6
61	Changes are necessary	46.0	41.6	8.8	0.9	2.7

Table 10.2c: Frequencies for Individual Items: Present Organisational Position

The two items dealing with organisational vision and respondents' awareness of this produced some of the most negative responses to individual items in Engineering Company 2. The other three items producing negative responses were not related, and came from three different categories; question 51 was associated with the category of Environmental links, question 16 with Participation in policy and question 37 with the Use of information. Three items also showed fairly neutral response, ie. the largest number of responses to the question were 'neither agree nor disagree' and there were only small differences between the percentages agreeing and disagreeing. These items were question 26; 'Information technology provides us with information on financial matters and company performance', 46; 'Rules or procedures are sometimes altered following discussion' and 11; 'Ways of working are often revised to include new ideas'. There is clearly a link between the second two of these items; both refer to a revision or

modification of process to take account of other peoples' views. the other question, number 26, may have produced non-decisive responses due to confusion; perhaps some employees were not clear as to the precise meaning of information technology.

No	Question	Strongly agree	Agree	Neither	Disagree	Strongly disagree
1	Contribute ideas	25.0	60.7	9.8	1.8	2.7
2	Work without supervision	46.0	46.9	5.3	0.9	0.9
3	Aware of educ. opportunities	36.6	51.8	4.5	3.6	3.6
4	Employees not checked up on	19.6	45.5	19.6	10.7	4.5
5	Man. motivates employees	42.9	47.3	8.0	0.0	1.8
6	Employees' opinions valued	41.8	48.2	7.3	1.8	0.9
7	Co. managers visit workshops	33.0	47.3	12.5	4.5	2.7
8	Standards are high	53.1	43.4	0.9	0.0	2.7
9	Training frequent	44.2	45.1	10.6	0.0	0.0
10	Job satisfaction	45.9	45.0	8.1	0.0	0.9
11	New ideas incorp. into work	28.6	58.9	9.8	1.8	0.9
12	Employees rewarded for effort	50.9	42.9	5.4	0.9	0.0
13	Roles & jobs are flexible	31.0	55.8	8.8	3.5	0.9
14	Regular feedback given	39.8	51.3	5.3	1.8	1.8
15	Teams, depts. share information	44.2	46.0	9.7	0.0	0.0
16	Participate in policy decisions	31.5	54.1	10.8	2.7	0.9
17	People learn from mistakes	34.5	52.2	11.5	1.8	0.0
18	Sense of belonging	48.7	46.0	5.3	0.0	0.0
19	Effective comms. system	25.7	54.0	15.9	3.5	0.9
20	Personal career aims considered	33.6	42.5	18.6	3.5	1.8
21	Proud of work quality	60.7	34.8	4.5	0.0	0.0
22	Differing opinions voiced	26.8	50.9	20.5	1.8	0.0

10.3a Frequencies for Individual Items: Ideal Organisational Position

No	Question	Strongly agree	Agree	Neither	Disagree	Strongly disagree
23	Supervisor provides support	41.1	51.8	6.3	0.9	0.0
24	Not penalised for mistakes	23.0	45.1	22.1	6.2	3.5
25	Responsible for own T & D	25.0	47.3	17.9	8.9	0.9
26	IT. provides feedback	22.5	46.8	27.0	1.8	1.8
27	Annual appraisal given	28.2	57.3	9.1	3.6	1.8
28	Team committed to work	33.0	60.7	5.4	0.9	0.0
29	Man. informs on ext. developm.	44.5	48.2	5.5	0.9	0.9
30	Mans. honest with employees	47.3	41.1	7.1	4.5	0.0
31	Possess necessary expertise	56.3	38.4	4.5	0.0	0.9
32	Respons. granted if required	20.7	57.7	19.8	1.8	0.0
33	Clear org. vision exists	40.2	50.0	7.1	2.7	0.0
34	No increase in stress	21.4	42.0	26.8	8.0	1.8
35	Other teams offer support	21.4	67.9	9.8	0.0	0.9
36	Info. shared with other cos.	31.3	44.6	19.6	3.6	0.9
37	Free flow of communication	33.3	53.2	10.8	2.7	0.0
38	Knowledge & resources shared	32.1	61.6	6.3	0.0	0.0
39	Employees feel valued	45.9	46.8	5.4	1.8	0.0
40	Working towards Group goals	39.8	54.9	5.3	0.0	0.0
41	Info. collected about environ.	15.2	33.9	32.1	12.5	6.3
42	Contrib. to policy part of job	21.2	51.3	23.9	0.9	2.7
43	Encouraged to think for oneself	29.2	62.8	7.1	0.9	0.0
44	Employees' views considered	27.4	51.3	16.8	2.7	1.8
45	Good employee-man. relations	36.3	53.1	8.8	0.9	0.9
46	Rules altered foll. discussion	19.6	58.9	19.6	1.8	0.0
47	Policies cater for everyone	32.7	50.4	10.6	4.4	1.8
48	Individual approach encouraged	23.0	45.1	23.0	8.0	0.9

10.3b Frequencies for Individual Items: Ideal Organisational Position

228

No	Question	Strongly agree	Agree	Neither	Disagree	Strongly disagree
49	Working relations good	39.8	51.3	8.8	0.0	0.0
50	Team makes decisions	24.8	54.0	18.6	2.7	0.0
51	Read mags. on external issues	16.8	46.0	29.2	7.1	0.9
52	Supportive atmosphere	43.4	54.9	1.8	0.0	0.0
53	Depts. respons. for own budgets	25.0	46.4	18.8	6.3	3.6
54	All involved in reward systems	25.9	57.1	13.4	2.7	0.9
55	Depts. seen as cust./ suppliers	18.8	43.8	25.0	8.9	3.6
56	Encouraged to experiment	29.2	52.2	14.2	2.7	1.8
57	Everyone aware of vision	44.2	46.9	6.2	2.7	0.0

Table 10.3c

Frequencies for Individual Items: Ideal Organisational Position

Table 10.3 above shows frequencies for the ideal organisational position. As all the items in this questionnaire with the exception of four were gap questions, it was necessary to analyse the responses to the second part of the questions; the ideal organisational position. These results are presented in the same format as in the previous table, with the way respondents replied to each item shown in detail. Question numbers are shown in the left-hand column. It was to be expected that the responses would all prove more positive than negative, as these questions concerned the way respondents would like the organisation to be rather than the way they perceive it at present.

The items which produced the most positive responses as shown in Table 10.4 were question 52; 'There (should be) a supportive atmosphere', question 21; 'We (should be) proud of the quality of our work', question 31; 'I feel I (should) have the necessary skills and expertise to do my job effectively' and question 12, 'Employees (should be) rewarded for effort and good work'.

Other items which also produced positive responses were question 39; 'I (should) feel valued in this organisation', question 57; 'Everyone (should be) aware of the company vision' and question 15; 'Teams and departments (should) share information'. These results provide some indication of the aspects respondents feel to be most important in their ideal organisation.

Mean Scores

Following analysis of frequencies of individual items, the mean scores produced by individual questions were next considered. Table 10.4 shows the mean score for each item in the present organisational situation, then the ideal situation, followed by the simple gap score.

The highest mean scores for individual items which referred to the organisational situation as it is at present were for questions 2; 'My immediate supervisor lets me work without close supervision', 31;' I possess the necessary skills and expertise to do my job', both of which also indicated very positive responses in Table 10.2 and 61; 'The organisation needs to change in order to survive'. The lowest mean scores for the present organisational position were for questions 33; 'There is a clear vision', 54; 'We are all involved in deciding how good work should be rewarded', 57; 'Everyone is aware of the company vision', 51; We are encouraged to read newspapers and magazines on external issues'. Questions 44; 'The views of employees are taken into account and reflected in policy statements' and 37; 'There is an open and effective flow of information' also provided low mean scores.

For those results which referred to the ideal organisational position, the highest mean scores were for question 31; 'I feel I (should) have the necessary skills and expertise to do my job effectively' (which also scored high for the present organisational situation), 8; 'Standards (should be) high; everyone (should try) to produce good quality work', 12; 'Employees (should be) rewarded for effort and good work, 18; 'I (should) feel I am a member of a team, rather than just an employee and 52; 'There (should be) a supportive atmosphere'.

No	Question	Mean : Pres.	Mean : Ideal	Gap score
1	Contribute ideas	3.25(1.13)	4.04(0.82)	0.79
2	Work without supervision	4.28(0.80	4.36(0.71)	0.08
3	Aware of educ. opportunities	2.41(1.23)	4.14(0.93	1.73
4	Employees not checked up on	3.09(1.19	3.65(1.05)	0.56
5	Manag. motivates employees	2.61(1.17)	4.29(0.77)	1.68
6	Employees' opinions valued	2.69(1.13)	4.28(0.76)	1.59
7	Co. managers visit workshops	2.58(1.19)	4.04(0.94)	1.46
8	Standards are high	3.50(1.07)	4.44(0.77)	0.94
9	Training frequent	2.22(1.09)	4.34(0.66)	2.12
10	Job satisfaction	3.24(1.08)	4.35(0.71)	1.11
11	New ideas incorp. into work	3.01(0.98)	4.12(0.72	1.11
12	Employees rewarded for effort	2.31(1.09)	4.44(0.64)	2.13
13	Roles & jobs are flexible	3.24(1.01)	4.12(0.78)	0.88
14	Regular feedback given	2.42(1.13)	4.26(0.79	1.84
15	Teams, depts. share information	2.42(1.09)	4.35(0.65)	1.93
16	Participate in policy decisions	2.22(1.11)	4.13(0.78)	1.91
17	People learn from mistakes	3.18(1.03)	4.19(0.71)	1.01
18	Sense of belonging	2.69(1.26)	4.43(0.60)	1.74
19	Effective comms. system	2.40(1.09)	4.00(0.80)	1.60
20	Personal career aims considered	2.92(1.23)	4.03(0.91)	1.11
21	Proud of work quality	3.88(0.96)	4.56(0.58)	0.68
22	Differing opinions voiced	2.89(0.99)	4.03(0.74)	1.14
23	Supervisor provides support	3.08(1.24)	4.33(0.64)	1.25
24	Not penalised for mistakes	3.50(1.09)	3.78(0.99)	0.28
25	Responsible for own T & D	3.03(1.14)	3.87(0.93)	0.84
26	IT provides feedback	2.73(1.12)	3.86(0.85)	1.13

Table 10.4a: Mean Scores of individual Items: Present and Ideal Organisational Positions and Gap Scores

No	Question	Mean : Pres.	Mean : Ideal	Gap score
27	Annual appraisal given	2.87(1.38)	4.06(0.83)	1.19
28	Team committed to work	3.46(0.92)	4.26(0.60)	0.80
29	Man. informs on ext. developm.	2.64(1.23)	4.35(0.71)	1.71
30	Mans. honest with employees	2.29(1.12)	4.31(0.79)	2.02
31	Possess necessary expertise	4.16(0.94)	4.49(0.67)	0.33
32	Respons. granted if required	2.89(1.04)	3.97(0.69)	1.08
33	Clear org. vision exists	2.02(1.06)	4.28(0.71)	2.26
34	No increase in stress	2.29(1.09)	3.73(0.95)	1.44
35	Other teams offer support	2.82(1.02)	4.09(0.62)	1.27
36	Info. shared with other cos.	2.89(1.19)	4.02(0.86)	1.13
37	Free flow of communication	2.16(0.98)	4.17(0.72)	2.01
38	Knowledge & resources shared	2.94(1.12)	4.26(0.57)	1.32
39	Employees feel valued	2.41(1.15)	4.37(0.67)	1.96
40	Working towards Group goals	3.34(1.02)	4.35(0.58)	1.01
41	Info. collected about environ.	2.75(1.04)	3.39(1.09)	0.64
42	Contrib. to policy part of job	2.90(1.07)	3.88(0.85)	0.98
43	Encouraged to think for oneself	3.58(0.99)	4.20(0.60)	0.62
44	Employees' views considered	2.16(0.96)	4.00(0.85)	1.84
45	Good employee-man. relations	2.75(1.22)	4.23(0.72)	1.48
46	Rules altered foll. discussion	3.09(0.99)	3.96(0.68)	0.87
47	Policies cater for everyone	2.33(1.01)	4.08(0.88)	1.75
48	Individual approach encouraged	3.13(1.00)	3.81(0.91)	0.68
49	Working relations good	3.73(0.95)	4.31(0.63)	0.58
50	Team makes decisions	3.11(1.04)	4.01(0.74)	0.90
51	Read mags. on external issues	2.13(1.12)	3.71(0.86)	1.58
52	Supportive atmosphere	3.26(1.09)	4.42(0.53)	1.16

Table 10.4b: Mean Scores of individual Items: Present and Ideal Organisational Positions and Gap Scores

232

No	Question	Mean : Pres.	Mean : Ideal	Gap score
53	Depts. respons. for own budgets	3.84(0.85)	3.83(0.99)	-0.01
54	All involved in reward systems	2.02(1.02)	4.04(0.76)	2.02
55	Depts. seen as cust./ suppliers	3.17(1.02)	3.65(1.00)	0.48
56	Encouraged to experiment	2.72(1.06)	4.04(0.84)	1.32
57	Everyone aware of vision	2.12(1.04)	4.33(0.71)	2.21
58	Read co. newsletter regularly	3.86(1.05)	-	-
59	Co. is forward-looking	2.92(1.13)	-	-
60	Understand reasons for changes	2.71(1.29)	-	-
61	Changes are necessary	4.27(0.87)	-	-

Table 10.4c: Mean Scores of Individual Items: Present and Ideal Organisational

Positions and Gap Scores

The lowest mean scores for the ideal organisational position were for question 41; 'It (should be) part of everyone's job to collect useful information about what is going on outside the company', question 55; 'Departments (should) view each other as customers and suppliers' and question 4; 'People (should be) given the freedom to make decisions without being checked up on.' This last one is perhaps surprising, as one would expect employees to prefer not to be checked up on, and indeed the results of question 2; 'My supervisor lets me work without close supervision' which is closely associated with the topic of question 4, produced very positive results (see Table 10.3). However, some explanation for this apparent anomaly is suggested by later findings (see 11.5.4)

The right-hand column in Table 10.5 shows simple gap scores; the difference between the two mean scores. This was intended to provide some measure of the distance employees felt the organisation needed to move in order to achieve an ideal (learning organisation) position. The greatest gap scores were for questions 33; 'There is a clear vision of where this organisation is going', 57; 'Everyone is aware of the company vision', 9; 'Training takes place frequently' and 12; 'Employees are rewarded for effort and good

work'. The smallest gap score was for question 53; 'Departments or units are responsible for their own budgets', this was the only item which produced a negative gap score (-0.01). In fact the mean scores for both the current and the ideal organisational positions were fairly high, but the score for the present situation was fractionally higher than that of the ideal position, thus giving a very small, negative gap score. Other items which produced low gap scores were questions 2; 'My supervisor lets me work without close supervision' 4; 'People are given the freedom to make decisions without being checked up on' and 49; 'People are friendly and generally have good working relationships'. It might be inferred from these results that employees feel not much change is necessary in these aspects of the organisation.

10.6.2 Results of Factor Analysis

Following the analysis of results by individual item, factor analysis was conducted on the data, in an attempt either to confirm the conceptual categories used in the first application of the questionnaire or to identify alternative groupings based on statistical analysis. It was intended that the factors identified should then be used as a basis for analysing the results.

However, the factors extracted did not appear to provide a useful classification of the data. Despite the extraction and subsequent rotation of nine factors accounting for 56.15% of the variance, a number of them were difficult to label and several individual variables did not appear to fit the categories on which they loaded. After consideration it was decided that the results of the analysis were inconclusive and the nine factors extracted were not sufficiently distinct or differentiated to form useful categories for analysis. A full description of the methods used and details of the factors extracted are shown in Appendix 9.

The factors extracted may have proved unsatisfactory for a number of reasons. This may have been due to flaws in the construction of the questionnaire; clearly the factors did not correspond with the nine conceptual categories decided on by the researcher, although these were largely based on two previous questionnaires, those of

Marquardt and Reynolds (1994) and Pedler, Burgoyne and Boydell (1991), and particularly the latter. The concepts of Pedler et al (1993) had been validated previously using cluster analysis and through practical application in a number of UK organisations. However, the individual questions which formed the indicators of these concepts were not all based on those of Pedler et al (1991) or Marquardt and Reynolds (op.cit) and hence may not have provided adequate content validity.

The orthogonal method of rotation was used, which aims at achieving simple structure, while keeping the factor axes orthogonal (Kline 1994). Varimax was used because the simple structure rotation would, it was hoped, result in factors which were relatively easy to interpret and which were composed of items with high or near zero loadings. However, as Varimax did not produce a sufficient number of clearly defined factors, it may be preferable in future analyses to use an oblique rotation such as Direct Quartimin or Oblimax to attempt to achieve a more satisfactory result; this was not used here due to constraints of time and because the ratio of subjects to variables was unsatisfactory in any case. Tabachnick and Fidell (1996: p674) suggest orthogonal rotation in preference to oblique forms because 'the simplicity of reporting results favours orthogonal rotation'. The failure of the factor analysis to validate the method may also have been due to the size of the sample used. Most writers on factor analysis recommend following two criteria; a minimum of 100 subjects and a ration of subjects to variables of at least 2:1 (Child 1990, Kline 1994). This sample fulfilled the first criterion but not the second as there were 113 subjects and 61 variables.

In order to ascertain more accurately the reasons for the lack of success of factor analysis in this instance, it would be helpful to conduct factor analysis on another large sample, to analyse this new data set and also to analyse the combined data set using a variety of methods of rotation. As factor analysis had not provided useful or distinct categories in this instance, ie. the data set was flawed due to the reasons listed above, it was decided not to use it as a basis for further analysis at this time.

10.6.3 Results by Category

Mean scores were then summarised using the nine conceptual categories as in the first study (the category of leadership and structure had been divided into two separate categories as results from the first study indicated that they were not compatible). Table 10.5 shows the mean scores for each of the nine categories, for the present and ideal organisational positions with standard deviation figures shown in brackets.

Category	Pres. posit. Mean (SD)	Cases	Ideal posit. Mean (SD)	Cases	Diss. index
Empowerment	3.49 (0.53)	110	4.14 (0.43)	110	15.34
Org. structure	3.38 (0.58)	111	3.89 (0.58)	111	11.79
Learning climate	2.96 (0.51)	108	4.19 (0.38)	107	29.01
Strategy	2.91 (0.59)	107	4.27 (0.50)	111	31.15
Individual learning	2.72 (0.71)	104	4.21 (0.45)	104	34.75
Use of information	2.70 (0.65)	107	4.11 (0.51)	109	32.95
Leadership	2.62 (0.77)	109	4.25 (0.51)	109	37.09
Environmental links	2.59 (0.71)	111	3.86 (0.60)	109	31.70
Participation in Policy	2.49(0.72)	110	4.02 (0.53)	110	36.95

Table 10.5: Mean Scores of Categories; Present and Ideal Organisational Positions and Dissatisfaction Indices

A Dissatisfaction Index has also been computed, as suggested by Pedler et al (1993), which is intended to indicate the relationship between the present score and the ideal score. This index may range, in theory, from 0 to 100, the higher scores indicating a greater degree of dissatisfaction. Description of the method of calculation of this score may be found in Section 10.5. The means of the nine categories for the present organisational position are presented in descending numerical order in Table 10.6. Three of the categories have mean scores above the mid-point of the scale; these are 'Empowerment' (3.58), 'Organisational structure' (3.38) and 'Learning climate' (3.12). The

other six conceptual categories score below the mid-point. The lowest scores are for 'Participation in policy '(2.41) and 'Leadership' (2.56). The highest mean score for the ideal organisational position is for the category of 'Strategy' (4.27), followed by 'Leadership' (4.25) and 'Individual learning' (4.21). The lowest scores for the ideal organisation are for 'Environmental links' (3.86) and 'Organisational structure' (3.89); these categories would appear to have been perceived by employees as less important aspects of the ideal organisation.

The dissatisfaction scores range from 11.79 to 37.09. The lowest dissatisfaction is for 'Organisational structure' (11.79), perhaps because this was viewed as a less important aspect in the ideal organisational situation, therefore less changes would need to be made for the structure to become ideal. 'Empowerment' also shows a low dissatisfaction score (15.34); in this case the reason is probably that the mean score for the present position is high, therefore respondents were likely to want to make less changes in this aspect of the learning organisation. The highest dissatisfaction scores are for 'Leadership' (37.09) and Participation in policy' (36.95), the two categories which also produce the lowest mean scores for the current organisational position; this would indicate that respondents feel a great deal of changes would need to be made to these aspects of the company before it conforms to their concept of an ideal learning organisation.

10.6.4 Inter-Category Correlations

This section examines the relationship between the category variables and the independent variables of Age, Years (ie. how many years respondents had worked for the company) and Department. These three variables constitute the respondent data which was obtained through the section at the end of the questionnaire on personal details. Respondents were only asked to provide three types of personal information as requests for further details might have adversely affected the response rate.

Relationship with Age

The nine category variables were then analysed in terms of their relationship with the independent variable of 'Age'. The sample was originally divided into five age ranges: Over 60, 51-60, 41-50, 31-40 and 30 or under. However, the variable of 'Age' was subsequently recoded, as it was found that one value, 'Over 60' consisted of only one respondent; '51-60years' and 'Over 60 years' were therefore combined into one category and labelled 'Over 50years'. A t-test was not used in this instance as there were more than two levels of the independent variable. A one-way analysis of variance was therefore employed to test the level of variability between the groups of data by comparing means. Table 10.7 shows the relationship between 'Age' and the nine categories using this test.

Category	Over 50	41-50	31-40	Under30	F	df	p
Indiv. L.	3.00(0.64)	2.78(0.77)	2.59(0.67)	3.01(0.62)	2.21	100	0.09
Strategy	3.24(0.67)	2.98(0.60)	2.74(0.45)	2.71(0.54)	4.43	102	<0.01
L.Clima.	3.26(0.49)	3.14(0.56)	2.99(0.45)	3.18(0.47)	1.51	104	0.22
Par.in P.	2.52(0.86)	2.57(0.88)	2.23(0.52)	2.38(0.50)	1.48	106	0.23
Use Inf.	3.07(0.83)	2.76(0.64)	2.63(0.53)	2.36(0.50)	4.45	103	<0.01
Empow.	3.56(0.46)	3.81(1.38)	3.35(0.53)	3.62(0.43)	1.70	106	0.17
Leader.	3.09(1.60)	2.51(0.83)	2.24(0.69)	2.59(0.83)	3.36	106	0.02
Struct.	3.44(0.65)	3.47(0.54)	3.29(0.63)	3.31(0.49)	0.71	107	0.55
Envir.L.	2.73(0.81)	2.66(0.81)	2.47(0.54)	2.55(0.66)	0.72	105	0.54

Key: df degrees of freedom F F ratio
        p significance value

Table 10.6: Relationship between Categories and Age (one way ANOVA)

The Levene test for homogeneity of variance (one of the assumptions of the analysis of variance) was not significant for all but 'Participation in policy' ($p < 0.01$). It was therefore decided to use the Kruskal-Wallis test to compare means for this category, as suggested by Kinnear and Gray (1994). However, the Kruskal-Wallis test confirmed the fact that the

differences between the means were not significant (chi-sq=3.12, df=3, $p = 0.37$). The table shows that there was a significant effect on 'Strategy' ($F =4.43$, df=102, $p <0.01$). 'Use of information ($F =4.45$, df=103, $p <0.01$) and 'Leadership' ($F =3.36$, df=106, $p =0.02$).

In the first two categories older respondents appeared to have more positive views than younger employees. This may be because older workers tended to be less idealistic and had lower expectations and therefore were more satisfied with the progress which had been made in these aspects of the company, while younger employees perhaps had higher expectations. Older age groups may also have worked in the company for longer and viewed the changes of the past nine months as significant in comparison with the position over the past five or ten years, or perhaps those respondents who were older had less desire to 'rock the boat' and therefore claimed to be more content than younger members of the workforce. For the category of 'Leadership' the pattern was less clear, though older respondents responded slightly more positively than those in younger age groups. The difference may have been less noticeable for this category because the mean scores were lower than in the other two categories.

The relationship between age and the dissatisfaction scores for the nine categories was also examined using one way ANOVA as shown in Table 10.8. This table indicates that the only significant effect of age is on the category of 'Use of information' ($F =3.88$, df=103, $p =0.01$).

It may be observed that the dissatisfaction score is higher for younger respondents; ie. those of 30 years and below, while older respondents appear more prepared to accept the current position. These attitudes may be particularly noticeable for this category because younger respondents who had grown up in the 'information age' may have been much more aware of the possibilities of information systems and were thus likely to be more disgruntled when the expected benefits failed to materialise, whilst older respondents had lower expectations.

Category	Over 50	41-50	31-40	Under 30	F	df	p
Indiv. L.	27.61	35.03	39.35	34.15	1.99	99	0.12
Strategy	25.14	28.72	34.75	36.52	2.28	103	0.08
L.Clima.	24.09	28.36	31.86	30.53	1.76	103	0.16
Par.in P.	31.45	36.50	41.02	36.16	1.04	106	0.38
Use Inf.	24.16	30.60	34.72	43.04	3.88	103	0.01
Empow.	12.66	15.48	17.17	14.92	0.59	104	0.62
Leader.	30.44	34.31	44.51	38.32	2.60	102	0.06
Struct.	13.19	9.47	14.09	9.97	0.54	107	0.65
Envir.L.	25.49	31.62	34.99	33.09	1.10	105	0.35

Key: df degrees of freedom   F F ratio
       p significance value

Table 10.7: Dissatisfaction Scores by Categories (one way ANOVA)

Relationship with Years

Next, the relationship between the nine categories and the number of years respondents had worked for the company was measured. The effect of years of service to the company was investigated using a one-way analysis of variance again as there were four levels of the independent variable, hence the t-test was unsuitable.

Levene's test for homogeneity of variance was not significant (p >0.05) in all cases, therefore one way analysis of variance was appropriate. The sample was divided into four; less than one year's service, one to five years' service, five to ten years' service and more than ten years' service. Table 10.9 (see next page) illustrates the relationship between 'Years' and the nine category variables; the first four columns show mean scores with the standard deviations in brackets. The F ratio, the degrees of freedom and the significance value (p) are shown in the three columns on the right.

Table 10.9 shows that highly significant effects of years of service were observed on 'Participation in policy' (F =6.11, df=106, p =<0.001) and 'Environmental links' there was a significant effect of 'Years' (F =4.87, df=105, p <0.01). Significant effects of years

of service were also noted on the categories of 'Learning climate' (F =3.55, df=104, p = 0.02) and 'Leadership' (F =3.02, df=106, p =0.03). It may be observed that newer employees generally expressed greater agreement with the positive aspects of these four categories; mean scores were highest for the group of respondents who had worked in the company for less then one year in each category. Respondents who had worked for a longer time in the company tended to express less positive views. This was perhaps because of the natural optimism of newer recruits to the organisation.

Category	Over 10yrs	5-10yrs	1-5yrs	0-1yrs	F	df	p
Indiv. L.	2.69(0.69)	2.84(0.50)	2.95(0.73)	3.43(1.18)	1.98	100	0.12
Strategy	2.90(0.61)	2.94(0.63)	2.86(0.51)	3.36(0.53)	0.84	102	0.47
L. Clima.	3.07(0.50)	3.13(0.46)	3.09(0.48)	3.80(0.45)	3.55	104	0.02
Par. in P.	2.30(0.69)	2.39(0.73)	2.45(0.57)	3.63(0.73)	6.11	106	<0.001
Use info.	2.76(0.63)	2.62(0.65)	2.56(0.64)	3.24(0.93)	1.80	103	0.15
Empow.	3.57(1.09)	3.53(0.53)	3.59(0.57)	3.83(0.51)	0.17	106	0.92
Leader.	2.33(0.77)	2.83(1.63)	2.60(0.85)	3.48(0.94)	3.02	106	0.03
Struct.	3.38(0.64)	3.28(0.58)	3.44(0.45)	3.50(0.61)	0.38	107	0.77
Envir. L.	2.47(0.65)	2.51(0.80)	2.73(0.64)	3.60(0.58)	4.87	105	<0.001

Key: F F ratio   df Degrees of freedom p significance value

Table 10.8: Relationship between Categories and Years (one-way ANOVA)

The relationship between the number of years' service and the dissatisfaction scores for the nine categories were also computed using one way analysis of variance as before. The results of this analysis are shown in Table 10.10 (see next page). The calculation shown in this table suggests that the only significant effect of years of service is on the category of participation in policy (F =3.25, df=106, p =0.02).

The dissatisfaction score was clearly lower for those who had worked in the company for the shortest time, this is probably for the reasons already stated, and confirms one of the effects noted in the previous table. It may be that the informal culture

of Engineering Company 2 encouraged a cynical approach to these aspects of the company but that this attitude had not yet become embedded in the attitude of newer employees towards their work.

Category	Over 10yrs	5-10yrs	1-5yrs	0-1yrs	F	df	p
Indiv. L.	35.82	33.96	34.21	26.58	0.37	99	0.77
Strategy	30.75	29.59	34.63	23.32	0.69	103	0.56
L. Clima.	29.36	27.43	31.57	17.81	1.71	103	0.17
Par. in P.	38.84	37.25	37.62	10.56	3.25	106	0.02
Use info.	31.13	33.48	37.12	28.40	0.72	103	0.54
Empow.	15.81	12.21	17.56	11.35	0.89	104	0.45
Leader.	40.78	32.76	35.93	27.53	1.30	102	0.28
Struct.	11.56	11.54	11.50	16.23	0.14	107	0.94
Envir. L.	32.69	34.07	31.14	14.02	1.53	105	0.21

Key: F F ratio   df Degrees of freedom p significance value

Table 10.9: Dissatisfaction scores by Years of Service (one way ANOVA)

Relationship with Department

Attempts were also made to carry out a test to assess any relationship between the nine conceptual categories and the independent variable of 'Department'. However, in Engineering Company 2, employees were distributed throughout thirteen different departments, some consisting of only very small numbers of workers. There was insufficient information available to group the departments in clusters according to similar functions. A preliminary calculation of frequencies for the thirteen departments showed that in any comparison of means, so many cells would have frequencies of less than five that there would be no point in carrying out a test of this kind.

242

10.7 ANALYSIS OF RESPONDENTS' COMMENTS

Thirty people (26.5%) added comments in the space provided on the questionnaire forms; these comments were useful in confirming issues raised by the survey and adding any points which might have been omitted. Of the thirty respondents who made comments, twenty-three people's remarks were largely negative, which is to be expected; the other seven observations included some positive feedback. The greatest number of comments referred to internal communications at Engineering Company 2. Thirteen respondents claimed that communications were poor and that there was little information sharing. This in turn created a lack of trust, two respondents added. Three others asserted that instead of effective communications there was a system of rumours, which might or might not be true, and that this was bad for morale. The high proportion of remarks concerning poor communications appears to support the findings of the survey and suggest that the way in which information is distributed internally is an issue which needs to be urgently addressed.

Another subject which produced a number of comments was training; nine people (12.5%) had something to say about this. Four respondents maintained that training was inadequate and infrequent; one suggested there should be more training through day release schemes. Two employees argued training and development opportunities were available only to managers, as were time off for training and financial assistance. One person criticised the lack of a long term training and development strategy in the company and another thought that progress with the training programme was being hindered by organisational restructuring.

The next largest group of comments concerned relations within the company. Two respondents asserted employees did not trust management; this corresponded to the comments of other individuals who suggested that poor communications led to a lack of trust. Three people commented that employee-management relations were poor, one mentioned poor internal relations in the Stores section and two contended that managers were too distant. Four more claimed that managers were not open to suggestions from shop floor workers or supervisors; employees were not consulted on issues which

affected their work. It was pointed out that not being receptive to employees' opinions was not likely to inspire commitment.

Six respondents thought there were particular problems with the reward system. Two asserted that good work was not adequately rewarded and a further two thought they were being asked to do more work for less money. A further two employees contended that the wage structure was full of anomalies and that most of the workforce felt the system was unfair.

A small number of comments (5) implied criticism of discipline within the company. Two respondents thought management was too soft, and a further two claimed disciplinary procedures were not properly utilised. One employee felt that late and night shifts were not effectively supervised. There were two comments about leadership at Engineering Company 2; these were related to remarks on discipline. One respondent claimed leadership was poor generally and this led to a lack of commitment on the part of employees, while another felt that top managers frequently lacked appropriate knowledge and skills which affected their decision making abilities.

Three people specifically mentioned a lack of employee commitment to the company and four others added comments which referred to morale. Two of these stated that employees did not feel valued by the company, one commented on the poor atmosphere in the department and another employee claimed they were 'treated like mushrooms'! Morale at this stage of the change process appears to be a problem, a number of other comments indirectly implied that morale was poor; it was suggested that this was a consequence of poor working relations, lack of information or disparity within the system of financial rewards. A further two respondents said they were worried about job security; this is clearly another factor likely to cause low morale.

Planning was mentioned as a problem by two members of the workforce; they felt there was a lack of overall strategic planning. This seems to correspond with the findings of the survey which suggested that employees were largely unaware of the existence of a vision for the future. Two respondents felt that the company was losing some of its best workers to other jobs; this would also have an impact on company morale.

There were ten miscellaneous comments covering a variety of topics and each raised by only one employee. One person maintained that lack of physical space had a detrimental effect on work and another thought that smaller batch sizes were causing problems of more downtime and less effective work, while other respondents suggested the heating system needed overhauling and that tools should be made more accessible. One respondent claimed the job was no longer rewarding, others felt that work sections competed rather than collaborating and that there was too much 'passing the buck'. Finally, one person felt strongly that there was a need to convince employees of the need for change. This was not borne out by the survey results, however, which indicated that 88% of the workforce recognized the need for the company to change.

10.8 DISCUSSION

The findings of the survey indicated that this was not a learning organisation. As Engineering Company 2 was in the relatively early stages of a major change programme it was not expected to find from the survey that this company could be considered at this stage to be a learning organisation. The findings of the questionnaire suggested that this company was most like a learning organisation in terms of its degree of employee empowerment. Employees responded most positively to questions within this conceptual category and particularly appeared to feel that they were allowed to get on with their work without close supervision.

However, not all respondents thought that a lack of close supervision was a benefit, some employees associated this with a lack of strong leadership, and a number of others commented on a lack of discipline during late and night shifts. These views are perhaps surprising, as it is widely assumed that most employees welcome a more empowered situation, though as Mayo (1996: p18) points out 'many people would rather not face the changes in personal responsibility ... and they need coaching and time to come to terms with a new way of thinking'. It may be that empowerment was introduced here solely for the benefit of the company, without considering the potential benefits to the employees concerned or ascertaining the extent to which empowerment strategies

might fulfil the needs of individuals (Alpander 1991). It should be noted that although many employees agreed with the statements on empowerment, this may not necessarily indicate that they approved of the concept unreservedly.

A high proportion of respondents expressed confidence in their skills and ability to perform their work well; this was also perceived as an important factor in the ideal organisation. Employees' pride in the quality of their work was also seen as significant in an ideal organisational situation. The reasons for relatively strong views on expertise and high quality work may be connected with the specialist regional nature of the work; shoe manufacturing is a traditional industry of the Midlands and the production of shoe-making machinery may be seen as a continuation of this tradition. Alternatively, these views may merely be a declaration of justifiable confidence in the abilities of a highly-skilled workforce.

A very positive response was also generated by a question on the necessity for change in this organisation in order for the organisation to survive. This would suggest that employees had widely accepted the need for change and that there was a general readiness for change reflected in organisational members' attitudes and beliefs, which Armenakis (1993) likens to Lewin's (1951) concept of unfreezing the organisation. This was in contrast to the findings in Engineering Company 1, where employees had appeared to be resistant to the notion of change on the whole.

Low scores were recorded for questions on organisational vision and employees' awareness of that vision; the lowest mean scores for individual items and the greatest gap scores were produced by these two questions. Respondents indicated that these were features they would like to see in their ideal organisation. Although the Manufacturing Director was confident that he had designed a clear vision of the future, it appears that he had failed to communicate this vision to employees; though other managers may have been apprised of his ideas and long-term plans, the workforce as a whole did not seem to be cognisant of these plans. Indeed, many respondents seemed unsure that such a vision existed at all.

This may be an issue either of poor communication or of lack of overall planning. The overall scores of categories indicated lower scores and a greater dissatisfaction score for the 'Use of information' but it should be noted that the mean overall score for 'Strategy', which included the two questions on vision, was also below the mid-point of the scale and the dissatisfaction index was only marginally lower. Several employees commented that there was no effective long-term planning process in Engineering Company 2. It could be surmised that employees' perception of the lack of vision was due to a combination of ineffective strategy-making and poor internal communications.

The fact that employees appeared largely unaware of the organisational vision was probably also related to an ineffective information flow throughout the company. This topic produced a low mean score for this specific item and the category 'Use of information' also ranked relatively low. Respondents' comments confirmed that communications were poor internally and information was not shared with all employees, this issue was cited most frequently as a major problem in the company. Moreover, respondents considered the sharing of information an important aspect in the ideal organisation. Many employees suggested they currently relied on rumours as their main source of information. One reason for the abundance of rumours may have been the absence of an overall communication system and the existence of a number of differing parallel means of transferring information from one person to another. This would mean that employees in different departments or at different levels did not necessarily receive the same information at the same time, thus news was passed on verbally in the course of which information might be distorted or exaggerated.

Although poor communications and lack of information did not emerge from the questionnaire as the greatest source of dissatisfaction, it was mentioned most frequently in respondents' added comments as a major problem. It is interesting to note that poor communications, and particularly the withholding of information, were also perceived as one of the principal problems in Group A of Engineering Company 1, where the same manager had been in charge of the change programme.

Provision of training was mentioned by a number of respondents as unsatisfactory, an individual item on the frequency of training also produced a high gap score, suggesting that employees may be dissatisfied with the current training situation. Respondents' comments indicated training provision at present was inadequate, infrequent and lacked an overall plan. The company is presently attempting to focus on organisational learning, yet in order for this to take place the right conditions for individual learning must exist. Training is one aspect of individual learning, but respondents felt current provision was very unsatisactory, which seems ironic in the circumstances. It would be useful to gather more in-depth information from employees in the company to discover the main criticisms of the current training provision and ascertain what improvements respondents would like to see.

The category which produced the lowest mean score was 'Participation in policy' and an individual question on the part played by employees in making policy decisions also resulted in a negative response. It is probably not surprising that participation in policy making should rank lowest, however, as this tends to be a feature of a well-established learning organisation, which this company did not claim to be at this time. The findings on employee participation were similar in Engineering Company 1 where the workforce did not appear to be involved in policy making. It is possible that the lack of development in both companies in this direction is due in part to management style; the manager responsible for initiating the changes in both companies, while claiming to be in favour of sharing power, may in fact have been reluctant to relinquish control.

There appeared to be a degree of discontent with the way in which employees in Engineering Company 2 were rewarded. One individual item stating that employees were, or should be, rewarded for effort and good work produced one of the highest gap scores and respondents ranked this factor high in their perception of the ideal organisation. Their additional comments confirmed that the current reward system was seen as unfair and full of anomalies. it is difficult to speculate on the reasons for this dissatisfaction; the present reward system may be an amalgamation of a number of systems from different departments which have merged, or it may be that the system of

allocating rewards is not being modified to keep pace with other changes in the company. Financial rewards have traditionally been a source of contention for employees in many companies. More information on this topic would help to clarify the issue.

Respondents identified a supportive atmosphere as the most important factor in their ideal organisation, though the present organisational situation scored less highly on this topic. The work atmosphere is influenced by a number of other closely-related issues such as leadership, access to information, employee-management relations and morale. As most of these factors produced negative responses in the questionnaire, it is probably not surprising that respondents felt the current work atmosphere could be improved. Additional comments indicated that morale and commitment were low throughout the company and that relations with management, particularly with senior managers, were poor. Again more in-depth information would enable the researcher to establish more clearly the reasons behind employees' apparent feelings of disillusion.

One individual item concerned with encouraging employees to read about external opportunities and competition scored very low. Respondents seemed to regard an interest in external influences and environmental links as relatively unimportant and irrelevant to themselves. It may be that management has done little to persuade employees that 'environmental scanning' (Pedler et al 1997: p136) might be a useful facet of their jobs.

The mean scores of categories suggested that respondents did not have very positive views on leadership in the company, as the mean score for this category ranked eighth out of nine and the dissatisfaction index was high. However, more specific data would be needed to establish the reasons behind employees' criticism of company leadership.

There were a number of effects of age and years of service on category variables. It would appear that older respondents were more positive about company strategy, the use of information and leadership. This may have been because as these employees were all aged over fifty, they intended to remain in the company until retirement and therefore had no wish to 'rock the boat'. Younger employees might be more idealistic naturally and

therefore more dissatisfied with certain aspects of their work. The number of years respondents had worked for Engineering Company 2 had an effect on their responses to the categories of 'Participation in policy', 'Environmental links', 'Learning climate' and 'Leadership'. The newest recruits, ie. those that had been in the company for less than one year, responded more positively than those who had been with the company for longer periods of time. It is possible that this effect was due to optimism linked with the newness of the job; perhaps longer-serving employees had become more cynical.

The overall null hypothesis was rejected; this could not be considered a learning organisation. Two of the subsidiary null hypotheses were rejected; the mean scores for these categories suggested that:

Employees were empowered and made decisions related to their work and

The organisational structure facilitated learning.

The other null hypotheses were accepted and some doubt is also cast over the validity of the suggestion that employees in this company were empowered, as there seems to have been a degree of misunderstanding of what empowermnent implied.

10.9 COMPARISON BETWEEN COMPANY 1 AND COMPANY 2

There were some similarities between the results of the first survey in Group A of Engineering Company 1 and this survey. In both companies the category of empowerment scored most highly and participation in policy making lowest. Similarly the individual items which produced the most positive responses were the same in the two companies; both sets of employees strongly agreeing that they worked without close supervision and that they possessed the skills and expertise needed for their jobs. Poor communications were criticised in both organisations, this was an issue which emerged as significant more from respondents' additional comments than from the questionnaire in both cases. Leadership was also perceived as unsatisfactory in the two organisations. The Manufacturing Director had been in charge of the changes at both companies which probably influenced the style in which the change was managed.

There were also a number of differences between the results for the two companies. Respondents in Company 1 had less negative feelings about the existence and awareness of a company vision than in Company 2, where these items produced very negative responses. Respondents' comments suggested that morale was lower in Company 2, or that people felt more strongly about this. There appeared to to be a greater readiness for change in Company 2. Group A of Engineering Company 1 had probably made more progress towards becoming a learning organisation, but this is understandable given that the change process had been underway for longer there.

It should be remembered that the second survey took place during the early stages of a change programme in the company and was intended to highlight progress made towards a learning organisation and pinpoint areas which needed attention. While the achievement of a central focus on learning was one of the primary aims of the changes in Engineering Company 2, it is necessary to recognise the existence of other goals such as increased cost-effectiveness and sustaining competitive advantage. The findings of the survey were summarised and presented to management in order to act as feedback during the change process.

10.10 RECOMMENDATIONS

In order for the company to continue to progress towards becoming a learning organisation, it is suggested that the following steps should be put into practice. Firstly, the company needs to put into place an effective communication system, which the findings indicate does not presently exist. Ideally, such a system should be introduced at the outset of the change programme, beginning with group discussions involving all members of the organisation. Internal communications should incorporate a number of different methods of disseminating and exchanging information, both formal and informal. Information technology needs to be an integral part of this system, providing up to date and easily accessible information about company matters for all organisational members and an exchange of ideas. However, it is likely that not everyone in the company will have the same access to computers, or may not wish to rely on technology

as the main means of communication, therefore alternative mechanisms should exist. Communications need to be at the centre of a learning orientation and deficiencies in the system at Engineering Company 2 were clearly impeding the development of a learning organisation.

Secondly, an appropriate and achievable vision needs to be created and communicated to everyone in the company. Employees should be made aware of this vision in a variety of ways, including discussions where everyone is encouraged to offer opinions or contribute suggestions. Thirdly, management should emphasise that employee involvement is an integral part of the new focus and that employees will be consulted about all issues that are likely to affect them. Empowerment needs to be more clearly defined in terms of how employees can expect to benefit and what is expected of them by the company. Mechanisms need to be created by which all organisational members can offer ideas or opinions on ways of working. It is important that employees' ideas should be acknowledged and tried out where feasible and that ownership of useful ideas should be correctly attributed.

The advantages of establishing links with the external environment should be explained by company leaders. This aspect of a learning company had not been developed at all in this company at the time of the survey. Managers need to state their wish that members of the workforce should act as environmental scanners (Pedler et al 1997), contributing potentially useful information about competitors, collaborators or external circumstances. These data could then be shared and used to inform the planning process.

10.11 SUMMARY

Research was carried out in a second engineering company using an improved version of the questionnaire. This incorporated a gap analysis designed to measure the difference between the present organisational system and the ideal position as perceived by employees. Data were analysed in terms of individual items and nine conceptual categories. Factor analysis did not provide a useful alternative set of categories for

classification. The most positive responses to individual items concerned the lack of close supervision of workers. The highest mean score of the nine categories was for the section on empowerment, with organisational structure also scoring high. Participation in policy making scored lowest. Only three categories out of nine had mean scores above the mid point.

Dissatisfaction scores were high for the categories of leadership and employee participation in policy making, implying that respondents saw the need for a great deal of change in these areas. The dissatisfaction scores were lowest for organisational structure and empowerment. Respondents' comments indicated a concern over poor communications and a lack of trust between management and employees. The provision of training and inconsistencies within the pay system were also criticised. There was a significant effect of age on the categories of organisational structure and the use of information, and a highly significant effect of years (the number of years respondents had worked for the company) on participation in policy and environmental links.

As anticipated, the results did not indicate that this company conformed to the notion of a learning organisation at this point of the change process. It conformed most closely to the notion of a learning organisation in terms of the organisation's structure and the extent of employee empowerment, though some employees may have confused empowerment with lack of close supervision, while others did not view empowerment as desirable for the company. The findings were intended to provide useful feedback to the company in identifying the areas in which most progress had been made and those where a great deal of change was still needed.

CHAPTER ELEVEN

TELEPHONE INTERVIEWS
ENGINEERING COMPANY 2

11.1 INTRODUCTION

From the analysis of questionnaire data in Engineering Company 2, (Phase 4 of the research) several topics had been identified which would benefit from further exploration. It was also felt that the collection of research material had relied on quantitative methods in Company 2 to date and there was a need for some in-depth qualitative data to clarify some of the issues raised and provide a more balanced approach. Some respondents had also indicated a desire to discuss certain aspects of the questionnaire through their comments.

It was therefore planned to conduct some personal interviews with employees; after careful consideration it was decided these would be best carried out as telephone interviews, because of the distance involved. Some advantages and disadvantages of telephone interviewing are discussed in the Methods section in 6.8.5. The topics to be discussed had arisen from the findings of the questionnaire survey and were those about which employees appeared to feel strongly, both in a positive and a negative way. The interviews were set up by the Personnel Manager, who selected at random a number of employees from different departments who agreed to be interviewed, some of whom had not responded to the questionnaire.

11.2 SAMPLE

There were to be twelve interviewees within the company who had agreed to talk to the researcher about learning and the management of change in the company. The sample consisted of male employees of different ages, some of whom had worked for the company for a number of years and others who were relatively new employees. No female members of the organisation were included as these made up a very small proportion of the total workforce (less than 0.5%) and their views might not be representative of the population as a whole. There were also people from different ethnic backgrounds although this would not be discussed during the interviews as questions about ethnic origin might prove offensive to interviewees and bias the way they responded.

The interviewees were from a number of different work sections; again this was not discussed specifically during the interviews for reasons of anonymity, but the composition of the sample was thus more likely to encompass a range of viewpoints on the issues under consideration. Five of the interviewees had completed and returned questionnaires; six, for various reasons, had not. Respondents were not asked to give their names, although some did this voluntarily, and no personal information was requested; instead the interviews focused on the opinions and perceptions of the individual employees.

11.3 AIMS

A series of telephone interviews was set up with a small sample of employees at Engineering Company 2 with the broad aim of exploring in greater depth a number of issues which emerged from the questionnaire. It was also intended to provide triangulation of existing data, by seeking in-depth perspectives on the topics under consideration (triangulation is discussed in greater detail in section 6.6.5.1). Through detailed one-to-one interviews, it was planned to clarify employees' views on issues raised by the questionnaire and others which interviewees felt were relevant and to identify any other factors influencing the development of a learning organisation which may have been omitted from the questionnaire and had not been revealed through respondents' added comments. Although no specific hypotheses were addressed in this phase, it was intended to consider the following two research questions which had not been covered by the survey;

Trust between members of the organisation is a prerequisite for the development of a learning organisation and

There is a relationship between effective communications and a climate of trust.

11.4 RESULTS

The findings of the telephone interviews are presented here, firstly feedback about response to the questionnaire survey and then results in terms of the categories which

emerged from the analysis. There were eight categories; five original topics resulting from the questions asked; communications, receipt of information, empowerment, work relations and leadership, and three other categories which emerged from the interviews as frequently mentioned issues; employee participation, change in the company and the new shiftwork system. The findings within each category are presented in the form of a table, showing the type of comment and the number of references that were made to it. For the purposes of the tables the wording is presented in a generalised form; in the descriptions of interviewees' observations which follow employees' original statements have been recorded as far as possible.

11.4.1 Questionnaire response

The eleven participants in the telephone interviews were asked whether they had completed and sent in the questionnaire forms and if not, why they had not done so. Five people said that they had sent in completed questionnaires, one claimed not to remember and the other five had not replied. The reasons given for non-response were various. One individual said he was away at the time and so had not received a survey form. A second interviewee said he had not filled in the form because it was issued at the same time that he was completing a self-appraisal form and he was busy with that.

One person who took part in the interviews admitted that he had not returned the questionnaire form because he 'had not got round to it', it had been put in a drawer and forgotten until it seemed too late. Only two employees said they had not completed the questionnaire because they did not like it. The first of these said that he filled in the form but then started to think about it and decided that he couldn't see the point; answering the questions was not likely to change anything. The other interviewee felt strongly that too much time was taken up in the company with 'waffling' and 'meaningless meetings' rather than getting on with the job. He felt that most of the discussion did not really adddress the problems that existed and that the questionnaire was just an extension of that discussion. The same employee made a lot of useful comments about the situation in the company however, and provided some ideas for improving matters.

11.4.2 Communications

Respondents' comments on communications are discussed first as the strongest feelings of interviewees appeared to focus on this issue. Table 11.1 illustrates interviewees' opinions on communications in the company.

No. of comments	Content
10	Communications poor throughout the company
4	Within some departments communications adequate
3	Everyone wants the news - good or bad
2	Lack of communication particularly on wider issues
2	Poor communications the company's main problem

Table 11.1: Opinions of Interviewees on Communications

Ten out of the eleven people interviewed thought that communications were poor throughout the company, particularly on wider issues of policy. Two individuals claimed there was a distinct lack of communication, another said managers did not really want to discuss things and a third employee thought communications on wider issues, such as the controversial new shift system, were the problem. Two respondents mentioned a lack of feedback and thought people wanted to be involved. Four argued that communications were not so bad on a smaller departmental scale; certain departments were thought to be better than others in this respect.

Three employees claimed that everyone in the company would prefer to know what was happening, even when the news was bad, such as threat of redundancies. Two people suggested that poor communications were the main problem at Engineering Company 2 and were the key to other problems such as the relationship between management and employees. Lack of adequate communication was thought to be a traditional problem; it would be hard to eradicate feelings of 'us' and 'them' which have existed for many years, this is also likely to influence the amount of trust present in the company. Two interviewees also mentioned that managers seemed to be aware of the

need to improve communications, and that since the questionnaire survey were going out of their way to get feedback.

11.4.3 Dissemination of Information

Although there are clearly close links between communication and information, a number of observations were made about the ways in which employees received information within the company and these were thought to be sufficiently distinct to warrant a separate section. Table 11.2 shows the main opinions of respondents regarding the way information is imparted throughout Engineering Company 2.

No. of comments	Content
11	Too many unsubstantiated rumours
7	Receive some information through meetings
4	Find things out from noticeboards
3	Managers sometimes withhold important information
3	Verbal information often distorted

Table 11.2: Opinions of Interviewees on Information Sharing

The employees interviewed held differing views on the way in which information was circulated throughout the company; this may have been due to the different work sections in which employees were situated. Four people stated they received information through regular task force meetings and another four claimed they obtained information from team briefs, though one employee said he was unaware of any group meetings and would like to see these taking place. A further four interviewees maintained most of their information came from noticeboards, others said information came from the Trade Union, too.

By far the greatest number of comments, however, referred to rumours. These were variously referred to as 'the rumour tree', 'the grapevine' or 'the rumour train.' All the people interviewed said there were too many rumours at Engineering Company 2 and

these existed in place of real information, or tended to precede it. Employees claimed that following rumours, they would receive verbal information from a foreman or manager, or could ask for confirmation of a rumour. Information was always given out in these circumstances but details were not necessarily included. One person felt that middle managers were often not kept informed themselves.

Interviewees suggested much of the information was passed round verbally from one person to another, but it often became distorted in the process, 'like Chinese whispers', one interviewee suggested. However, several employees claimed that some information was withheld on occasions; one person contended that one manager would deny something another manager had said and two others thought management would only tell you what they wanted you to know. One employee argued managers kept some things secret but another said there were no secrets, while two others thought all firms kept some things hidden and that retaining information was an inbuilt feature of management.

A number of people mentioned meetings. Four thought meetings were held regularly with managers, one argued there were too many meetings; 'we're here to make machines, not have meetings', and another person insisted there were now many more meetings than before. One person said there were no group meetings in his department, however.

There was a complaint that the minutes of one committee meeting were vetted before being made available to employees and another employee advocated more feedback from certain meetings.

11.4.4 Empowerment

As a result of the question respondents were asked about empowerment, a number of observations were made. These are summarised in Table 11.3 below and described in more detail in the following section. Participants in the telephone interviews confirmed the findings of the questionnaire in that most employees in the company seemed to think they were fairly empowered and felt positively about this, though the degree of

empowerment varied with departments. Everyone interviewed agreed that as skilled employees, they were left to get on with their own work without close supervision. Three people added that no-one checked up on people, they were free to make decisions about their own work.

No. of comments	Content
11	Allowed to work without supervision
7	Supervisors provide support where required
5	Some employees abuse empowerment
4	Enjoy the benefits of empowered situation
3	Make decisions about own work
2	Other employees are supportive and helpful

Table 11.3: Opinions of Interviewees on Empowerment

In order to facilitate employee empowerment a supportive atmosphere appeared to exist. Seven interviewees noted that supervisors were available to provide support where necessary and two noted that no-one was criticised for having problems. Two people also commented that other workers provided assistance and were ready to help whenever required. The supportive atmosphere was one of the benefits of empowerment noted by employees, other advantages included being treated as equals, and possessing control over the quality of your own work; four people mentioned they enjoyed being trusted to get on with their work and make their own decisions. Two people suggested that being empowered added interest to the job.

However, five people noted that the freedom accorded by empowerment was abused by some employees who wasted time and 'messed about'. This reiterated the findings of the questionnaire. Discipline was thought to be a problem sometimes, it was suggested that first line managers needed support from higher managers in enforcing this. Two employees commented on teamwork, suggesting that managers were trying to implement this and that it was already in place during shift work, but that over the whole

system employees were not working in teams at this point in time. Videos demonstrating the value of teamwork, which had recently been shown to employees, were thought by one person to be a good idea. Another employee felt he was lucky to be working in a small team where the atmosphere was very good.

11.4.5 Employee-Management Relations

There were a number of remarks which addressed relations between employees and management. These were mostly in response to a specific question on the subject put to interviewees, but led on to discussion on a number of other related issues. The main comments on employee-management relations are illustrated in Table 11.4; the following section describes the discussions more fully.

No. of comments	Content
8	Little or no trust between management and employees
5	Morale very low
5	Poor relations because employees do not trust management
3	Employees have lost respect for management
2	Poor relationship partly due to problems over pay
2	Managers don't appreciate employee loyalty
2	Relations currently the worst ever

Table 11.4: Opinions of Interviewees on Employee-Management Relations

Two people stated that they had worked in the company for some years and relations were currently the worst they had ever been; two others suggested that relations were poor and needed improving. Five interviewees claimed that morale within the company was low, there was a great deal of apathy and lack of confidence on the part of employees and improvements needed to be made.

Three people commented that management had lost a lot of respect, particularly through the implementation of the shift system and the handling of the new contracts.

Other employees mentioned a lack of respect for employees; one suggested skilled workers were 'treated like zombies' and another felt engineers did not command the respect they deserved from management. Two people thought that the poor management-employee relationship was also partly due to problems with the pay structure; current wage negotiations were making the situation 'very fraught'. Two employees argued that employees had suffered a series of broken promises and another described the workforce as 'completely disillusioned'. One worker suggested that when there was a shortage of work, employees felt inscure about the future of their jobs and this had an impact on work relations. Two interviewees discussed lack of appreciation by management for employee loyalty and another indicated that frequent changes in management were detrimental to long term employees.

The greatest number of comments on workplace relations however, related to a lack of trust, mainly on the part of employees towards management. Eight of the eleven people interviewed maintained there was little or no trust at Engineering Company 2, though one thought this was just a fact of life, and a further five employees asserted poor workplace relations existed because employees did not trust management. One person argued that management did not trust employees either, though they claimed to. Another two employees thought the lack of trust was associated with the historical 'them' and 'us' situation which would be difficult to resolve.

11.4.6 Leadership and Direction

A number of remarks were made which referred to leadership and direction in the company; these are summarised in Table 11.5 below. Five of the people interviewed thought that effective leadership had been lacking in recent years but two felt the situation was improving under the new director. One person claimed that First Line Managers had little faith in their own supervisors; this may be related to comments on the need for managerial support in order to enforce better discipline. Two employees commented that leaders in the company were not good at handling people and failed to treat everyone equally.

No. of comments	Content
7	Don't know senior managers, rarely or never see them
6	No consistency in management style
5	Effective leadership lacking in recent years
3	Lack of direction is due to too many management changes
2	Leaders don't treat employees equally
2	Situation improving under new Managing Director

Table 11.5: Opinions of Interviewees on Leadership and Direction

A number of interviewees argued that poor leadership was linked to lack of contact between employees and top managers. Four employees said they did not know who many of the senior managers were; one described them as 'a faceless, nameless army', and seven people suggested that employees rarely or never saw top managers and that this was because they were frequently away from the company. Another person argued top managers were 'whizz kids' who wouldn't stay in the job for long, and who were not aware of what was happening on the shop floor, though one person said the managing director had visited once and talked to everyone.

Three people commented on the lack of direction at Engineering Company 2 and a further three thought that takeovers or changes in management had led to differences in direction over the past few years; this had left employees confused about the company's overall strategy. Six people claimed there was a lack of consistency in management style and direction, they felt more stability would improve the current leadership situation.

Although four interviewees argued things were always changing in the company and there was too much change, two people felt the situation was improving because of the changes and another four felt the changes were positive; one employee commented that management seemed determined to change the company for the better. Five people noted that managers were making an effort to follow up the issues raised by the questionnaire; these individuals said they were pleased that something was being done.

11.4.7 Shift Work

One very contentious topic was the introduction of shift work and the new contracts that accompanied this change. This was a subject that had emerged from respondents' comments at the end of the questionnaire, although it had not been referred to in individual items in the survey, as it had not been mentioned by managers prior to the administration of the questionnaire. Participants in the telephone interviews made a number of references to this issue and there were clearly a lot of strong feelings associated with it. The observations of respondents are illustrated in brief in Table 11.6 below and discussed in more detail within this section.

No. of comments	Content
6	New shift system has caused major problems
5	Employees resent shift system because no prior consultation
4	Managers should ask the people who know
3	Management has lost respect over this issue

Table 11.6: Opinions of Interviewees on the Shift System

Six people claimed the introduction of a new shift system had caused major problems in the company, and people did not like it; 'no-one wants the shift system' contended one individual. Five interviewees thought this was mainly because the new system had been brought in without prior consultation. One employee described being issued 'out of the blue' with a new contract which made shift work compulsory and having to sign it. Another suggested employees were suffering from 'culture shock' as a result of the changeover from flexitime to a two-shift system and added that it was difficult to appreciate the benefits.

Three people thought managers had lost respect through the way in which the new shift system had been introduced and that this had seriously undermined management's relationship with employees. Four people advocated more consultation with employees, one suggesting managers should 'consult the people who know'. Another respondent

claimed management was currently going out of its way to obtain feedback and discover the feelings of employees and felt it was a pity it had not done this over the shift system.

11.4.8 Employee Participation

Observations about workplace relations and the way in which the shift system had been introduced led on to discussion about the participation of employees in the running of the company.

No. of comments	Content
4	More consultation needed with employees
3	Decisions often made without asking people affected
2	Company now aware of benefits of involving employees
1	Managers now exploring the potential of the workforce
1	Everyone wants to participate in the company

Table 11.7: Opinions of Interviewees on Employee Participation

Many of the remarks about the involvement of employees were made in connection with other issues, but there were a number of comments which referred specifically to employee participation. A summary of these is illustrated in Table 11.7(see above).

Four people argued more consultation was needed with employees throughout the company and three thought that important policy decisions were often made without prior discussion with those concerned. One interviewee said the worst thing was having no choice, even after working in the company for years. Another pointed out that other people were making decisions about their work and their lives and a third was angry that when employees' suggestions were put to use there was no recognition that the ideas had originated from the shop floor.

Two individuals suggested that the company was now becoming aware of the advantages of involving employees in decisions about their work, and that the results of the questionnaire survey had helped to reinforce this idea. One interviewee thought

managers were beginning to explore the potential of the workforce and another recommended getting everyone more involved in the day-to-day business of the company. Two individuals claimed that everyone wanted to participate; 'People want to be involved and consulted', insisted one. Another employee thought that there would not ever be true participation however; 'Let's face it, we're never going to end up on the board of directors'.

11.4.9 The Need for Change

Organisational change was mentioned in most of the telephone discussions. Employees were aware of the changes taking place and the reasons behind them, but had differing views as to the effectiveness of the changes. These views are summarised in Table 11.8 below. Most of the employees interviewed understood that there was a need for the company to change in order to keep up with the business environment of the 1990s. Two said they realised the company could not stand still and another thought that they were moving slowly in the right direction.

No. of comments	Content
5	Managers following up issues raised by the questionnaire
4	Too much change, not enough stability
4	Many of the changes are for the better
3	Company needs to make a profit, but must be fair
2	Redundancies have undermined employees' confidence

Table 11.8: Opinions of Interviewees on Organisational Change

However, four interviewees thought there was too much change and not enough stability. One of these commented that the company sometimes focused on the wrong sort of change; moving buildings or repainting, which was a waste of time and effort, but another respondent thought that the company was doing the right thing in moving departments closer together geographically.

Inevitably, change in the company was linked to job insecurity. Two interviewees thought that the redundancies which had taken place, while probably necessary, had undermined confidence and led to ill-feeling among employees. Three people said they understood the need to make a profit, but thought the company could treat employees fairly, while concentrating on improving efficiency.

Four individuals believed most of the changes in the company were positive, however; managers were making an effort to improve communications or understand the needs of the workforce. A number of people also thought that the questionnaire had in itself generated change; five respondents indicated that managers were now following up issues which employees had known were unsatisfactory for some time but which had been highlighted by the results of the questionnaire survey.

11.5 DISCUSSION

The factor which emerged from the telephone interviews as most significant was that these employees viewed communications within the company as very inefficient. There was widespread dissatisfaction with the current communication system and almost everyone wanted to see an improvement. These findings confirmed the results of the questionnaire survey which also indicated that communications were poor, although the full extent of employees' discontent was not revealed in the questionnaire. Respondents' additional comments had suggested that inefficient communications and lack of information sharing were major problems in Engineering Company 2. Although some interviewees attributed poor communications to the traditional 'them and us' division between management and non-management, others felt that they deserved to be made aware of company matters and were aggrieved that there was no overall system of imparting information throughout the company.

Certainly, poor communications would appear to be a block to the development of a learning organisation; Kaye (1995) advocates shared information for all employees as one of the main ways of facilitating individual and organisational learning. Indeed Drucker (1995) suggests that new organisations should be built around systems of

integrated information and should constantly measure their existing information in order to plan future strategies. One of the main precepts of the learning organisation is that it involves everyone in the organisation, whatever their level, but employees cannot participate in the running of their organisation if they do not know what is happening within the company. If Engineering Company 2 is to develop into a learning organisation, its workforce must be allowed access to all company information through a systematic process of communication. This does not exist at present, perhaps because managers have been reluctant to relinquish their exclusive possession of relevant knowledge or because they were unaware that information was not being effectively circulated.

All the employees interviewed mentioned the proliferation of rumours in this company, these probably exist in place of an overall communication system. There were also some suggestions that managers were inconsistent in the information they were willing to give out to employees. It would appear that many managers were operating on a 'need-to-know' basis, imparting information when they felt it was appropriate; thus one manager might deny what another had said, or perhaps some managers held information which others were unaware of. There seems to be a clear case for an integrated system of information sharing in order to resolve the resentment and misunderstanding caused by lack of effective communications at present.

Employees claimed to be empowered at Engineering Company 2; the questionnaire survey indicated that this was the area of learning organisation practice in which most progress had been made. However, most of the interviewees had interpreted empowerment as meaning a lack of close supervision. This interpretation of empowerment has little in common with Blundell's (1994) definition of empowerment as providing employees with the authority and autonomy to make decisions and carry out their work, or that of Marsick (1994) who considers empowerment joint decision making about work challenges by groups of employees. In this organisation workers appeared to take little or no part in making decisions, though a few employees had begun to be responsible for their own work. It is not surprising that under scrutiny the organisation

should not show a high degree of empowerment since the change process had only been under way for a short time.

A number of the interviewees mentioned that lack of supervision sometimes resulted in time-wasting or 'messing about'. This reiterated what employees had noted at the end of the questionnaires. As this type of behaviour seemed to be confined to evening or night times it may have been an expression of employees' resentment at the forcible introduction of the shift system. Alternatively, it was an indication that the implementation of a degree of empowerment had not been accompanied by programmes which ensured commitment on the part of employees, or an interest in achieving company goals.

There seemed to be widespread agreement that the relationship between management and non-management employees was poor and had deteriorated over the past few years. This appeared to be due to a number of interrelated factors; firstly employees' lack of trust in the management which was itself the result of disputes and lack of consultation over issues such as the reward system and the introduction of shift work. Furthermore, workplace relations had suffered through little access on the part of the employees to accurate company information; many employees apparently felt resentful at being 'kept in the dark' about company matters which affected their own everyday working lives. Management was now aware of these two problems and was attempting to resolve them, though a major shift in focus would be needed to turn the situation around completely; although the workforce had indicated its readiness for change, the management may have been less willing to relinquish traditional methods.

Too much change had probably taken place in recent years in the composition of the top management team, employees' observations frequently referred to inconsistencies in the style of management and a lack of stability. These constant changes had led, not surprisingly, to feelings of a general lack of direction. This may also be associated with employees' perceptions of a lack of company vision, which emerged from the questionnaire as the factor about which respondents felt most negatively. Some of the employees interviewed indicated that they felt more optimistic about leadership in the

company under the newly-appointed managing director, and noted that attempts were being made to address some of the issues raised by the questionnaire.

The introduction of the shift system had obviously been a source of major discord, partly because of the need for employees to work unsociable hours, but more probably because there had been little or no consultation with the people who were affected by the change. This was a major issue at the time of these interviews as shift work had been introduced very recently and feelings of resentment were still very strong. Discussion with interviewees on this topic provided a valuable insight into the way the company worked and how fairly minor issues often assumed major significance through the way in which they were implemented and the lack of employee involvement. Respondents reiterated a number of times their wish to be consulted and kept informed on matters which concerned their own working lives.

The telephone interviews confirmed the low level of employee participation indicated by the findings of the questionnaire survey. This was not surprising as the company was only in the early stages of the change programme at the time of these interviews and highly developed participation tends to be a feature of a well-established learning organisation rather than one in its initial stages. The company needs to improve its communication system and design an integrated means of dispersing information rapidly throughout the organisation before the degree of employee involvement can be improved. It is more likely that managers would seek the views of employees over important issues in future as they were now aware that the tension caused by the introduction of shift work had been largely due to lack of consultation with the employees affected. These employees were also beginning to recognise they had a right to participate in decisions about their own work.

The responses to the telephone interviews suggested that in many ways employees at Engineering Company 2 were ready for change and recognised that it was necessary for survival. However, this conflicted with frequent feelings of insecurity over the future of their jobs, perhaps because of the lack of stability in the management team and changes in the style of direction or as a result of a general lack of trust in company

leaders. Some respondents implied that managers may have been less ready for change than the rest of the workforce.

Quite a lot of positive feeling appeared to have been generated about the questionnaire survey, however and some interviewees thought the results had opened managers' eyes to the feelings of employees. A number of discussions had taken place between managers and the workforce to follow up issues raised by the questionnaire and one employee had been inspired to devise his own questionnaire on job satisfaction which was being circulated in his department . Managers were clearly interested in resolving some of the problems indicated by the results of the survey as barriers to the development of a learning organisation.

The findings of these interviews suggested that there was probably a link between the low level of information sharing in the company and a lack of trust between managers and employees. The present lack of trust appeared to be a barrier to a better management-employee relationship and to organisational learning, however, it was not possible to ascertain whether trust was necessary to the development of a learning organisation. It also emerged from these interviews that employees who had not responded to the questionnaire did not seem to have done so through a lack of interest.

11.6 RELATIONSHIP BETWEEN QUESTIONNAIRE AND INTERVIEW DATA

The data obtained from the telephone interviews was compared with the findings from the questionnaire. Many similarities were found but there were also certain issues highlighted by the interviews which had not emerged or had not appeared significant from the findings of the questionnaire survey.

Results from the telephone interviews appeared to suggest that the most problematic issue in the company was poor communications. The findings of the questionnaire had not suggested that this was such a major problem, though it was clear that the communication system was not very effective. The interviews also highlighted disparities in the way in which information was disseminated; there seemed to be no system of sharing information. This had not emerged from the questionnaire although

respondents noted that information was not always shared with all members of the organisation to the same degree. The result of an inefficient communication system seemed to be the existence of an abundance of rumours, often inaccurate, which was often the main way in which shopfloor employees received information. Rumours had been mentioned in employees' comments on the survey forms, but it had not been evident that they replaced formal communications to such a degree.

Both the interviews and the survey implied a lack of close supervision and a move towards teamworking. However, both methods of data collection suggested that respondents considered their current position to be empowered, whereas in fact the company was only in the initial stages of implementing employee involvement. The telephone interviews pointed to a concern on the part of some employees that the lack of supervision was already being abused in some instances, and the results of the second part of the data from the questionnaire; the ideal organisational position, suggested not all respondents considered further moves towards empowerment desirable for the company.

The telephone interviews highlighted poor relations between management and non-management employees and a general lack of trust. This lack of trust had not been evident from the results of the survey and suggests that perhaps the questionnaire should address the topic of trust. The findings of the questionnaire had indicated that respondents were dissatisfied with the leadership of the company. This was confirmed by the telephone interviews where it was suggested that there was a general lack of direction, partly due to a series of changes in the management team in recent years. The questionnaire also illustrated respondents' belief that there was no clear organisational vision. Although this was not mentioned specifically in the telephone interviews, it corroborates the overall sense of a lack of direction in the company.

One issue discussed frequently in the telephone interviews was the introduction of the shift system, an issue which had clearly led to widespread feelings of resentment and injustice. While probably not so much a problem in itself, the new system had clearly aggravated existing problems, chiefly a through a lack of management consultation with the employees concerned. The topic of shift work had not been included in the survey as

it was specific to this organisation at this point in time, but it was a useful subject for discussion as it underlined the current failure of management to discuss policy issues with the workforce.

A lack of consultation was associated with a low level of employee participation generally. Respondents' observations during the interviews suggested they wished for greater involvement in a number of aspects of the company. This is borne out by the results of the survey which showed the highest dissatisfaction score was for employee participation in policy making.

One finding which emerged from both the telephone and questionnaire data as positive was the recognition throughout the company of a need for change. Results from the questionnaire had suggested that respondents understood why management was making changes and that these were necessary for the survival of the company. These views were confirmed in the telephone interviews where respondents agreed the company needed to keep pace with changes in the business environment.

11.7 SUMMARY

This chapter has described the administration and findings of a series of telephone interviews carried out with a sample of employees at Engineering Company 2. The interviews were carried out to provide triangulation of the data produced from the questionnaire survey in this company. Telephone interviews were found in this case to be an effective method of obtaining additional in depth information about employees' perceptions of the company. The results confirmed that communications were poor throughout the company and there was a lack of shared information. There appeared to be no overall system of imparting important information to employees in the company. Although employees were not closely supervised they did not seem to possess a high degree of empowerment and took little part in decision making, although they considered themselves to be empowered.

The relationship between management and non-management employees appeared to be poor and there was a lack of trust on both sides, which was probably associated with

274

other factors such as ineffective communications and changes in management. Interviewees were dissatisfied with inconsistency of management style and lack of contact with senior managers and felt the company had suffered from a lack of direction. The situation now seemed to be improving; managers were following up some of the issues raised by the survey and attempting to take into account the feelings and wishes of the workforce. The findings of these interviews confirmed many of the results of the questionnaire survey but also highlighted respondents' concern over poor communications and a lack of trust between organisational members. These two factors appeared to have inhibited the development of a learning organisation.

CHAPTER TWELVE

CONCLUSIONS AND DIRECTIONS FOR FURTHER RESEARCH

12.1 INTRODUCTION

This thesis has examined the development of the concept of the learning organisation from its origins in the Human Relations approach through action learning and the development of learning theories to its present position as one of the proposed solutions to the problem of sustaining survival and competitive advantage in today's business climate. It is suggested that there are a number of reasons for the current adoption of a series of ideas which have been in existence for some time. The most significant of these are probably severe environmental pressure caused by increased global competition and economic fluctuations, and a widespread recognition of the need for transformational change following the success of the Japanese model. The learning organisation is also one response to changing management practices with a new focus on the human assets of the organisation. The learning organisation is presented here as a model for the management of organisational change and is defined for the purposes of the study as an orientation towards learning rather than a fixed state or end point.

12.2 REVIEW OF RESULTS

The study aimed to address the composition of a learning organisation in terms of nine hypotheses which referred to conceptual characteristics of such organisations. The hypotheses were tested by measuring each of the two companies to determine whether they could be considered learning organisations through the presence of the nine suggested characteristics. The hypotheses were as follows:

Where organisations conform to the theoretical notion of a learning organisation:

H1 Leadership in the organisation encourages employees to learn

H2 The organisational structure facilitates learning

H3 The organisational climate has a central focus on learning

H4 The communication system facilitates learning at individual and group levels

H5 Strategy is learning-orientated

H6 Employees are empowered and make decisions related to their work

H7 Links are fostered between the organisation and its business environment

H8 Individual learning and self-development is encouraged

H9 Employees participate in policy-making

In Company 1 (Group 'A') four of the null sub-hypotheses were rejected. It could be said that in this Group the organisational structure facilitated learning, there was a learning climate, employees were empowered and individual learning and self-development were encouraged. The other five null hypotheses were accepted. This Group could not therefore be said to conform to the theoretical notion of a learning organisation. In Company 2 only two of the characteristics of a learning organisation were found to be present. Two null hypotheses were rejected, suggesting that in this company the organisational structure facilitated learning and employees were empowered and made decisions related to their work. Other null hypotheses were accepted, indicating that this company also failed to conform to the notion of a learning organisation.

As neither of the organisations studied could be said to have been learning organisations, it was difficult to test those hypotheses which relate to preconditions or characteristics of learning organisations in general. In Engineering Company 1 some of the learning organisation characteristics which were not found to be present appeared to have acted as barriers to the development of a learning organisation. Had the company possessed a learning-based strategy, had employees participated in policy making and had information been used and disseminated more effectively, it may be speculated that the company would have been more like a learning organisation. Further testing of the same characteristics on Engineering Company 2 failed similarly to produce evidence of a learning organisation and the lack of certain of these, particularly effective communications, also appeared to act as barriers to learning there.

The elements which seemed to comprise a learning organisation were derived from the literature and represented in a generic model on which the diagnostic tool and the hypotheses used in this study were subsequently based. It appears from the research findings that this model and its nine components may not have been appropriate to these two

organisations in that the learning organisation characteristics used seem to have been largely based on a managerial perspective and were generic, rather than particular to one type of organisation or sector. In the light of this, a new, sector-specific model is proposed. The supplementary research questions stated in Chapter Six are analysed using this model as a framework.

12.3 A SECTOR-SPECIFIC MODEL OF A LEARNING ORIENTATION

This model, which is shown in Figure 12.1 on the following page, is specific to large organisations in the engineering sector and relates to the development of learning orientated organisations. The characteristics of the model are based on factors which have emerged from the research rather than from the existing literature. Evidence from the literature and from studies within organisations indicates that it is difficult to 'become' a learning organisation (eg.Jones and Hendry 1994, Burgoyne 1995); it might be argued that organisations are more likely to achieve a learning orientation, given that it is a focus rather than a state. The fact that the model is sector-specific is considered to be an advantage, as most of the theoretical studies have been based on a generic learning organisation model and have not considered that there might be factors peculiar to particular types of organisation.

The model incorporates some of the elements which comprised the generic model, ie. empowerment and communication, but focuses on other factors which the results of the questionnaire surveys and interviews suggested were more appropriate to these organisations. Certain of the new elements which form the basis of this model were included in the questionnaire surveys as individual items; eg. trust and organisational vision, but emerged from the findings of these surveys and from interviews with employees in both organisations as more significant than was originally supposed. The components of the new model are organisational vision, empowerment of organisational members, an appropriate system of rewards, individual learning, shared learning, effective communication and trust. These issues are directly related to the secondary research questions which were stated in Chapter Six and are reiterated and discussed later in this section.

279
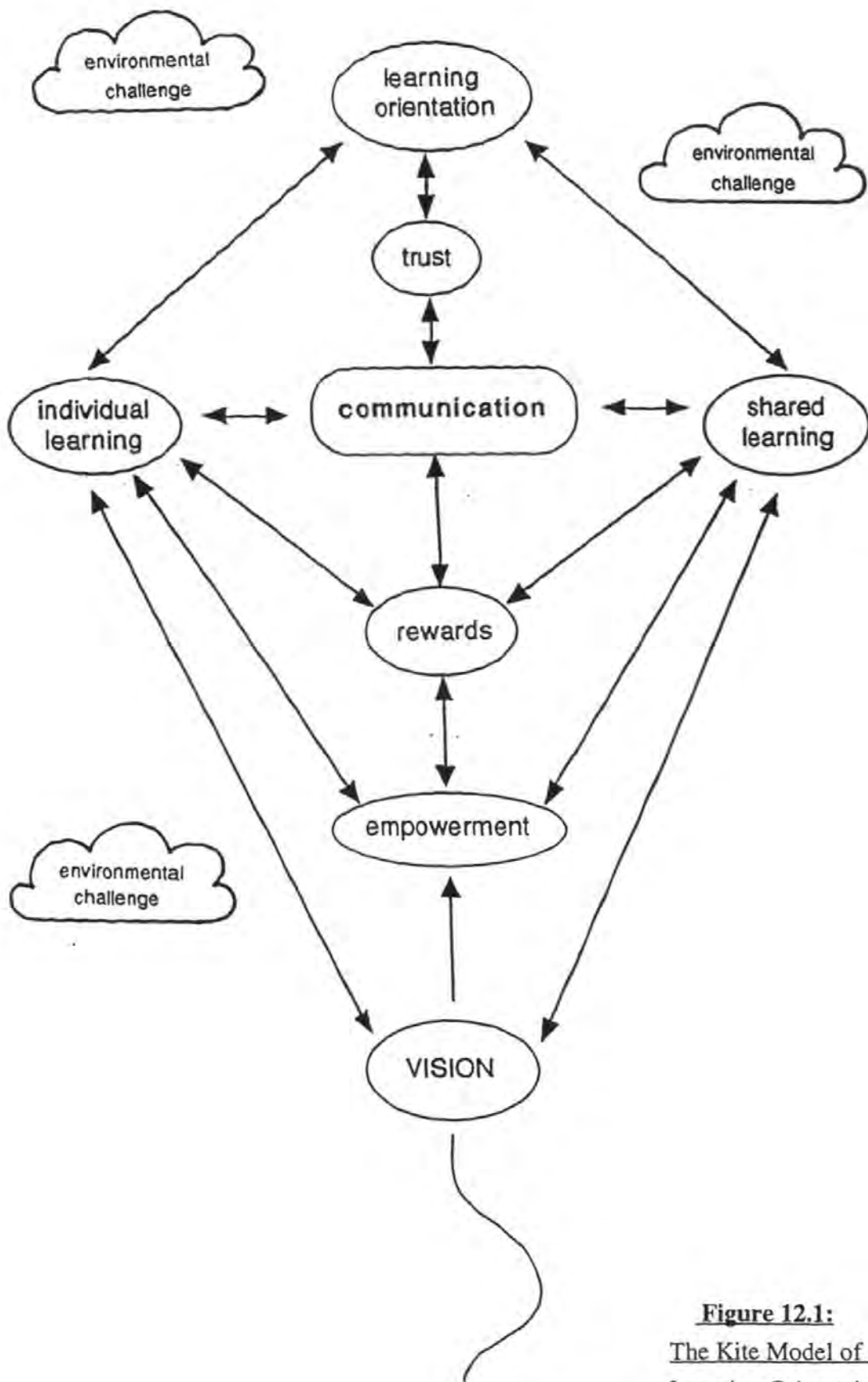
Figure 12.1:
The Kite Model of a
Learning Orientation

The research questions, which were formulated in addition to the nine research hypotheses were as follows:

1. A shared vision is a prerequisite for the development of a learning organisation.

2. Empowerment of employees is a prerequisite for the development of a learning organisation.

3. The rewarding of appropriate behaviour is a prerequisite for the development of a learning organisation.

4. An effective communication system is a prerequisite for the development of a learning organisation.

5. Trust between members of the organisation is a prerequisite for the development of a learning organisation.

6. There is a relationship between effective communications and a climate of trust.

Vision, which is the foundation of the Kite Model, is probably the key to developing motivation and commitment among employees. In order to achieve a committed workforce, loyal to the company and conscientious about their work, management needs to create confidence in its own ability and foster a sense of identification with the organisation (Thomson and Mabey 1994). Connock (1991) claims that the creation of a vision is a key role for the HR manager, and that this vision should include consideration of how people will be treated in the organisation and recognition of the value of individuals to the company. Vision is 'the grand design' (McBeath 1990) and forms the basis of effective leadership, which should focus on the translation of the concept into practical strategies and modification of the existing culture to fit the vision. Sadler (1991) argues that employees are likely to become committed to their organisation when its values are clearly stated and regularly reinforced, when they feel these values are appropriate to the organisation and themselves and when they see management acting out their belief in these values. Within neither of the two organisations studied did there appear to be a clear vision nor did the style of leadership facilitate learning; managers still seemed to adhere to a more directive type of leadership.The

findings of this study do not provide sufficient evidence to either confirm or refute the assumption that shared vision is a prerequisite to the development of a learning orientated organisation, however lack of vision, or poor communication of organisational vision appeared to be a problem in both of the organisations studied and probably acted as a barrier to learning.

The first stage of implementing vision is likely to be the empowerment of employees. Empowerment is a term somewhat overused and frequently misinterpreted, it is considered an essential component of this model, however. Employees or teams need to be granted sufficient authority to solve problems by trying out new ideas so that learning can result. The opportunity for employees to experiment in this way is unlikely to occur unless managers relinquish direct control and allow their employees the freedom to discuss ideas and make work-related decisions. It must be emphasised that empowerment does not imply merely a lack of supervision, but rather a situation where people manage their own work using personal ideas and expertise, while at the same time retaining a focus on organisational goals and achievement of the vision. Training and coaching can help to equip employees with the skills in problem solving and decision making needed to achieve this. Evaluation of the degree of empowerment in both companies was based on respondents' perceptions of this. It was claimed by respondents that a degree of employee empowerment existed in both the companies studied, but perhaps these employees did not possess an in-depth understanding of what the concept entailed; some employees in Company 2 appeared to interpret being empowered as a lack of close supervision by managers. There was an apparent success of empowerment initiatives particularly in Company 1, but in fact only a certain level of empowerment had been implemented. There is no firm evidence to demonstrate that empowerment is essential to a learning orientation, although it would seem that this is likely.

An appropriate system of rewards is also an important part of a learning-orientated company. There are two aspects of the way in which employees are rewarded by the organisation: firstly rewards need to be commensurate with employees' hard work and contribution of ideas, and in particular to reflect the amount of effort put in by individuals or

teams. Secondly the reward system should contain a participative element, so that employees are consulted or take some part in deciding how rewards are to be fairly allocated and perhaps in what these rewards should consist of. There is no reason why good work should only be rewarded in financial terms; experiments with other forms of remuneration such as public recognition, gift vouchers or certificates of commendation have proved successful in a variety of organisations (Hogg 1990, Garvin 1993, Besser 1995).

Research question 3 posited that an appropriate system for rewarding employees was a prerequisite for the development of a learning organisation. Only one individual item in the original version of the questionnaire dealt with this issue; the response to this in Group A was largely negative. In Company 2, the revised version of the questionnaire, the LORI, contained two individual items on rewards. Responses to both items produced low scores and the dissatisfaction indices for both were high. Clearly the use of appropriate rewards could not be said to have contributed to the development of a learning orientation in either organisation. It is not possible from these limited results to prove or disprove that an appropriate reward system is a necessary component of a learning orientated organisation. It may be posited however, that failure to reward ideas and effort or the rewarding of inappropriate behaviour may prevent learning taking place, as employees are then unlikely to be motivated to achieve organisational objectives.

On one side of the model is individual learning, on the other is shared learning. They are depicted in this way to show two strands of learning taking place simultaneously in the organisation; it is not suggested however, that these activities occur only at the periphery of the organisation. The two aspects of learning are closely related to the concepts of individual and shared mental models as defined by Senge (1992) and Kim (1993b). The development of individual mental models into shared mental models through dialogue and discussion is incorporated into the learning orientation model as part of the communication process which is at the heart of such organisations. This is the critical factor for a focus on learning.

Communication involves the process of sharing information, knowledge and learning through a variety of methods such as informal conversation, group discussion programmes or

283

computer-based communication such as email. In addition, communication implies the more formal methods of transmitting information throughout the organisation, which correspond to Pedler, Burgoyne and Boydell's notion of 'informating'(1997: p30). These might include reporting on company performance, reinforcing aspects of the corporate culture or apprising employees of the outcomes of management meetings. Again, such information may be imparted in a variety of ways; through meetings, team briefing sessions, company videos or notices. It is important that not only positive information is communicated; individuals in organisations need to be aware of the bad news such as impending takeover, loss of competitive advantage or threat of redundancies.

The fourth research question suggested that an effective communication system was a prerequisite for the development of a learning organisation. Neither of the companies studied appeared to have an efficient communication system in place and employees indicated through their comments that they believed this was detrimental to learning and to relations between management and the workforce. In both companies poor communications and lack of shared information seemed to be a major problem and employees were concerned about this. The results of the two surveys and the interviews with employees cannot show conclusively that good communications are essential to learning organisations, however there is some evidence to suggest that poor communications and lack of information are likely to provide a barrier to the development of a learning orientation. Without further evidence this factor may only be considered to apply to large organisations within the engineering sector.

Where such a complex, comprehensive system of communication has been established in the organisation, the resulting internal atmosphere is more likely to be one of trust, as indicated in the Kite model. The issue of trust was not addressed specifically through the survey but was the subject of research questions 5 and 6 and emerged from the research as significant. Little evidence emerged about trust in Company 1 but employees in Company 2 talked more openly about a lack of trust. Again, an apparent lack of trust in the organisations studied cannot be considered proof that trust is needed in order to become a learning organisation, but a low-trust climate would appear to inhibit a number of other

factors perceived as characteristic of learning orientated organisations, eg.information-sharing and creativity.

It has been proposed by a number of writers (eg. Pucik 1988, Pettit 1995) that in order for trust to exist, information must be easily accessible and available to individuals at all levels of the organisation. The final research question suggested that a relationship existed between these two factors. This project showed that in Engineering Company 2, where employees felt there was little trust this was due, in part at least, to the withholding of information. The development of a learning organisation was constrained by poor articulation of aims and objectives to the workforce and by a lack of information-sharing at all levels of the organisation; this had resulted in unmotivated staff and low trust. It seems probable that there is a link between a lack of trust and ineffective communications, thus by inference the reverse may also be true.

12.4 OVERALL CONCLUSIONS

This research, although it has not been able to provide conclusive evidence as to the characteristics of learning organisations, has nevertheless been valuable in providing an insight into attempts to introduce a learning orientation in two companies. The model and the findings produced are also useful in that they are specific to large organisations in the engineering sector, rather than being generic, like most of the research into learning organisations to date.

One of the underlying aims of the project was to validate the model of a learning organisation shown in Chapter Six (Figure 6.1) which consisted of nine conceptual categories. However, these categories had been derived from the literature, which is largely management-based and it appeared that some categories were more relevant to managers' perceptions of their organisation than to those of non-managerial employees. Interviews conducted in both organisations suggested there might be other factors which influenced the development of both indiviual and collective learning. Hence, future research needs to be grounded in the experiences and needs of all organisational members.

It is undoubtedly difficult to measure learning organisations; this is illustrated by the dearth of empirical evidence to show that such organisations actually exist. The reasons for this are that the development of a learning organisation is essentially a process rather than a state; it is an ongoing and aspirational concept and may never be completely achieved. This project attempted to measure such organisations by assessing the extent of learning organisation characteristics present and by ascertaining what these characteristics actually comprise. A learning orientation may be a more useful perspective than a learning organisation and as such may be easier to achieve, though some of the same difficulties inherent in the definition of a learning organisation exist.

This project found factors specific to each of the two organisations studied. In the case of Engineering Company 1, the stimulus for change was mainly a result of changes in Government policy regarding defence and the decline in the naval fleet, following the end of the Cold War, both of which meant that the future of the company, and of the dockyard where the company was situated, were in jeopardy. The history and the geographical location of the organisation probably influenced the attitudes of the workforce towards change, and morale was adversely affected by uncertainty surrounding the future of the defence industry. Engineering Company 2 was under pressure from rapidly increasing global competition, particularly from the Far East, which was threatening the position of the company as the major producer of shoe-making machinery. The recent introduction of a shift-work system involving little consultation with the employees affected had led to a poor relationship and lack of trust between managers and non-managerial employees. Other factors may have been specific to organisations of this size or to the engineering sector. It is probably inappropriate therefore, to apply generic learning organisation models in studies of this type.

Within both companies, it was found that the style of leadership was directive rather than facilitative. There appeared to be a reluctance on the part of senior managers to relinquish control and pass a degree of authority to their employees. It is probably for this reason that employee empowerment had, in reality, only taken place to a limited degree. It was difficult to ascertain whether this lack of willingness to delegate authority was

286

intentional and was rooted in managers' own fears about their position in the company, or whether there had merely been a poor understanding of what employee empowerment actually implied. One senior manager was common to both these companies, his particular style of leadership may have influenced the progress of the learning organisation initiative in both companies.

There was an absence of shared vision in both organisations which appeared to have hindered the development of a learning orientation. The literature on learning organisations emphasises the importance of shared vision but these organisations did not appear to have taken this on board; the vision of the organisational future had been created by a small number of managers and not communicated adequately to other company members. In both companies there only appeared to be one or two champions of the vision and little understanding outside the management team of what it implied. A clear, shared organisational vision should be the cornerstone of the learning orientated company; lack of such a vision almost certainly impeded the development of learning in the organisations studied.

Managers in the two companies claimed they wanted to develop a learning organisation for the benefit of the company and its employees, but in both cases this aim did not appear to have been explained to the workforce who perceived the objective of the changes purely as producing higher profits for the company. Undoubtedly greater efficiency and cost effectiveness figured in the rationale behind the introduction of these changes, but it is difficult to speculate to what extent these formed a major aim. It might be concluded that in these companies, the development of a learning organisation was just another management tool used to persuade employees to contribute more effort for similar rewards. On the other hand, it may be that in these two companies the changes introduced formed a rather inaccurate interpretation of the notion of a learning organisation; although the aim was to benefit the workforce at the same time as bringing about greater efficiency, this was unlikely to take place unless managers were prepared to relinquish their role as controllers and directors.

These findings appear to indicate that both the company vision and the rationale behind the development of a learning organisation need to be clearly articulated to all organisational members, not merely to managers, so that all employees have a comprehensive understanding of what the organisation is attempting to achieve and can align their behaviour with these aims.

It was suggested that empowerment was a prerequisite for the development of a learning organisation. Results from the first survey showed that in Engineering Company 1 employees considered themselves empowered and regularly made decisions related to their own work. In Company 2 questionnaire responses to items on empowerment were positive, and the dissatisfaction score for this category was low, which suggested that employees were content with the degree of empowerment they possessed; the views expressed in the telephone interviews supported these views. The findings from both questionnaires indicated that this was the aspect in which each of the two companies was most like a learning organisation.

However, the fact that employees were found to be empowered in these two organisations does not provide conclusive evidence that empowerment is necessary to the development of a learning orientation. Firstly, neither of the companies concerned was found to be a learning organisation and secondly the term 'empowerment' may have been misinterpreted by employees in Company 2, some of whom equated it with a lack of close supervision and noted that this was sometimes abused. True empowerment implies granting employees the authority to make their own decisions in order to achieve shared (organisational) aims; if individuals understand and espouse these aims one might speculate that they are unlikely to abuse the situation. There may be an alternative term to empowerment, or a clearer definition which would include not only the removal of close supervision, but also the provision of structures and training to support the devolution of responsibility from managers to employees. Furthermore, there are different levels of empowerment; training and preparation may be required for employees at each stage of the process.

Much progress had been achieved in the area of employee empowerment, particularly in Company 1, but this was limited to responsibility related to employees' own tasks; in neither company did employees appear to take any part in determining company policy or making strategic decisions. Both groups of employees appeared to believe they had achieved an empowered position, perhaps because the level of development which had occurred was in contrast to their former position; it should be remembered that large numbers of respondents in both companies had worked in the same organisation for many years.

The question of rewards, both financial and non-financial was not covered in enough depth in the questionnaire. Only one item in the first survey referred directly to reward; the mean score for this question suggested negative feelings about this. Respondents' comments in Company 1 also indicated resentment at various aspects of the reward system there. In Company 2, two items on the questionnaire produced mainly negative responses and the findings of the telephone interviews on workplace relations suggested that these had been adversely affected by strife over the pay system. These findings were not sufficiently explicit to make any conclusions about the system of rewards in either company, however they highlighted a need to explore this question further. It seems likely that appropriate rewards play a role in the success of learning initiatives in organisations generally.

Poor communications appeared to be a problem in the two companies; this issue was not being addressed effectively in either company at the time of the surveys. It would clearly be difficult to implement notions of shared learning and creative working if the mechanisms for passing on and sharing information were not in place. Although the lack of an effective communication system emerged as a major problem in Company 2 in particular, the results of the questionnaires did not reveal the full extent of the problem, which was highlighted through respondents' comments and the telephone interviews. This emphasises the value of collecting data by more than a single method, in order to compare and corroborate findings. It may also be an indication of the need to modify those items in the survey form which refer to communications in order to obtain more specific responses.

In both companies poor communication systems and little or no information-sharing appeared to constitute a major barrier to organisational learning. It may be that this factor is specific to the size of the organisations concerned; ineffective communications are more likely to be present in large companies, rather than in small or medium-sized businesses, where the dissemination of information may not need to be a systematic process.

The issue of trust between organisational members was not addressed directly through the questionnaire; thus little information emerged about the level of trust in Company 1. However, respondents in Group B implied a lack of trust between managers and employees and senior managers had suggested that there was little trust between employees and management as a result of large numbers of redundancies which had taken place at the beginning of the change period. It is suggested that the introduction of a learning organisation should be divorced from any restructuring or enforced redundancies and should not take place until at least some months after such programmes, so that the idea of the learning orientation is not linked in employees' minds with insecurity and anxiety.

In Company 2, it was suggested through comments on the survey forms and through the interviews that there was little or no trust between management and employees; in particular employees did not trust many managers, which resulted in poor relations in the workplace. The poor relations and lack of trust in Company 2 seemed to be largely a result of the introduction of a shift system with little consultation or discussion with the workforce. This had occurred recently, since the company had aimed to become a learning organisation, yet this method of implementing a new system seemed inconsistent with espoused learning organisation objectives; that ideas and decisions should be shared and employees and managers should work together to achieve common organisational goals.

It was suggested that a relationship existed between effective communications and trust. Certainly, in these two organisations, and particularly in Company 2 there appeared to be a link between these two factors, this was only based on the views of a small number of respondents, though. In Engineering Company 1, it was not easy to pinpoint particular circumstances but low trust appeared to have resulted from lack of communication,

particularly of threats and uncertainties regarding the future of the company. In Company 2, respondents in the telephone interviews indicated that they received little information through official channels, most often they heard things through rumours, which might or might not be confirmed; this led to uncertainty and a lack of trust. Employees' trust in their managers had also been lost through the lack of consultation when the shift system was introduced. Based on the evidence from these employees' views it would appear that there is probably a link between communications and trust, but further research would be required to substantiate this premise.

Employees in both companies demonstrated a high level of interest in the organisational changes taking place. In Company 1, this was particularly evident from the high response rate to the questionnaire and the large number of comments respondents added to their forms. At the time of the survey there was a lot of anxiety about the future of the dockyard and insecurity about individual jobs following large numbers of redundancies. While respondents claimed to recognise the need for organisational change in order for the company to survive, they were very suspicious of any changes that were implemented because of fears for the security of their jobs.

Anxiety over job insecurity was bound up with the geographical location of the company. For over a hundred years the dockyard, of which this company formed an important part, had been the largest employer in the Plymouth area, and while this position had now changed there was still a lot of local reliance on it as a strategic industrial centre. Furthermore there were few possibilities for alternative industrial employment in the South West. Respondents also appeared to take a considerable amount of pride in working in the dockyard, and for this reason they were interested in the way the company was developing. Many of the responses, however, expressed anger or negative feelings.

In Engineering Company 2 a number of respondents were also keen to express their opinions about the changes being made in the company. People appeared to be less worried about job security here, partly because there had not been enforced redundancies as part of the change process. Moreover, the company was situated in the heart of the Midlands, where

there is a strong industrial basis and a number of towns only a short distance apart, thus there were more possibilities for alternative employment in the surrounding area. The responses from the questionnaire and the telephone interviews indicated that these employees possessed an interest in the future of their jobs and were genuinely interested in helping to make the company a better place to work in.

One of the aims of the research was to determine the applicability of the learning organisation as a model for change. In the two organisations studied, senior managers had attempted to apply learning organisation principles to the management of change with varying degrees of success. In Company 1 the success of the learning organisation model was probably limited by the lack of involvement of the workforce in decision making, other than that directly related to their own work. Many of the changes made appeared to have been structural, this was borne out by the results of the survey which suggested that employees were reasonably content with the revised structure of their Group, moreover this was one aspect which conformed more closely to the notion of a learning organisation.

Senior managers claimed there had been cultural changes in the Group associated with modifications to values and behaviour, but the examples given were largely connected with the behaviour of managers rather than lower level employees. It appeared there had been little involvement of non-managerial employees throughout the change programme. This was at odds with the concept of a learning organisation in which vision, ideas and decisions are shared between all organisational members. It is suggested that one of the reasons why this Group could not be considered a learning organisation was the lack of articulation and discussion of aims and ideas throughout the process of change and the consequent non-involvement of the workforce in any form of strategic decision making.

Paradoxically, although the questionnaire appeared to show that this Group was not a learning organisation, senior managers nevertheless claimed the changes had been successful because performance had been improved. This would suggest that the development of a learning organisation was in fact, only a subsidiary aim and that senior managers were in reality more concerned with improving efficiency and enhancing the image of the Group.

In this Group further development towards a learning organisation was probably impeded by the lack of progress in other Groups and poor communication between Group A and senior managers. It is suggested that it may be unrealistic to attempt to introduce a learning orientation in one Group or department of any organisation, without attempting to implement similar initiatives in other Groups.

Links at employee level between both organisations and the wider business environment appeared to be weak and there was little indication that either company was attempting to pursue this issue. Respondents from the two companies did not seem to believe that it was part of their job to gather intelligence about the external environment and management had not encouraged this view. The lack of environmental scanning is perhaps more understandable in Engineering Company 1 because the dockyard had traditionally been independent of its surroundings, but is not appropriate to market-orientated organisations of the 1990s. Lack of awareness of developments by competitors or impending environmental changes is likely to threaten the survival of today's organisations.

Information on employees' views of the 'ideal' organisation was not collected from Engineering Company 1. In Company 2 the gap scores and the results of the telephone interviews suggested that the ideal organisation according to employees was not necessarily one which would conform to a learning organisation, although it had been assumed that this would be the case. This may have been because there were factors specific to the engineering sector, which in turn raises questions about the applicability of general learning organisation models. It may be however, that respondents were unhappy with the way in which management had perceived learning organisation characteristics, such as empowerment, in relation to the company. Some respondents did not consider that monitoring the business environment should be part of their job and a number were unhappy with the lack of supervision associated with empowerment of employees. These attitudes probably resulted from the way the change programme had been implemented in Company 2; it would appear that management had not established the necessary underlying structures before effecting the changes.

It was not possible to substantiate claims that the learning organisation may form a model for the management of change, as although this model had been applied in these two companies neither was found to have developed into such an organisation at the time. The learning organisation may prove to be a relevant model for the management of change, but it is not the only model and may not necessarily be appropriate to all organisations. Sector-specific models may prove more useful than generalised learning organisation principles.

12.5 STRENGTHS OF THE RESEARCH

The study has contributed positively to existing work in this area in a number of ways. Firstly, it has provided a new and different approach to a field where little empirical evidence has been collected to date. The research uses a specially-designed research instrument which is an outcome of the study *per se* , and which should prove valuable in future work in this area. This study was also different in that it sought to examine the development of learning organisation characteristics from the perspective of employees at all levels of the organisation below middle management, whereas most previous studies have focused on the beliefs and values of the management team. The findings in these two companies, that the perceptions of senior managers and lower level employees differ widely as to the degree and types of learning taking place in the organisation may well prove generalisable to other firms.

This study also used a questionnaire survey method supported by individual or group interviews rather than a case-study approach which has been more widely employed in research of this type. The questionnaire provided a wealth of empirically-based quantifiable data from two significantly sized samples. It is planned to conduct further analysis on the data obtained and also to extend the sample for the purposes of factor analysis. Another outcome of this study has been the development of the Kite Model (See Figure 12.1) which is based on the research findings rather than a synthesis of the literature. Future research may focus on those aspects of learning-orientated organisations identified in the model as a parallel strand to further data collection using the LORI research instrument.

Perhaps the greatest strength of this research is the fact that both the research instrument and the Kite Model are sector specific rather than generic, unlike most learning organisation models to date (eg. Swieringa and Wierdsma 1993, Pedler, Burgoyne and Boydell 1997). Given the differences which exist between public and private sector organisations, between manufacturing and service industries etc., it is unrealistic to expect all organisations attempting to develop a learning orientation to display uniform characteristics. The Kite Model is specific to the engineering sector, but perhaps more importantly to large, older organisations, where the established culture plays an important role. Future studies may focus on grounded type research in another sector, in order to develop another different model, thereby demonstrating that the Kite Model is indeed specific to engineering organisations.

The research carried out in these two organisations has also proved of use to the companies concerned, although this was not a primary objective of the study. The findings of the questionnaire surveys and the interviews were reported back to each organisation in turn in order to inform the change process. In Engineering Company 2 in particular, employees' perceptions of changes within the company were taken on board by the management team and provided valuable feedback in the development of a learning orientation.

Altogether then, this study has made a significant contribution to the field of learning organisation theory. It has extended knowledge about such organisations and those attempting to become them in several different ways, for example the significance of organisation-specific factors, barriers to the development of a learning orientation and some means of overcoming these, and the sequence in which learning organisation models may be successfully implemented. Finally, the study has provided an abundance of empirical data and suggested a number of directions for further research.

12.6 A CRITIQUE OF THE RESEARCH

There are inevitably a number of shortcomings associated with some aspects of the research, certain of these may have been attributable to the way in which the research was

designed, while other constraints were imposed by external agents. Some of the limitations of the project are described in detail below.

Firstly, there was no triangulation of research in Engineering Company 1. The main data set was collected via the use of a questionnaire in Group A; it would have been preferable to view information gained about the Group from another angle in addition to this, through some form of personal interviews with employees in the same Group. Senior managers were unwilling to give permission for any interviews of this kind however, perhaps because of the working hours these would involve, or because they were worried that the views of shop floor employees would have proved negative. As a result the only form of additional data came from respondents' comments at the end of the questionnaire forms.

Secondly, the use of the questionnaire in Group A of this company should ideally have been supported by another survey employing the same questions in another Group of the company. This would have provided a comparison between the Groups and an indication of those factors specific to Group A. A comparative survey might also have helped confirm that the characteristics being observed were the result of the changes implemented in Group A and had not been present beforehand, as other Groups in Engineering Company A had not made any attempt to introduce learning orientated initiatives. It had been the intention of the researcher to administer a second survey shortly after the first, but though this had been agreed initially with senior managers at the company, permission for the second survey was subsequently refused on the grounds that another major survey for IIP was being carried out at the same time.

Ideally, research in both companies should have been carried out using longitudinal studies. This type of study, repeated at regular intervals would have provided evidence of learning organisation characteristics before, during and after the changes, in order to reflect accurately aspects of the organisation such as the work atmosphere, morale and commitment among employees, the presence or lack of trust and working relationships at various points during the proposed transition to a learning organisation. The first phase of the research only measured the organisation three years after the changes had first been implemented, not in

the initial stages of the process. Although employees in Group A commented that morale was currently at an all time low and that the atmosphere had deteriorated as a result of the changes in the Group, without an earlier comparison there was no way of verifying this.

In the second organisation it would probably have been better to conduct the research at the beginning of the change process, rather than nine months later. A second survey could then have been administered perhaps eighteen months later to provide a comparison and an indication of progress achieved. Unfortunately, in neither company was the timing of the data collection ideal, due to the way in which the research evolved through incidental meetings and the time needed to establish the feasibility of the study and determine access. This may indicate that in future situations it would be preferable to follow a planned programme of research as far as possible, instead of allowing it to develop by chance.

The gap format of the second questionnaire attempted to address the difference between the current situation and a future state by asking for respondents' views on the present and the ideal organisational situations. This then provided the opportunity to measure the gap between the two answers. However, respondents' views on the ideal organisational state did not precisely match the characteristics of a learning organisation, contrary to expectations. This would suggest that the researcher had assumed a familiarity with the concept of the learning organisation on the part of employees which was not the case, or may indicate that the notion of a learning organisation, or certain aspects of it, was innapropriate in this instance. In view of this, the gap being measured in this survey was that perceived by respondents to vary from their ideal, rather than a difference between the current state and a learning organisation.

This factor adds weight to the argument against prescriptive models of the learning organisation, a topic discussed earlier in the thesis. As already suggested, some factors may be specific to individual organisations; others may relate to particular types of organisation or to a discrete sector. The development of a learning organisation is essentially an experimental, emergent process. The imposition of prescribed generic models may therefore actually impede progress towards the achievement of the desired aims.

297

Measurement of learning organisation characteristics in both companies were based almost exclusively on the perceptions of the employees working there. A comparison was made between these and the claims of managers as to the degree of learning organisation characteristics present at that point in time. However, employees' and management perceptions were the only type of evidence used for the purposes of evaluation; there was no data indicating improvements in company performance or increased effectiveness in ways of working which might have supported claims of learning organisation characteristics. The views of shop floor employees might be criticised for their lack of a holistic perspective and it might be argued that these employees were being questioned about the learning organisation; a subject of which they appeared to have little or no knowledge. Senior managers on the other hand, would be more likely to exaggerate the degree of learning present in both organisations, because they wished their change programmes to be successful in this respect. The study could have also elicited the views of other organisational stakeholders such as customers or suppliers in order to gain a more complete picture.

Much of the questionnaire analysis was based on a series of conceptual categories devised by the researcher from analysis of the literature. These did not correspond exactly to any previously tested models of learning organisation characteristics, although they were related to the categories of Pedler, Burgoyne and Boydell (1997) and to a lesser extent, to those of Marquardt and Reynolds (1994). The nine categories employed here may therefore not be an accurate representation of the composition of the theoretical notion of a learning organisation. However, other lists of learning organisation characteristics were derived in a similar manner and verified through application in a number of organisations (eg. Pedler et al op.cit). It could be surmised that a number of further applications of the LORI questionnaire would be likely to provide evidence that these categories are equally reliable as others in the field.

The conceptual categories employed in the questionnaire were derived from the literature and categories were scored against each other; this method of measurement was based largely on the ideas of Pedler, Burgoyne and Boydell (1993, 1997) who used a similar

298

scoring procedure. However, the practice of categorising individual questions can only be based on personal perceptions; certain items may appear very difficult to classify as they could belong in any one of two or three categories and the final allocation of a category may be an arbitary decision. Questions on the degree of supervision practised in the organisation, for example, might equally belong in the categories of empowerment, learning climate or individual learning. This clearly impacts on the reliability of any categorical scores and suggests the use of scores may be a dubious method of evaluating progress. The factor analysis revealed completely different associations between individual items from the ones suggested in the conceptual categories, and although the factors extracted failed to provide a useful classification in this instance, a larger sample might have resulted in a series of new categories.

With hindsight, a positivist method may have been an inappropriate approach to establish the elements which make up a learning-orientated organisation; some form of grounded approach may have proved more suitable, so that the characteristics of the organisations studied emerged gradually during the course of the research rather than being predetermined.

This perspective of the learning organisation has attempted to include such features as systems designed to reward employees for effort and ideas, learning from mistakes and encouragement for experimenting with new approaches. Though a number of papers mention such aspects in passing, there is little in the literature which specifically addresses these topics and almost no empirical evidence to indicate that these ideas can be successfully incorporated into the notion of a learning organisation.

Claims that Engineering Company 1 was in the process of becoming a learning organisation were based on the perceptions of a small number of senior managers. It was clear that some middle managers and certainly the majority of employees did not know what a learning organisation was and were certainly unaware that their company was claiming to be such an organisation, which is completely contradictory to the whole concept of the learning organisation as a *shared* objective.

Similarly, in Company 2, although senior managers expressed their desire that the company should develop along learning organisation lines, the foundations for a learning organisation had not been laid, and without a declaration of intent on the part of managers, employees could not be expected to understand the aims of the change process or the rationale behind the survey.

12.7 DIRECTIONS FOR FURTHER RESEARCH

As a result of this study, a number of areas have emerged where it is indicated that further research would be desirable in helping to further knowledge. The first of these is empirically based research into the learning organisation of which there is little to date. Much of the literature on this topic is prescriptive but with little evidence of practical application, with a few notable exceptions. There is clearly a need for further research of this type based on empirical data and particularly into aspects of measurement and evaluation, this would help to establish the characteristics of learning organisations on which future analysis might be based.

At the time of the research, it only proved possible to find one existing instrument for measuring the learning organisation; this was the Eleven Characteristics Questionnaire developed by the Learning Company (Pedler, Burgoyne and Boydell 1993). This is a commercial product which, at the time, was relatively expensive; moreover analysis of the data obtained through its use was carried out by the Learning Company; it therefore seemed to be unsuitable for academic use. A second tool, also a questionnaire, was subsequently discovered by the researcher; the strategic learning assessment map (SLAM), which was designed to diagnose patterns of organisational learning (Crossan and Hulland 1996), however this was only in the early stages of development at the time. It is suggested that other tools should be developed to assess learning organisation characteristics; these may be more useful if they are type or sector-specific, as much of the theory on learning organisations to date has been generic. The LORI is considered to be a valuable development in this direction and should be used and validated in a number of other organisations.

It is also proposed that further research might be carried out to establish whether a differentiation can be made between a learning orientation and a learning organisation. This thesis has suggested throughout that it is difficult, if not impossible, to judge the point at which the 'state' of being a learning organisation is reached, because the need for progress and change is continuous. Instead it might be more feasible to determine that an organisation had orientated itself towards learning in all aspects. If this proved to be the case, it might then be possible to conclude that a learning orientation may be easier to achieve and to measure than a learning organisation.

If the organisation is to aim to become learning-orientated then research needs to focus on the process by which this may be achieved. Much of the literature has been concerned with implementing the principles of the learning organisation at company level through strategic planning and restructuring. Future research might concentrate on the measures managers need to adopt on a day-to-day basis at a local level so that a learning orientation might be achieved.

The Learning Organisation Research Inventory (LORI) was tested in two organisations in the engineering sector. It would be useful to collect further data from engineering-based organisations using the questionnaire in order to establish its reliability. Further application of this questionnaire would help to establish its validity and reliability as a diagnostic tool. Validity could be further enhanced by using a different researcher to gain objectivity. Factor analysis could then be conducted on the data obtained. It is suggested that, subject to further analysis using larger samples, the categories suggested by the factors extracted might provide a more valid basis for evaluation of learning organisation characteristics than the nine conceptual categories used to date.

Further research might also be carried out into utilising this empirical research to greater effect in the organisations studied. The LORI questionnaire carries diagnostic and developmental aspects which are potentially valuable to these organisations; future studies could focus on an ongoing structured process of assessment and improvement. Garvin (1993) discusses the diagnostic capabilities of learning organisations, suggesting that such

organisations are skilled at systematic problem solving, using learning cycles, empirical data and statistical programmes as their tools. The development of organisational learning through systematic information sharing and transfer of learning may follow on from the diagnosis of problems in learning-orientated organisations; future research could concentrate on the developmental aspects. Future studies could also consider a wider perspective on organisations with a learning orientation, while still focusing on the engineering sector. Comparative and co-operative cross-national studies might help to determine whether there is a cultural factor in the way in which learning-orientated organisations are designed and developed.

This research suggested that some of the nine conceptual categories on which the LORI questionnaire was based may not have been appropriate to these organisations. The Kite Model (Figure 12.1) was developed from the research findings and it is suggested that this might form the basis of a new research strategy, although further validation would be required before adoption of the model. Alternatively, a grounded approach might be employed in future studies in place of the positivist method adopted in this study; this could identify organisational characteristics and determine which of these may match the learning orientation model.

The literature on learning organisations refers in passing to experimentation and creative ways of working (eg. Leonard-Barton 1992, Garvin 1993, Pedler et al 1997) but there is little to explain how businesses may become more creative or what structures and learning might encourage employees to experiment in order to further organisational aims. It is proposed that the facilitation of experimentation as a means of learning should form the starting point for further research. Similarly, the issue of appropriate rewards is frequently mentioned in passing in the learning organisation literature but there is little which addresses this question directly, with the exception of Pedler, Burgoyne and Boydell (1997). It is suggested that more practical research should be carried out into reward systems and that this should comprise more than merely consideration of pay schemes.

Although a number of claims to learning organisation status have been made, most of these have relied on the claims of senior managers. There is now a need to conduct empirical research into a variety of organisations to establish which can in fact be considered to be learning organisations, according to the definitions proposed in the literature. If some companies were to be identified as learning organisations, the characteristics of such firms could be established conclusively. It would then be possible to ascertain whether such organisations provide benefits not only to senior managers but also to employees at every level. This study has highlighted some of the gaps in the research into this area. There is clearly a need for more practical studies of learning organisations and a better understanding the qualities and values organisations require in order to develop a learning orientation. These studies need to espouse the learning organisation philosophy and take into account the needs and views of employees at all organisational levels, rather than evaluating progress from a purely management perspective. Following on from this project, it should be possible to test and perfect a sector-specific, sequential model for the implementation of a learning orientation in organisations undergoing major change.

LIST OF REFERENCES

Aiken, H.D. (1956) *The Age of Ideology*. Mentor, New York.

Allan, J. (1995) 'Empowerment' *Management Accounting*, February, p32.

Alpander, G. G. (1991) 'Developing Managers' Ability to Empower Employees', *Journal of Management Development*, Vol.10, No.3, pp 13-24.

Alreck, P.L. and Settle, R.B. (1995) (2nd ed.) *The Survey Research Handbook: Guidelines and Strategies for Conducting a Survey*. Irwin, Chicago.

American Management Association (1994) 'Encouraging a Risk Taking Culture' *Supervisory Management*, 10th August (No author cited.)

Analoui, F. (1993) *Training and Transfer of Learning*. Avebury, Aldershot.

Anderson, R. (1995) 'Jettisoning Management's Crutches - Learning to Trust Downwards', *Moving from Control to Coaching*, IBC Conference, March, London.

Anderson, H. and Gustavsson, P. (1995) Organisational Learning, Relationships and Internationalization' Unpublished paper, *IMP Conference*, Manchester.

Anderson, D. R., Sweeney, D. J. and Williams, T. A. (1987) *Statistics for Business and Economics*. West Publishing Co., St. Paul, MN.

Annett, J. & Sparrow J. (1985) *Transfer of Learning and Training*. Manpower Services Commission, Sheffield.

Anthony, P. (1994) *Managing Culture*. Open University Press, Buckingham.

Argyris, C. (1982) *Reasoning, Learning and Action*. Jossey-Bass, San Fransisco.

Argyris, C. (1990) *Overcoming Organizational Defences*. Allyn & Baker, Needham Heights, MA.

Argyris, C. (1992) *On Organizational Learning*. Basil Blackwell, Oxford.

Argyris, C. and Schon, D. (1978) *Organizational Learning: A Theory of Action Perspective*. Addison-Wesley, Reading, MA.

Armenakis, A. E., Harris, Stanley, G. and Mossholder, K. G. (1993) 'Creating Readiness for Organizational Change', *Human Relations*, Vol. 46, No.6, pp 681-701.

Armstrong, M. (1995) *Personnel Management Practice*. Kogan Page, London.

Ascari, A., Rock, M. and Dutta, S. (1995) 'Reengineering and Organizational Change: Lessons from a Comparative Analysis of Company Experiences', *European Management Journal*, Vol.13, No.1, pp 1-30.

Atkinson, M. (1994) 'Build Learning into Work', *HR Magazine*, Vol.39, No.9, pp 60-64.

Bailey, K. D. (1994) *Methods of Social Research*. The Free Press, New York.

Banks, P. and Waisfisz, R. (1994) 'Managing Intercultural Teams: A Practical Approach to Cultural Problems' in Shaughnessy, H. (Ed.) *Collaboration Management-Intercultural Working: New Issues and Priorities*, John Wiley and Sons, Chichester.

Barnard, C. (1938) *The Functions of the Executive.* Cambridge, MA., Harvard University Press.

Barnes, L. B. (1981) Managing the Paradox of Organizational Trust', *Harvard Business Review*, Vol.57, No.2, March-April, pp 107-116.

Baron, A. (1994) 'Winning Ways with Culture', *Personnel Managenment,* October, pp 64-68.

Bass, B. M. (1987) 'Charismatic and Inspirational Leadership: What's the Difference?' *Symposium on Charismatic Leadership in Management,* McGill University, Montreal.

Bate, P. (1992) 'Organizational Culture and Problem Solving' in Salaman, G. (Ed.) *Human Resource Strategies.* Sage, London.

Bateson, G. (1973) *Steps to An Ecology of Mind.* Ballantine, New York.

Beard, D. (1993) 'Learning to change Organisations', *Personnel Management,* January, pp 32-35.

Beck, M. (1989) 'Learning Organisations: How to Create Them' *Industrial and Commercial Training,* Vol.21, May/June, pp 21-28.

Becker, H.S. and Geer B. (1960) 'Latent Culture', *Administrative Science Quarterly,* Vol.5, pp 303-313.

Beer, M., Eisenstat, R. A. and Spector B. (1990) 'Why Change Programs Don't Produce Change' *Harvard Business Review,* Nov/Dec., Vol.68, pp 158-166.

Belasco, J. A. (1990) *Teaching the Elephant to Dance,* Century Business, London.

Belbin, R. M. (1981) *Management Teams: Why they Succeed or Fail.* Butterworth-Heineman, Oxford.

Benjamin, G. and Mabey, C. (1993) Facilitating Radical Change: a Case of Organization Transformation; in Mabey, C. and Mayon-White, B. *Managing Change.* Chapman, London.

Bennett, A. R. (1993) 'Corporate Culture or Customer Care: Where Does the Buck Stop?' *Journal of European Industrial Training,* Vol 17, No.6, pp 10-14.

Bennett, R. (1983) 'Management Research', *Management Development Series 20,* Geneva.

Bennis, W. and Nanus, B. (1985) *Leaders: Strategies for Taking Charge.* Harper and Row, New York.

Bentley, T. (1994) 'Facilitation: Providing Opportunities for Learning', *Journal of European Industrial Training,* Vol.8, No.5, pp 8-22.

Berg, B. L. (1995) *Qualitative Research Methods for the Social Sciences .* (2nd ed.) Allyn and Baker, Needham Heights, Mass.

Berger, P.L and Luckman, T. (1966) *The Social Construction of Reality.* Penguin, London.

Besser, T. (1995) 'Rewards and Organizational Goal Achievement: A Case Study of Toyota Motor Manufacturing in Kentucky' *Journal of Management Studies* , Vol.32, No.3, May, pp 383-399.

Bishop, G.F., Oldendick, R.W. and Tuchfarber, A.J. (1983) 'Effects of Filter Questions in Public Opinion Surveys', *Public Opinion Quarterly*, Vol.47, pp 528-546.

Black, T. R. (1993) *Evaluating Social Science Research: An Introduction.* Sage, London.

Blundell, B. (1994) 'Empowerment in Organizations: A Critical Review' *Management Bibliographies and Reviews.* Vol.20, No. 5, pp 2-10.

Boddy, D. & Buchanan, D. (1986) *Managing New Technology.* Basil Blackwell, Oxford.

Boeker, W. (1992) 'Power and Managerial Dismissal: Scapegoating at the Top' *Administrative Science Quarterly*, Vol. 37, pp 400-421.

Boisot, M. (1987) *Information and Organizations: The Manager as Anthropologist.* Fontana, London.

Bouchard, T. J. Jr. (1976) 'Unobtrusive Measures: An Inventory of Uses', *Sociological Methods and Research*, Vol.4, pp 267-300.

Bourque, L. B. and Fielder, E. P. (1995) *How to Conduct Self-Administered and Mail Surveys.* Sage, Thousand Oaks, CA.

Bowen, D. E. and Lawler, E. E. (1992) 'The Empowerment of Service Workers: What, Why, How and When' *Sloan Management Review*, Spring, Vol.33, No.3, pp 31-39.

Bradley, P. (1995) 'Linking Corporate and Reward Strategies for High Performance: The Case of the NHS', Conference Paper, Employment Research Unit Annual Conference, *Organising Employment for High Performance,* Cardiff Business School, September.

Brookfield, S.D. (1987) *Developing Critical Thinkers; Challenging Adults to Explore Alternative Ways of Thinking and Acting.* Jossey-Bass, San Fransisco.

Brooks, E. (1980) *Organizational Change: The Managerial Dilemma.* Macmillan, London.

Brown, R.K. (1978) 'From Donovan to Where?' *British Journal of Sociology*, Vol.23, No 4, pp 36-44.

Brown, R. & Brown, M. (1994) *Empowered! A Practical Guide to Leadership in the Liberated Organization.* Nicholas Brealey, London.

Bryman, A. (1988) *Quantity and Quality in Social Research.* Routledge, London.

Buckley, P. and Casson, M. (1988) A Theory of Co-operation in International Business, in Contractor, F. and Lorange, P. (Eds.) *Co-operative Strategies in International Business.* Lexington Books, Lexington.

Bullock, R.J. and Batten, D. (1985) 'It's Just a Phase we're Going Through: A Review and Synthesis of OD Phase Analysis', *Group and Organization Studies*, Vol.10, December, pp 383-412.

Bunning, Cliff. (1992) 'Turning Experience into Learning: The Strategic Challenge for Individuals and Organizations' *Journal of European Industrial Training*, Vol.16, No.6, pp 7-12.

Burdett, J. O. (1991) 'What is Empowerment Anyway?' *Journal of European Industrial Training*, Vol. 15, No.6, pp 23-30.

Burdett, J.O. (1993) 'Managing in the Age of Discontinuity', *Management Decision*, Vol.13, No.1, pp 10-17.

Burgess, R.G. (1982) *Field Research: A Source Book and Field Manual.* Allen and Unwin, London.

Burgoyne, J., Pedler, M. & Boydell, T. (1991) *The Learning Organisation: A Strategy for Sustainable Development.* McGraw Hill, London.

Burgoyne, J. G. (1994) 'Managing by Learning' *Management Learning*, Vol.25, No.1, pp 35-55.

Burgoyne, J. (1995) 'Feeding Minds to Grow the Business' *People Management*, 21st September, pp 22-25.

Burke, R. J. (1996) 'Information Sources and their Usefulness in a Professional Services Organisation', *Management Decision*, Vol.34, No.1, pp 60-65.

Burnes, B. (1991) 'Managerial Competence and New Technology' *Behaviour and Information Technology*, Vol.10, No.2, pp 91-109.

Burnes, B. (1992) *Managing Change.* Pitman, London.

Burns, T. and Stalker, G.M. (1961) *The Management of Innovation.* Tavistock, London.

Burt, C. (1940) *The Factors of the Mind.* University of London Press, London.

Butler, J. K.Jr. (1991) 'Towards Understanding and Measuring Conditions of Trust: Evolution of a Conditions of Trust Inventory', *Journal of Management,* Vol.17, No.3, pp 643-663.

Bynner, J.M. and Romney, D.M. (1986) 'Intelligence, Fact or Artefact: Alternative Structures for Cognitive Abilities', *British Journal of Educational Psychology,* Vol.56, pp 13-23.

Calvert, G., Mobley, S. and Marshall, L. (1994) 'Grasping the Learning Organization', *Training and Development*, Vol.48, No.6, pp 38-43.

Campbell, D. T. and Fiske, D.W. (1959) 'Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix', *Psychological Bulletin,* Vol.56, pp 81-105.

Campbell, T. (1995) *Benchmarking and Measuring the Learning Organisation: The Rover Reality.* Center for International Management and industrial Development, Lausanne, Switzerland.

Cangelosi, V.E and Dill, W.R. (1965) 'Organizational Learning: Observations Towards a Theory', *Administrative Science Quarterly,* Vol.10, pp 175-203.

Cantley, M.R. (1980) *Who Learns What? A Conceptual Description of Capability and Learning in Technological Systems*. International Institute for Applied Systems Analysis, Laxenburg, Austria.

Carnall, C.A. (1982) *The Evaluation of Organisational Change*. Gower, Aldershot.

Carnall, C. A. (1990) *Managing Change in Organizations*. Prentice Hall International, Hemel Hempstead.

Carr, C. (1994) 'Empowered Organizations, Empowering Leaders', *Training and Development*. March, Vol.48, No.3, pp 39-44.

Carter, R., Martin, J., Mayblin, W. and Munday, M. (1984) *Systems, Management and Change: A Graphic Guide*. Paul Chapman, London.

Cartwright, S. and Cooper, C.L. (1993) 'The Role of Compatability in Successful Organizational Marriage' *Academy of Management Executive*, Vol.7, No.2, pp 57-70.

Cashman, K. and Feldman, J. (1995) 'Reengineering the Employment Contract', *Executive Excellence*, Vol.12, No.2, pp 15-16.

Cattell, R.B. (1967) 'The Theory of Fluid and Crystallized Intelligence Checked at the 5-6 year-old Level', *British Journal of Educational Psychology*, Vol. 37, pp 209-224.

Cattell R.B. (1978)*The Scientific Use of Factor Analysis*. Plenum Press, New York.

Cave, A. (1994) *Managing Change in the Workplace*. Kogan Page Ltd., London.

Chakravarthy, B.S. (1982) 'Adaptation: A Promising Metaphor for Strategic Management', *Academy of Management Review*, Vol.24, pp 735-744.

Chan, K.C. (1994) 'Learning for Total Quality' *The Learning Organization*, Vol.1, No.1, pp 17-22.

Chapman, R. L., Kennedy, J. L., Newell, A. and Biel, W. C. (1959) 'The Systems Research Laboratory's Air Defense Experiments', *Management Science*, Vol.5, pp 250-269.

Chell, E. (1985) *Participation and Organization: a Socio-Psychological Approach*. MacMillan, London.

Child, D. (1990) (2nd ed.) *The Essentials of Factor Analysis*. Cassell, London.

Chin, R. and Benne, K. (1976) 'General Strategies for Effecting Changes in Human Systems', in Bennis, W.G., Benne, K.D., Chin, R. and Corey, K.E. (Eds.) *The Planning of Change*. Holt, Rinehart and Winston, New York.

Clark, J. (Ed.) (1993) *Human Resource Management and Technical Change*. Sage, London.

Clarke B. and Krone C. (1989) 'Environmental Factors, Uncertainty and Organizational Change', *Organization Studies*, Vol.10, No.1, pp 73-91.

Claydon, T. and Doyle, M. (1996) 'Trusting Me, Trusting You? The Ethics of Employee Empowerment', *Personnel Review*, Vol.25, No.6, pp 13-25.

Clutterbuck, D. (1995) 'Development, Empowerment and the Manager as Developer' Conference Paper, *Association for Management Education and Development (AMED)*.

Coad, J. (1992) 'The Development and Organisation of Plymouth Dockyard 1689-1815', in Duffy, M., Fisher, S. Greenhill, Basil; Starkey, D. J. and Youings, J. (eds.) *The New Maritime History of Devon, Vol.I.* Conway Maritime Press, London, in association with the University of Exeter.

Coch, L. and French, J. (1948) 'Overcoming Resistance to Change', *Human Relations*, Vol.1, No.4, pp 512-532.

Cohen, R.K. (1979) 'On the Distinction Between Individual Deserving and Distributive Justice' *Journal for the Theory of Social Behaviour*, Vol.9, No.2, pp 71-75.

Cohen, M. D. (1991) 'Individual Learning and Organizational Routine: Emerging Connections', *Organization Science*, Vol.2, No.1, February, pp 135-139.

Connock, S. (1991) *HR Vision: Managing a Quality Workforce.* Institute of Personnel Management, London.

Coopey, J. (1995a) 'The Learning Organization: Power, Politics and Ideology' *Management Learning*, June, Vol.26, No.2, pp 193-213.

Coopey, J. (1995b) 'Managerial Culture and the Stillbirth of Organisational Commitment', *Human Resource Management Journal*, Vol. 5, No.3, pp 56-76.

Coopey, J. (1996) 'Learning to Trust and Trusting to Learn: Forum Theatre or Court Jester?' *Symposium of Organisational Learning and the Learning Organisation*, September, Lancaster University.

Coulson-Thomas, C. and Coe, T. (1991) *The Flat Organization: Philosophy and Practice.* British Institute of Management, Corby.

Critchley, W. (1993) 'Can Organisations Really Learn?' in *Learning More about Learning Organisations*, AMED Focus Paper, October, Association for Management Education and Development.

Crosby, R.P. (1992) 'Walking the Empowerment Tightrope; Balancing Managerial Authority and Employee Influence' *Organization Design and Development*, King of Prussia, PA.

Crossan, M. and Hulland, J. (1996) 'Measuring Organizational Learning : The Strategic Learning Assessment Map (SLAM)', *Symposium on Organizational Learning and the Learning Organization: Theoretical Research Developments*, September, Lancaster University.

Cumber, R. & Gibbs, R. (1995) 'A Learning Company in Action' *Employers for Capability*, Vol.1 (3) pp 13-16.

Cummings, T.G. and Huse, E.F. (1989) *Organization Development and Change.* West, St. Paul, MN.

Curnow, B. (1989) 'Recruit, Retrain, Retain: Personnel Management and the Three Rs', *Personnel Management*, November, p41.

Curry, L. (1996) 'Rewards Without a Sting in the Tail', *People Management*, 18th April, pp 40-41.

Cyert, R.M. and March, J.G. (1963) *A Behavioural Theory of the Firm.* Prentice-Hall, Englewood Cliffs, NJ.

Czaja, R. and Blair, J. (1996) *Designing Surveys: A Guide to Decisions and Procedures.* Pine Forge, Thousand Oaks, CA.

Daft, R.L. and Huber, G.P. (1987) 'How Organisations Learn: A Communication Framework', *Research in the Sociology of Organisations,* Vol.5, pp 1-36.

Day, G. S. and Nedungadi, P. (1994) 'Managerial Representations of Competitive Advantage', *Journal of Marketing,* Vol.58, April, pp 31-44.

Deakin, S. and Wilkinson, F. (1995) *Contracts, Co-operation and Trust: The Role of the Institutional Framework.* ESRC Working Paper, WP 10, September, University of Cambridge.

Deal, T.E. and Kennedy, A.A. (1982) *Corporate Cultures: The Rites and Rituals of Corporate Life.* Addison Wesley, Reading, MA.

Dean, J. P. and Whyte, W. (1978) 'How do you Know if the Informant is Telling the Truth?' in Bynner, John and Stribley, Keith M.(Eds.) *Social Research: Principles and Procedures.* Longman, London.

DeGeus, A. (1988) 'Planning as Learning', *Harvard Business Review,* Vol.66, No.2, pp 70-74.

Deming, W. E. (1986) *Out of the Crisis.* MIT Centre for Advanced Engineering Study, Massachusetts.

Deming, W. E. (1992) *Quality, Productivity and Competitive Position.* Ford Quality Education and Training Centre, Detroit.

Dench, S. (1993) *The Employers' Manpower and Skills Practices Survey (EMSPS) - Why Do Employers Train?* Employment Department, Social Science Research Branch, Working Paper 5.

Denton, D. K. and Wisdom, B. L. (1991) 'The Learning Organization Involves the Entire Work Force', *Quality Progress,* Vol.24, No.12, December, pp 69-72.

Denzin, N. K. (1978) *The Research Act.* (2nd ed.) McGraw-Hill, New York.

Denzin, N.K. (1983) 'Interpretive Interactionism', in Morgan, G. (Ed.) *Beyond Method: Strategies for Social Research.* Sage, Beverly Hills, CA.

De Vaus, D.A. (1996) *Surveys in Social Research* (4th ed.) UCL Press, London.

Dixon, R. (1993) *The Management Task.* Butterworth-Heinemann, Oxford.

Dixon, N. (1994) *The Organizational Learning Cycle: How We Can learn Collectively.* McGraw-Hill, Maidenhead.

Dixon, N. M. (1997) Organizational Learning: A Review of the Literature with Implications for HRD Professionals, in Russ-Eft, Darlene; Preskill, Hallie and Sleezer, Catherine, *HRD Review: Research and Implications.* Sage, Thousand Oaks, CA.

Dodgson, M. (1993a) 'Organizational Learning: A Review of Some Literatures', *Organization Studies,* Vol.14, No.3, pp 375-394.

Dodgson, M. (1993b) 'Learning, Trust and Technological Collaboration', *Human Relations*, Vol.46, No.1, pp 77-95.

Doutriaux, J. (1992) 'Emerging High-Technology Firms: How Durable are their Comparative Start-Up Advantages?'*Journal of Business Venturing*, Vol.7, No.4, pp 303-322.

Downs, S. and Clarke, A. (1991)*Training Requirements of the Older Worker.* Department of Employment.

Drath, W.H. (1993) *Why Managers Have Trouble Empowering: A Theoretical Perspective Based on Concepts of Adult Development.* Centre for Creative Leadership, Greensborough, NC.

Drew, S. and Coulson-Thomas, C. (1996) 'Transformation through Teamwork: The Path to the New Organization?' *Management Decision*, Vol. 34, No.1, pp 7-17

Driscoll, J. W. (1973) 'Trust and Participation in Organizational Decision Making as Predictors of Satisfaction', *Academy of Management Journal*, Vol.21, No.1, pp 41-49

Drucker, P.F. (1955) *The Practice of Management.* Heinemann, Oxford.

Drucker, P.F. (1988) 'The Coming of the New Organizations', *Harvard Business Review*, Jan-Feb., pp 45-53.

Drucker, P.F. (1989) *The New Realities.* Heinemann, New York.

Drucker, P.F. (1992) *Managing for the Future.* Butterworth-Heinemann, Oxford.

Drucker, P. F. (1995) 'The Information Executives Truly Need', *Harvard Business Review*, Jan-Feb, pp 54-62.

Duncan, R.B. and Weiss, A. (1978) 'Organizational Learning : Implications for Organizational Design' in Staw, Barry (Ed.) *Research in Organizational Behaviour.* JAI Press, Greenwich, Conn.

Dunphy, D.C.and Stace, D.A. (1988) 'Transformational and Coercive Strategies for Planned Organizational Change' *Organizational Studies*, Vol.9, No.3, pp 317-334.

Dunphy, D. and Stace, D. (1993) 'The Strategic Management of Corporate Change', *Human Relations*, Vol.46, No.8, pp 905-920.

Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991) *Management Research; An Introduction*, Sage, London.

Easterby-Smith, M. (1992) 'Creating a Learning Organisation', *Personnel Review*, Vol.19, No.5, pp 24-28.

Eccles, A. (1994) *Succeeding with Change.* McGraw Hill, Maidenhead.

E.C.Council Recommendation, (1993) *Access to Continuing Vocational Training.* 30 June.

Edmonstone , J. and Havergal, M. (1993) 'Empowerment: Holy Grail or a Blinding case of the Obvious?' *Health Manpower Management*, Vol.19, No.2, pp 22-28.

Evans, J. R. (1993) *Applied Production and Operations Management.* West Publishing Co., St.Paul, MN.

Ezzamel, M., Lilley, S. and Willmott, H. (1994) 'The "New Organization" and the "New Managerial Work"', *European Management Journal,* Vol.12, No.4, December, pp 454-461.

Feldman, S.P. (1989) 'The Broken Wheel: The Inseparability of Autonomy and Control in Innovation within the Organization', *Journal of Management Studies,* Vol.26, No.2, pp 83-102.

Fells, R.E. (1993) 'Developing Trust in Negotiation', *Employee Relations,* Vol.15, No.1, pp 33-45.

Felstead, A. and Green F. (1993) *Cycles of Training? Evidence from the British Recession of the Early 1990s.* University of Leicester.

Fern, E.F. (1983) 'Focus Groups: A Review of Some Contradictory Evidence, Implications and Suggestions for Future Research', *Advances in Consumer Research,* Vol.10, pp 121-126.

Festinger, L. (1957) *Theory of Cognitive Dissonance.* Row Petersen, Evanston, IL.

Fink, S.L., Beak, J. and Taddeo, K. (1971) 'Organizational Crisis and Change', *Journal of Applied Behavioural Science,* Vol.7, pp 15-41.

Fiol, C.M. and Lyles, M.A. (1985) 'Organizational Learning' *Academy of Management Review,* Vol.10, No.4, pp 803-813.

Foddy, W. (1993) *Constructing Questions for Interviews and Questionnaires: Theory and Practice in Social Research.* Cambridge, Cambridge University Press.

Fojt, M. (Ed.) (1995) 'Being Taught How to Learn' *Journal of European Industrial Training,* Vol.19, No.6, pp 7-8.

Foot, M. and Hook, C. (1996) *Introducing Human Resource Management.* Addison Wesley Longman, Harlow, Essex.

Foy, N. (1993) *Empowering People at Work.* Gower, Aldershot.

French, W.L. and Bell, C.H. (1984) *Organization Development.* Prentice-Hall, Englewood Cliffs, NJ.

Fretwell, J. (1985) *Freedom to Change.* Royal College of Nursing, London.

Frey, J. H. and Oishi, S. M. (1995) *How to Conduct Interviews by Telephone and In Person.* The Survey Kit, Sage, Thousand Oaks, CA.

Fullerton, H. and Price, C. (1991) 'Culture Change in the N.H.S.' *Personnel Management,* Vol. 23, pp 50-53.

Futrell, C. M. and Swan, J. E.(1977) 'Anonymity and Response by Salespeople to a Mail Questionnaire', *Journal of Marketing Research,* Vol.14, November, pp 611-616.

Galton, F. (1869) *Hereditary Genius.* Macmillan, London.

Gardiner, P. (1996) 'The Case for Employee Empowerment as a Means of Enhancing Organisational Performance', *Management Research News*, Vol.19, No.4/5, pp 68-69.

Gardiner, P. and Whiting, P. (1997) 'Success Factors in Learning Organizations: An Empirical Study', *Industrial and Commercial Training*, Vol.29, No. 2, pp 41-48.

Garratt, R. (1987) *The Learning Organization*. Fontana, London.

Garratt, R. (1995) 'An Old Idea that has Come of Age' *People Management*, 21st September, pp 25-28.

Garvin, D. A. (1993) 'Building a Learning Organization.' *Harvard Business Review*, July-August, pp 78-91.

Gill, J. and Whittle, S. (1992) 'Management by Panacea: Accounting for Transience', *Journal of Management Studies*, Vol. 30, No.2, March, pp 280-295.

Giddens, A. (1979) *Central Problems in Social Theory*. Macmillan, London.

Gill, J. (1996) 'Communication - Is it Really That Simple?' *Personnel Review*, Vol. 25, No.5, pp 23-36.

Goffee, R. and Scase R. (1992) 'Organizational Change and the Corporate Career', *Human Relations*, Vol.45, No.4, pp 363-385.

Goodwen, M. (1993) 'Rewarding Empowerment', *Involvement and Participation*, Summer, No.618, pp 8-11.

Gowler, D. and Legge, K. (1979) 'The Evaluation of Planned Organisational Change: The Necessary Art of the Possible?' *Journal of Enterprise Management*, Vol.1, pp 201-212.

Green, M., Dale, M., Kennie, T., Matzdorf, F. and Megginson, D. (1997) *Learning to Succeed: Learning Processes in the Chartered Surveying Profession*. Royal Institute of Chartered Surveyors (RICS), London.

Green, S. (1985) 'Strategy, Organizational Culture and Symbolism' in Rhodes, Ed. & Wield, David (Eds.) *Implementing New Technologies*. Oxford, Basil Blackwell.

Green, V. (1994) 'Empowerment', *Business, Growth and Profitability*, Vol.1, No.4, pp 333-338.

Groves, R. M. and Kahn, R. L. (1979) *Surveys by Telephone: A National Comparison with Personal Interviews*. Academic Press, New York.

Greenwood, M. (1995) 'Managing the Transition from a Training to a Learning Organization', *Moving from Control to Coaching* IBC Conference, March, London.

Gubman, E. L. (1995) 'People are More Valuable than Ever', *H R Strategy*, Jan/Feb., pp 7-14.

Guile, D. and Young, M. (1996) Knowledge and Learning: the Challenge for Specialist and Non Specialist Learning Organisations, *Symposium on Organisational Learning and the Learning Organisation*, September, University of Lancaster.

Guttman, L. (1955) 'A New Approach to Factor Analysis; the Radex' in Lazarfield, P.F. (Ed.) *Mathematical Thinking in the Social Sciences*. Free Press, Glencoe.

Habermas, J. (1970) 'Knowledge and Interest' in Emmet, D. and MacIntyre, A.(Eds.), *Sociological Theory and Philosophical Analysis.* Macmillan, London.

Hakim, C. (1987) *Research Design: Strategies and Choices in the Design of Social Research.* Unwin Hyman, London.

Hall, R.H. (1972) *Organisations: Structure and Process.* Prentice-Hall, Englewood Cliffs.

Hamel, G. and Prahalad, C.K. (1991) 'Corporate Imagination and Expeditionary Marketing', *Harvard Business Review,* July-August, pp 81-92.

Hammer, M. (1990) 'Reengineering Work: Don't Automate, Obliterate', *Harvard Business Review,* July-August, pp 104-112.

Hammer, M. and Champy, J. (1993) *Reengineering the Corporation: A Manifesto for Business Revolution,* Harper Business, London.

Handy, C. (1989) *The Age of Unreason.* Business Books, London.

Handy, C. (1991) *Gods of Management: The Changing Work of Organisations.* Business Books, London.

Handy, C. (1995) 'Trust and the Virtual Organization', *Harvard Business Review,* Vol.73, No.3, May/June, pp 40-50.

Handy, C. (1995) *Beyond Certainty: The Changing Worlds of Organisations.* Hutchinson, London.

Harrow, J. (1995) 'Modelling Risk in Public Services Organizations: Managers, Organizational Learning and Organization Forgetting' *Risk in Organizational Settings,* E.S.R.C Conference, May, London.

Hawes, J. (1994) 'To Know Me Is To Trust Me', *Industrial Marketing Management,* Vol 23, pp 215-219.

Hawkins, P. (1991) 'The Spiritual Dimension of the Learning Organisation', *Management Education and Development,* Vol.22, Part 3, pp 172-187.

Hawkins, P. (1994) 'Organizational Learning: Taking Stock and Facing the Challenge' *Management Learning* Vol.25, No.1, pp 71-82.

Hayes, J. and Allinson, C.W. (1996) 'Cognitive Style and the Theory and Practice of Individual and Collective Learning in Organisations: A Conceptual Synthesis', *Symposium of Organisational Learning and the Learning Organisation,* September, Lancaster University.

Hedberg, B. (1981) 'How Organizations Learn and Unlearn', in Nystrom, P.C. and Starbuck, W.H. *Handbook of Organizational Design.* Oxford University Press, Oxford.

Hedges, A. (1985) 'Group Interviewing' in Walker, Robert, *Applied Qualitative Research,* Gower Publishing, Aldershot.

Henderson, I. (1993) 'Action Learning: A Missing Link in Management Development ?' *Personnel Review,* Vol.22, No.6, pp 14-24.

Hendry, C. (1995) *Human Resource Management: A Strategic Application to Employment.* Butterworth Heinemann, Oxford.

Hendry, C. (1995) *Human Resource Management.* Butterworth-Heinemann, Oxford.

Hendry, C. (1996) 'Understanding and Creating Whole Organizational Change Through Learning Theory', *Human Relations,* Vol.49, No.5, pp 621-641.

Hendry, J. and Hope, V. (1994) 'Cultural Change and Competitive Performance' *European Management Journal,* December, Vol.12, No.4, pp 401-406.

Hendry, J. & Johnson, G. (Eds.) (1993) *Strategic Thinking, Leadership and the Management of Change.* John Wiley & Sons, Chichester.

Henerson, M. E., Lyons Morris, L. and Taylor Fitz-Gibbon, C. (1987) *How to Measure Attitudes.* Sage, Newbury Park, CA.

Henry, J. and Walker, D. (1991) *Managing Innovation.* Sage, London.

Herriot, P. & Pemberton, C. (1995) *Competitive Advantage Through Diversity - Organizational Learning from Difference.* Sage, London.

Herriott, S. R., Levinthal, D. and March, J. G. (1985) 'Learning for Experience in Organizations', *American Economic Review,* Vol.75, pp 298-302.

Herzberg, F. (1968) 'One More Time: How do you Motivate Employees?' *Harvard Business Review,* Vol.46, pp 53-62.

Heywood, J. (1989) *Learning Adaptability and Change.* Paul Chapman Publishing, London.

Hilditch, P. (1994) 'The Dockyard in the Local Economy', in Duffy, M. Fisher, S., Greenhill, B., Starkey, D. J. and Youings, J. (Eds.) *The New Maritime History of Devon, Vol II.* Conway Maritime Press, London, in association with the University of Exeter.

Hinkin, T.R. (1995) 'A Review of Scale Development Practices in the Study of Organizations', *Journal of Management,* Vol.21, No.5, pp 967-988.

Hofstede, G., Neuijen, B., Ohayv, D. and Sanders, G. (1990) 'Measuring Organizational Cultures: A Qualitative and Quantitative Study Across Twenty Cases' *Administrative Science Quarterly* June, Vol.35, No.2, pp 286-316.

Hogg, C. (1990) 'Incentive Programmes' *Personnel Management Factsheet,* No.33, September.

Holpp, L. (1995) 'If Empowerment is So Good, Why Does it Hurt?' *Training,* March, pp 52-57.

Honey, P. and Mumford, A. (1989) *The Manual of Learning Opportunities.* Honey, Maidenhead.

Honey, P. and Mumford A. (1992) *The Manual of Learning Styles.* Peter Honey, London.

Honey, P. (1991) 'The Learning Organization Simplified', *Training and Development,* July, pp 30-33.

Howard, R. (1990) 'Values Make the Company', *Harvard Business Review*, September-October, pp 133-143.

Huber, G. (1991) 'Organisational Learning: The Contributing Processes and the Literatures', *Organizational Science*, Vol.2, No.1, pp 88-115.

Hultman, G. and Klasson, A. (1994) 'Learning from Change? A Note on Interactive Action Research.' Paper presented at the *Conference on Learning and Research in Working Life*, Collaborative Experiences, Lund.

Hunt, Raymond G. (1968) 'Review of E.J. Miller and K.A. Rice's Systems of Organization' *Administrative Science Quarterly*, Vol.13, pp 360-362.

Hutchins, E. (1991) 'Organizing Work by Adaptation', *Organization Science*, Vol.2 pp 14-39.

Iles, P. (1994) 'Developing Learning Environments: Challenges for Theory, Research and Practice' *Journal of European Industrial Training*, Vol.18, No.3, pp 3-9.

Industrial Society, The. (1995) 'Empowerment', *Managing Best Practice Guide*, No.8.

Ishikawa, K. (1985) *What is Total Quality Control?* Prentice-Hall, Englewood Cliffs, NJ.

Jaques, E. and Clement, S. D. (1991) *Executive Leadership*. Basil Blackwell, Cambridge, Mass.

Jarvis, M. (1995) 'Diffusing Resistance to Change within the Team', IBC Conference Paper, *Moving from Control To Coaching*, March, London.

Jashapara, A. (1993) *Competitive Learning Organization: A Quest for the Holy Grail*. Henley Working Paper.

Jick, T. D. (1983) Mixing Qualitative and Quantitative Methods: Triangulation in Action, in Van Maanen, John, *Qualitative Methodology*. Sage, Beverly Hills, CA.

Johnson, G. and Scholes, K. (1993) *Exploring Corporate Strategy* (3rd ed.) Prentice Hall, Hemel Hempstead.

Jones, A.M. and Hendry, C. (1992) *The Learning Organization: A Review of Literature and Practice*. The Human Resource Development Partnership, London.

Jones, A.M. and Hendry, C. (1994) 'The Learning Organization: Adult Learning and Organizational Transformation', *British Journal of Management*, Vol.5, pp 153-162.

Jordan, J. and Jones, P. (1997) 'Identifying Organisational Knowledge Profiles', Conference paper, *Competing Through Knowledge*, May, University of the West of England, Bristol.

Jordan, L. A.; Marcus, A. C. and Reeder, L. G. (1980) 'Response Styles in Telephone and Household Interviewing: A Field Experiment', *Public Opinion Quarterly*, Vol. 44, pp 210-222.

Joreskog, K.G. (1969) 'A General Approach to Confirmatory Maximum Likelihood Factor Analysis', *Psychometrika*, Vol.34, pp 183-202.

Judd, C. M.; Smith, E. R. and Kidder, L. H. (1991) *Research Methods in Social Relations*. Harcourt Brace Jovanovich, Fort Worth, TX.

Kaiser, H.F. (1958) 'The Varimax Criterion for Analytic Rotation in Factor Analysis'. *Psychometrika*, Vol.23, pp 187-200.

Kakabadse, A., Ludlow, R. and Vinnicombe, S. (1988) *Working in Organizations*. Penguin, Middlesex.

Kanter, R.M. (1984) *The Change Masters*. Simon and Schuster, New York.

Kanter, R.M. (1989) 'The New Managerial Work' *Harvard Business Review*, Nov/Dec. pp 85-92.

Kanter, R.M. (1991) 'Change-Master Skills: What it takes to be Creative', in Henry, J. and Walker, D. (Eds.) *Managing Innovation*.. Sage, London.

Kanter, R.M., Stein, B.A. and Jick T.D. (1992) *The Challenge of Organizational Change: How Companies Experience it and Guide it*.. Free Press, MacMillan, New York.

Katz, D. & Kahn, R.L. (1978) *The Social Psychology of Organizations*. John Wiley, New York.

Kaye, B. (1993) *Chaos and Complexity: Discovering the Surprising Patterns of Science and Technology*. Addison Wesley, Reading, MA.

Kaye, D. (1995) 'The Importance of Information', *Management Decision*, Vol.33, No.5, pp 5-12.

Keeley, M. (1978) 'A Social-Justice Approach to Organizational Evaluation', *Administrative Science Quarterly*, Vol.23, pp 9-15.

Kidd, J.B. and Teramoto, Y. (1994) 'The Learning Organisation: The Case of the Japanese RHQs in Europe' Research Paper Series 9402, *Aston Business School*.

Kiefer, C. F. and Senge, P. M. (1982) 'Metanoic Organizations in the Transition to a Sustainable Society', *Technological Forecasting and Social Change*, Vol.22, pp 37-49.

Kim, D. H. (1993a) 'The Leader with the "Beginner's Mind"', *Healthcare Forum Journal*, Vol.36, No.4, pp 33-37.

Kim, D. H. (1993 b) 'The Link between Individual and Organizational Learning', *Sloan Management Review*, Fall, pp 37-50.

Kim, D. H. (1993c) *A Framework and Methodology for Linking Individual and Organizational Learning: Applications in TQM and Product Development*. Doctoral Thesis, MIT, Mass.

Kim, J. and Mueller, C. W. (1978) *Factor Analysis: Statistical Methods and Practical Issues*. Sage, Beverly Hills, California.

Kim, P. S., Pindur, W. and Reynolds, K. (1995) 'Creating a New Organizational Culture: The Key to Total Quality Management in the Public Sector' *International Journal of Public Administration*, Vol.18, No.4, pp 675-709.

Kinnear, P. R. and Gray, C. D. (1994) *SPSS For Windows Made Simple*. Lawrence Erlbaum Associates, Hove.

Klein, J.A., Edge, G.M. and Kass, T. (1991) 'Skill-Based Competition' *Journal of General Management*, Vol.16, No.41, pp 1-15.

Kline, P. (1994) *An Easy Guide to Factor Analysis.* Routledge, London.

Kofman, F.(1992) Lecture Slides on the Learning Cycle. *MIT Sloan School of Management,* Cambridge, MA.

Kohn, A. (1993) 'Why Incentive Plans Cannot Work' *Harvard Business Review,* September-October, pp 54-63.

Kolb, D.A. (1984) *Experiential Learning,* Prentice-Hall, Englewood Cliffs, NJ.

Kotter, J. P. & Heskett, J. L. (1992) *Corporate Culture and Performance.* The Free Press, New York.

Kotter, J. P. (1996) *Leading Change.* Harvard Business School Press, Boston, MA.

Lane, C. and Bachmann, R. (1995) 'Risk, Trust and Power. The Social Constitution of Supplier Relations in Britain and Germany', Working Paper 5, *ESRC Centre for Business Research,* University of Cambridge.

Lave, J. and Wenger, E. (1990) 'Situated Learning: Legitimate Peripheral Participation', IRL Report, *Institute for Research on Learning,* Palo Alto, CA.

Laver, M. (1989) *Information Technology; Agent of Change.* Cambridge University Press, Cambridge.

Lavrakas, P. J.(1993) *Telephone Survey Methods: Sampling, Selection and Supervision.* Sage, Newbury Park, CA.

Lawler, E.E, Nadler, D.A. and Camman, C. (1980) *Organisational Assessment.* Wiley-Interscience, New York.

Lazlo, E. (1972) *Introduction to Systems Philosophy.* Gordon and Breach, New York.

Leavitt, H.J. (1991) 'A Survey of Management Education', *Economist,* Vol.2, No.8, March, pp 1-28.

Lee, M. (1995a) Action Learning as a Cross-Cultural Tool, in Stewart, J. and McGoldrick, J (Eds.) *Human Resource Development: Perspectives, Strategies and Practice.* Pitman Publishing, London.

Lee, M. (1995b) 'Working with Choice in Central Europe', *Management Learning,* Vol.26, No.2, pp 215-230.

Lee, S. M. and Kim, B. (1996) 'Developing the Information Systems Architecture for World-Class Organizations', *Management Decision,* Vol.34, No.2, pp 46-52

Legge, K. (1984) *Evaluating Planned Organizational Change.* Academic Press, London.

Leigh, A. and Maynard, M. (1993) *Ace Teams: Creating Star Performance in Business.* Butterworth-Heinemann, Oxford.

Leitch, C., Harrison, R., Burgoyne, J. and Blantern, C. (1996) 'Learning Organizations: The Measure of Company Performance', *Journal of European Industrial Training,* Vol.20, No.1, pp 31-44.

Leonard-Barton, D. (1992) 'The Factory as a Learning Laboratory', *Sloan Management Review,* Fall, pp 23-37.

319

Leppitt, N. (1993) 'The Path to Successful Empowerment' *Engineering Management Journal*, December, No.14, pp 271-277.

Lessem, R. (1990) *Developmental Management: Principles of Holistic Business*, Blackwell, London.

Lessem, R. (1991) *Total Quality Learning*. Basil Blackwell, Oxford.

Lessem, R. (1993) *Business as a Learning Community*. McGraw Hill, Maidenhead.

Levitt. B and March, J.G. (1988) 'Organizational Learning', *Annual Review of Sociology*, Vol.14, pp 319-340.

Lewin, K. (1951) *Field Theory in Social Science*, Harper and Row, New York.

Lewis, P. and Thornhill, A. (1994) 'The Evaluation of Training: An Organizational Culture Approach' *Journal of European Industrial Training*, Vol. 18, No.8, pp 25-32.

Likert, R. (1967) *The Human Organization*. McGraw-Hill, Maidenhead.

Lofland, J. and Lofland L. H. (1995) *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*. Wadsworth, Belmont, California.

Loomis, J.L. (1959) 'Communication, the Development of Trust, and Co-operative Behaviour', *Human Relations*, Vol.12, pp 305-315.

Lovell, J. (1996) Preliminary Analysis of the Times Top 1000 Companies, Discussion Paper, *Plymouth Business School*.

Luhmann, N. (1979) *Trust and Power*. John Wiley, Chichester.

Lupton, T. & Tanner, I. (1987) *Achieving Change: A Systematic Approach*. Gower, Aldershot.

Lupton, T. (1991) 'Organisational Change: Top-down or Bottom-up Management?' *Personnel Review*, Vol.20, No.3, pp 4-10.

Lyles, M., von Krogh, G., Roos, J. and Kleine, D. (1996) 'The Impact of Individual and Organizational Learning on Formation and Management of Organizational Cooperation' in von Krogh, Georg and Roos, Johan, *Managing Knowledge: Perspectives on Cooperation and Competition*. Sage, London.

Lynne Markus, M. (1984) *Systems in Organizations*. Pitman Publishing Inc., London.

Mabey, C. & Mayon-White W. (Eds.) (1993) (2nd ed.) *Managing Change*. Paul Chapman, London.

Maccoby, M. (1993) 'What Should Learning Organizations Learn?', *Research Technology Management*, Vol.36, No. 3, pp 49-52.

Madhok, A. (1995) 'Opportunism and Trust in Joint Venture Relationships: An Exploratory Study and a Model', *Scandinavian Journal of Management*, Vol.11, No.1, pp 57-74.

Majaro, S. (1992) *Managing Ideas for Profit: The Creative Gap*. McGraw-Hill, London.

March, J.G. and Olsen, J.P. (1975) 'The Uncertainty of the Past: Organizational Learning under Ambiguity', *European Journal of Political Research*, Vol.3, pp 147-171.

March, J. G. (1991) 'Exploration and Exploitation in Organizational Learning', *Organization Science*, Vol.2, No.1, February, pp 71-87.

Marchington, M.; Goodman, J.; Wilkinson, A. and Ackers, P. (1992) *New Developments in Employee Involvement*, Series No.2, Employment Department, Sheffield.

Marchington, M.; Wilkinson, A. and Ackers, P. (1993) 'Waving or Drowning in Participation?' *Personnel Management*, March, pp 46-50.

Marchington, M. and Wilkinson, A. (1996) *Core Personnel and Development*. Institute of Personnel and Development, London.

Marquardt, M. and Reynolds, A. (1994) *The Global Learning Organization*. Irwin Professional Publishing, New York.

Marsden, D. and Richardson, R. (1994) 'Performing For Pay? The Effects of 'Merit Pay' on Motivation in a Public Service', *British Journal of Industrial Relations*, Vol.32, No.2, pp 243-261.

Marshall, C. and Rossman, G. B. (1989) *Designing Qualitative Research*. Sage, Newbury Park, CA.

Marsick, V. J. (1994) 'Trends in Managerial Reinvention: Creating a Learning Map' *Management Learning*, Vol.25, No.1, pp 11-33.

Mason, J. (1996) *Qualitative Researching*. Sage, London.

Mayo, A. (1993) 'Learning at All Organisational Levels'. Focus Paper, *AMED, London*.

Mayo, A. (1996) 'The Pain and Gain of Devolution and Empowerment', *Organisations and People*, Vol.2, No.4, pp 14-18.

McBeath, G. (1990) *Practical Management Development; Strategies for Management Resourcing and Development in the 1990s*. Blackwell, Oxford.

McGill M.E. and Slocum, J.W. (1993) 'Unlearning the Organization' *Organizational Dynamics*, Autumn, Vol.22, No.2 pp 67-79.

McHale, J. (1976) *The Changing Information Environment*. The Camelot Press, Southampton.

McLean, A. (1981) 'Organization Development; A Case of the Emperor's New Clothes?' *Personnel Review*, Vol.4, No.1, pp 38-46.

Megginson, D., Joy-Matthews, J. and Banfield, P. (1993) *Human Resource Development*. Kogan Page, London.

Megginson, D. (1996) 'Planned and Emergent Learning: Consequences for Development', *Management Learning*, Vol.17, No.4, pp 411-428.

Megginson, D. and Whitaker, V. (1996) *Cultivating Self-Development*. Institute of Personnel and Development, London.

Metcalf, H., Walling, A. and Fogarty, M. (1994) *Individual Commitment to Learning: Employers' Attitudes.* Policy Studies Institute for the Department of Employment, November, Sheffield.

Meyer, A. (1982) 'Adapting to Environmental Jolts' *Administrative Science Quarterly,* Vol.27, No.12, pp 515-537.

Miles, M. B. (1983) Qualitative Data as an Attractive Nuisance: The Problem of Analysis; in Van Maanan, John (Ed.) *Qualitative Methodology.* Sage, Beverly Hills, CA.

Miles, R.E. and Snow C.C. (1978) *Organizational Strategy, Structure and Process.* McGraw-Hill, New York.

Miles, R.H. (1982) *Coffin Nails and Corporate Strategies.* Prentice-hall, Englewood Cliffs, NJ.

Miller, D. C. (1991) (5th ed.)*Handbook of Research Design and Social Measurement* . Sage, Newbury Park, CA.

Miller Hosley, S. Lau, A. T., Levy, F K. and Tan, D. S. (1994) 'The Quest for the Competitive Learning Organization' *Management Decision,* Vol.32, No.6, pp 5-15.

Mink, O.G., Esterhuysen, P.W., Mink, B.P. and Owen, K.Q. (1993) *Change at Work.* Jossey-Bass, San Fransisco.

Mintzberg, H. (1973) *The Nature of Managerial Work.* Prentice-Hall, Englewood Cliffs, NJ.

Mintzberg, H.. (1989) *Mintzberg on Management: Inside our Strange world of Organizations.* Free Press, New York.

Moingeon, B. and Edmondson, A. (1996) 'Trust and Organizational Learning', *Symposium of Organisational Learning and the Learning Organisation* September, Lancaster University.

Molander, C. and Winterton, J. (1994) *Managing Human Resources.* Routledge, London.

Moorman, C., Deshpande, R. and Zaltman, G. (1993) 'Factors Affecting Trust in Market Research Relationships', *Journal of Marketing,* Vol.57, pp 81-101.

Morgan, D. L. and Krueger, R. A. (1993) When to use Focus Groups and Why, in Morgan, David L.(Ed.) *Successful Focus Groups.* Sage, Newbury Park, CA.

Morgan, G. and Smircich, L. (1980) 'The Case for Qualitative Research', *Academy of Management Review,* Vol.5, No.4, pp 491-500.

Morgan, G. (1986) *Images of Organization.* Sage, London.

Morgan, G. (1993) *Imaginization.* Sage, London.

Morgan, R.M. and Hunt, S.D. (1994) 'The Commitment-Trust Theory of Relationship Marketing', *Journal of Marketing,* Vol.58, July, pp 20-38.

Morris, J. L. (1995) 'Bonus Dollars for Team Players' *H.R. Magazine* , February, pp 76-83.

Morris, J. and Burgoyne, J. (1973) *Developing Resourceful Managers.* Institute of Personnel Management, London.

Moss-Jones J. (1990) *Automating Managers: the Implications of Information Technology for Managers.* Pinter Publishers, London.

Moss-Jones, J. (1992) *The Learning Organisation.* The Open University, Centre for Technology Strategy, Milton Keynes.

Muller, J. and Watts, D. (1993) 'Modelling and Muddling: The Long Route to New Organizations', *European Management Journal,* Vol.11, No.3, pp 361-366.

Mumford, A. (1991) 'Learning in Action', *Personnel Management,* July, pp 34-37.

Mumford, A. (1992) 'Individual and Organizational Learning: The Pursuit of Change' *Management Decision,* Vol.30, No.6, pp 143-148.

Mumford, A. (1994) 'Four Approaches to Learning from Experience' *The Learning Organization ,* Vol.1, No.1, pp 4-10.

Mytelka, L. (1991) Crisis, Technological Change and the Strategic Alliance, in Mytelka, L. (Ed.) *Strategic Partnership and the World Economy.* Pinter, London.

Nevis, E. C., Dibella, A. J. and Gould, J. M. (1995) 'Understanding Organizations as Learning Systems', *Sloan Management Review,* Winter, pp 73-78.

Nicolini, D. and Meznar, M. B. (1990) 'The Social Construction of Organizatioanl Learning: Conceptual and Practical Issues in the Field', *Human Relations,* Vol.48, No.7, pp 727-746.

Nixon, B. (1993) 'Overcoming the Barriers to Organizational Excellence', *Journal of European Industrial Training,* Vol.17, No.6, pp 15-19.

Nonaka, I. (1991) 'The Knowledge-Creating Company', *Harvard Business Review,* November-December, pp 96-104.

Nonaka, I. (1994) 'A Dynamic Theory of Organizational Knowledge Creation' *Organization Science,* Vol. 5, No.1, pp 14-37.

Nonaka, I. and Johansson, J. (1985) 'Japanese Management: What About the 'Hard' Skills?' *Academy of Management Review,* Vol.10, No. 2, pp 181-191.

Nunnally, J. (1978) *Psychometric Theory.* McGraw-Hill, New York.

Nystrom, P. and Starbuck, W. (1984) 'To Avoid Organizational Crises, Unlearn', *Organizational Dynamics,* Vol.12, No.4, pp 53-65.

O'Connor, C. (1993) *Handbook of Organizational Change: Strategy and Skill for Trainers and Developers.* McGraw Hill, Berkshire.

Oddey, G. (1993) 'Take A Horse to Water, But ...' *Managing Service Quarterly,* Nov. pp 7-10.

Ormerod, R. J. Nov. (1992) 'Information and Management Style in IT Strategy Development'. *Warwick Business School Research Paper,* No. 67.

P.A. Consulting Group. (1990) *Information Technology; The Catalyst for Change.* Mercury, London.

Packman, I. (1994) 'A Framework for Change', *Manufacturing Engineer*, February, pp 13/1-13/2.

Parasuraman, A., Zeithaml, V. A. and Berry, L. L.(1994) 'Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria', *Journal of Retailing*, Vol.70, No.3, pp 201-230.

Park, A. (1994) 'Recent Research into Individual Attitudes to Lifetime Learning' Workshop, *ED-CBI Individuals and Learning Conference*, June, London.

Pascale, R. (1990) *Managing on the Edge.* Penguin, London.

Patchen, M. (1965) *Some Questionnaire Measures of Employee Motivation and Morale.* ISR, Ann Arbor, Michigan.

Pearson, K. (1901) 'On Lines and Planes of Closest Fit to Systems of Points in Space', *Philosophy Magazine*, Vol. 4.

Pearson, A. W. (1991) 'Managing Innovation: An Uncertainty Reduction Process' in Henry, Jane and Walker, David (Eds.), *Managing Innovation.* Sage, London.

Pedler, M., Boydell. T. and Burgoyne, J. (1986) *Self-Development for Managers.* McGraw-Hill, Maidenhead.

Pedler, M., Boydell, T. and Burgoyne, J. (1988) *Learning Company Project: A Report on Work Undertaken October 1987 to April 1988,* The Training Agency, Sheffield.

Pedler, M., Burgoyne, J. and Boydell, T. (1991)*The Learning Company.* McGraw-Hill, Maidenhead.

Pedler, M., Burgoyne, J. and Boydell, T. (2nd ed.) (1997)*The Learning Company.* McGraw-Hill, Maidenhead.

Pedler, M., Boydell, T. and Burgoyne, J. (1993) *The Eleven Characteristics Questionnaire: Basic Data from 10 Organisations.* Case Paper No.1, The Learning Company, Sheffield.

Pennings, J. M. (1993) 'Executive Reward Systems: A Cross-National Comparison' *Journal of Management Studies*, March, Vol.30, No.2, pp 261-278.

Peters, J. (1993) 'The Enterprise School of Management: Turning Dreams into Reality', *Management Decision*, Vol.31, No.1, pp 4-9.

Peters, Thomas J. & Waterman Robert H. (1982) *In Search of Excellence: Lessons from America's Best-Run Companies.* Harpers & Row, London.

Peters, T. (1987) *Thriving on Chaos.* Pan Books, London.

Peters, T. (1995) 'Six Big Ideas', *Incentive*, Vol.169, No.1, p18.

Pettigrew, A. (1979) 'On Studying Organizational Cultures', *Administrative Science Quarterly*, Vol. 24, pp 570-581.

Pettigrew, A.M. (1985) *The Awakening Giant.* Basil Blackwell, Oxford.

Pettigrew, A. and Whipp, R.(1991) *Managing Change for Competitive Success.* Blackwell, Oxford.

Pettit, P. (1995) 'The Cunning of Trust', *Philosophy and Public Affairs,* Vol.24, No.3, pp 202-225.

Pfeffer, J. (1995) 'Producing Sustainable Advantage through the Effective Management of People', *Academy of Management Executive,* Vol.9, No.1, pp 55-72.

Pheysey, D. C. (1993) *Organizational Cultures; Types and Transformations.* Routledge, London.

Piaget, J. (1970) *Structuralism.* Basic Books, New York.

Pickard, J. (1993) 'The Real Meaning of Empowerment', *Personnel Management,* Nov. Vol.25, No.11, pp 28-33.

Pinchot, G. (1985) *Intrapreneuring.* Harper and Row, New York.

Plunkett, L. C. and Fournier, R. (1991) *Participative Management: Implementing Empowerment.* John Wiley and Sons, New York.

Porras, J. I. and Silvers, R. C. (1991) 'Organization Development and Transformation', *Annual Review of Psychology,* Vol.42, pp 51-78.

Porter, L.W. and Lawler, E.E. (1968) *Managerial Attitudes and Performance.* Irwin-Dorsey, Homewood, Illinois.

Prahalad, C.K. and Hamel, G. (1990) 'The Core Competence of the Corporation' *Harvard Business Review,* Vol. 68, No. 3, pp 79-91.

Preskill, H. (1994) 'Evaluation's Role in Enhancing Organizational Learning: A Model for Practice', *Evaluation and Program Planning,* Vol.17, No.3, pp 291-297.

Preskill, H. and Torres, R. T. (1996) 'Evaluative Inquiry for Learning in Organizations', Unpublished Working Paper, *Symposium on Organisational Learning and the Learning Organisation,* September, University of Lancaster.

Pucik, V. (1988) 'Strategic Alliances, Organizational Learning and Competitive Advantage: The HRM Agenda', *Human Resource Management,* Vol.27, No.1, pp 77-93.

Quick, T. (1992) *Successful Team Building.* Anacom, New York.

Randell, G.A.; Packard, P.M.A.; Shaw, R.L. and Slater, A.J.P. *Staff Appraisal.* Institute of Personnel Management, London.

Raper, P., Ashton, D., Felstead, A. and Storey, J. (1997) 'Towards the Learning Organisation? Explaining Current Trends in Training Practice in the UK', *International Journal of Training and Development,* Vol.1, No.1, pp 9-21.

Revans, R.W. (1972) 'Action Learning - a Management Development Programme', *Personnel Review,* Vol.4, No.1 pp 14-21.

Revans, R.W. (1980) *Action Learning.* Blond and Briggs, London.

Revans, Reg. (1983) *ABC of Action Learning.* Chartwell-Bratt, Bromley.

Richardson, Bill and Thompson, John (1995) 'Strategy Evaluation in Powerful Environments: A Multi-Competence Approach', *Leadership and Organization Development Journal,* Vol.16, No.4, pp 17-25

Ripley, R.E. and Ripley, M.J. (1992) 'Empowerment: the Cornerstone of Quality' *Management Decision,* Vol.30, No.4, pp 20-44.

Robey, D., Wishart, N. A. and Rodriguez-Diaz, A. G. (1995) 'Merging the Metaphors for Organisational Improvement: Business Process Reengineering as a Component of Organisational Learning', *Accounting, Management and Information Technology,* Vol.5, No.1, pp 23-39.

Rockart, J. F. and Hofman, J. D. (1992) 'Systems Delivery: Evolving New Strategies' *Sloan Management Review,* Summer, pp 21-31.

Roth, A. and Marucheck, A. (1994) 'Innovations that work for Learning Organizations', *Planning Review,* Vol. 22, No.3, pp 33-35.

Rotter, J.B. (1967) 'A New Scale for the Measurement of Interpersonal Trust' *Journal of Personality,* Vol. 35, No.4, pp 651-665.

Sabel, C. F. (1992) 'Studied Trust: Building New Forms of Co-operation in a Volatile Economy', in Pyke, F. and Sengenberger, W. *Industrial Districts and Local Economic Regeneration.* International Labour Office, Geneva.

Sadler, P. (1991) *Designing Organizations.* Mercury, London.

Sadler, P. (1993) 'The Firm as a Learning System' in *Learning More About Learning Organisations,* AMED Focus Paper, October, Association for Management Education and Development.

Sadler-Smith, E. and Gardiner, P. (1995) *The Learning Organisation in Context.* Discussion Paper No.155, Plymouth Business School.

Sadler-Smith, E. and Gardiner, P. (1996) 'Evaluating the Learning Organisation: Intra-Organisational Differences', *Symposium of Organisational Learning and the Learning Organisation: Theoretical Research Developments,* September, University of Lancaster.

Sako, M. (1991) 'The Role of 'Trust' in Japanese Buyer-Supplier Relationships', *Ricerche Economiche,* Vol. XIV, pp 375-399.

Sako, M. (1992) *Prices, Quality and Trust: How Japanese and British Companies Manage Buyer-Supplier Relations.* Cambridge University Press, Cambridge.

Sandberg, A. (1992) *Technological Change and Co-determination in Sweden.* Temple University Press, Philadelphia.

Sapsford, R. and Jupp, V. (Eds.) (1996) *Data collection and Analysis.* Sage, London.

Scarbrough, H. and Corbett, J. M. (1992) *Technology and Organization: Power, Meaning and Design.* Routledge, New York.

Schein, E.H. (1969) *Process Consultation: Its Role in Organizational Development.* Addison-Wesley, Reading, Mass.

Schein, E.H. (1987) *Process Consultation Volume II: Lessons for Managers and Consultants.* Addison-Wesley, Reading, Mass.

Schein, E.H. (1985) *Organizational Culture and Leadership.* San Fransisco, Jossey-Bass.

Schein, E.H. (1993) 'How Can Organizations Learn Faster? The Challenge of Entering the Green Room', *Sloan Management Review*, Winter, pp 85-92.

Schmitt, N. and Klimoski, R. (1991) *Research Methods in Human Resources Management.* South-Western Publishing Co., Cincinnati, Ohio.

Schofield, J. W. (1993) 'Generalizability of Qualitative Research', in Hammersley, Martyn (Ed.) *Social Research: Philosophy, Politics and Practice.* Sage, London.

Seath, I. and Clark J. (1993) 'A Clean Cut Vision of Progression' *Managing Service Quarterly*, Nov. pp 11-14.

Seeley Brown, J. and Duguid, P. (1991) 'Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning and Innovation' *Organization Science*, Vol.2, No.1, February, pp 40-57.

Sellitz, C., Jahoda, M., Deutsch, M. and Cook, S. W. (1959) *Research Methods in Social Relations.* (Revised ed.) Holt, Rinehart and Winston, New York.

Senge, P. (1990a) *The Fifth Discipline: The Art and Practice of the Learning Organization.* Doubleday, New York.

Senge, P. (1990b) 'The Leader's New Work: Building Learning Organizations', *Sloan Management Review*, Fall, pp 7-23.

Senge, P. M. (1992) 'Mental Models', *Planning Review*, Vol.20, No.2, pp 4-10.

Sengenberger, W.; Loveman, G. and Piore, M. (1990) *The Re-emergence of Small Enterprises: Industrial Restructuring in Industrialised Countries.* IILS, Geneva.

Shanahan, L. (1994) 'Individual Empowerment' Workshop, ED-CBI Conference; *Individuals and Learning* , June, London.

Shaughnessy, J.J. and Zechmeister, E.B. (1985) *Research Methods in Psychology.* Knopf, New York.

Shrivastava, P. (1983) 'A Typology of Organizational Learning Systems', *Journal of Management Studies*, Vol.20, No.1, pp 8-28.

Sieber, S. D. (1973) 'The Integration of Fieldwork and Survey Methods', *American Journal of Sociology*, Vol.78, No.3, pp 1335-1359.

Silk, D. J. (1991) *Planning IT: Creating an Information Management Strategy.* Butterworth Heinemann Ltd., Oxford.

Silverman, D. (1985) *Qualitative Methodology and Sociology: Describing the Social World.* Gower, Aldershot.

Simon H.A. (1969) *Sciences of the Artificial.* MIT Press, Cambridge, Mass.

Simon, H. A. (1991) 'Bounded Rationality and Organizational Learning', *Organization Science*, Vol.2, No.1, pp125-134.

327

Singley, M. K. and Anderson, J. R. (1989) *The Transfer of Cognitive Skill*. Harvard Press, Cambridge, MA.

Slater, S. F. and Narver, J. C. (1995) 'Market Orientation and the Learning Organization', *Journal of Marketing*, Vol. 59, pp 63-74.

Sligo, F. (1996) 'Disseminating Knowledge to build a Learning Organisation', *International Journal of Human Resource Management*, Vol.7, No.2, pp 508-520.

Smircich, L. (1985) 'Is the Concept of Culture a Paradigm for Understanding Organizations and Ourselves?' in Frost, PeterJ.; Moore, Larry F.; Lewis, Meryl Reis; Lundberg Craig C. and Martin, Joanne (Eds.) *Organizational Culture*. Sage, Beverly Hills, CA.

Smith, A.[1776] (1974) *The Wealth of Nations*. Penguin, Harmondsworth.

Snell, R. and Chak, A. (1996) 'The Learning Organization: Learning and Empowerment for Whom?' *Symposium of Organisational Learning and the Learning Organisation*, September, University of Lancaster.

Spence, W. R. (1994) *Innovation - The Communication of Change in Ideas, Practices and Products*. Chapman and Hall, London.

Spicer, D. (1997) 'Linking Mental Models and Cognitive Maps as an Aid to Organisational Learning' *Maintaining Organisational Effectiveness Conference*, Edgehill University College, June.

Stacey, R. D. (1991) *Chaos Frontier: Creative Strategic Control for Business*. Butterworth-Heinemann, Oxford.

Stata, R. (1989) 'Organizational Learning - The Key to Management Innovation' *Sloan Management Review*, Spring, pp 63-64.

Sterns, H.L. and Doverspike, D. (1989) 'Aging and Training and Learning Process' in Goldstein, T.L. (Ed.) *Training and Development in Organizations*. Jossey Bass, San Fransisco.

Stewart, R. (1982) *Choices for the Manager: A Guide to Managerial Work and Behaviour*. McGraw-Hill, London.

Stewart, T.A. (1993) 'Reengineering: The Hot New Managing Tool', *Fortune*, August 23, pp 41-48

Stinchcombe, A.L. (1990) *Information and Organizations*. University of California Press, Berkely, CA.

Storper, M. (1996) 'Innovation as Collective Action: Conventions, Products and Technologies', *Industrial and Corporate Change*, Vol.5, No.3, pp 761-896.

Storey J. (Ed.) (1991) *New Perspectives on Human Resource Management*, Routledge, London.

Sudman, S. and Bradburn, N. M. (1982) *Asking Questions*. Jossey-Bass, San Fransisco.

Sussman, S.; Burton, D.; Dent, C.W.; Stacy, A.W. and Flay, B.R. (1991) 'Use of Focus Groups in Developing an Adolescent Tobacco Use Cessation Program: Collection Norm Effects', *Journal of Applied Social Psychology*, Vol.21, No.4, pp 1772-1782.

Sutton, D. C. (1994) 'Levels of Learning in Organisations' in Burgoyne, J., Pedler, M., and Boydell, T. (Eds.) *Towards the Learning Company,* McGraw-Hill, Maidenhead, pp 79-97.

Swieringa, J. and Wierdsma, A. (1993) *Becoming a Learning Organization: Beyond the Learning Curve.* Addison Wesley Longman, Harlow, Essex.

Tabachnick, B.G. and Fidell, L.S. (1996) *Using Multivariate Statistics.* Harper Collins, New York.

Taylor, D. E. & Singer, E. J. (1983) *New Organizations from Old: How to Survive and Prosper in a Changing Environment.* IPM, London.

Taylor, S. and Bogdan, R. (1984) *Introduction to Qualitative Research Methods.* Wiley-Interscience, New York.

Taylor, S. (1992) 'Managing a Learning Environment' *Personnel Management,* October, pp 54-57.

Thomas, J. M. & Bennis, W. G. (1972) *Management of Change and Conflict.* Penguin, Middlesex.

Thompson, J. and Richardson, W. (1996) 'Strategic and Competitive Success: Towards a Model of the Comprehensively Competent Organization', *Management Decision,* Vol.34, No.2, pp 5-19.

Thomson, R. and Mabey, C. (1994) *Developing Human Resources.* Butterworth Heinemann, Oxford.

Tichy, N., Fombrun, C. and Devanna, M. (1982) 'Strategic Human Resource Management', *Sloan Management Review,* Winter, Vol.23, No.2 pp 47-60.

Todd, D.J. (1979) 'Mixing Qualitative and Quantitative Methods: Triangulation in Action', *Administrative Science Quarterly,* Vol.24, December, pp 602-611.

Toffler, A. (1985) *The Adaptive Corporation.* Gower, Aldershot.

Torbert, W. R. (1994) 'Managerial Learning, Organizational Learning: A Potentially Powerful Redundancy' *Management Learning,* Vol. 25, No.1, pp 57-70.

Torrington, D. & Holden, N. (1992) 'Human Resource Management and the International Challenge of Change' *Personnel Review,* Vol. 21, pp 19-30.

Tranfield, D. (1994) 'The Soft Side of Change',*Colloquium/ Workshop on The Management of Change,* March, London, pp 3.1-3.6.

Tremlett, N., Thomas, A. and Taylor, S. (1995) *Individual Commitment to Learning: Providers' Attitudes.* Social and Community Planning Research for the Department of Employment, March, Sheffield.

Tzu, L. (500 B.C. approx.) *Tao Teh Ching.*

Ulrich, D., Jick, T. and Von Glinow, M. (1993) *'High Impact Learning: Building and Diffusing Learning Capability',Organisational Dynamics,* Vol.22, No.2, pp 52-66.

Van de Ven, A.H. (1980) 'A Revised Framework for Organisational Assessment' in Lawler, E.E., Nadler, D.A. and Cammann, C.(Eds.) *Organisational Assessment*, Wiley-Interscience, New York.

Van de Ven, A.H. and Ferry, D.L. (1980) *Measuring and Assessing Organisations.* Wiley-Interscience, New York.

Van Maanen, J. (Ed.) (1983) *Qualitative Methodology.* Sage, Beverly Hills, CA.

Vince, R. (1995) 'Emphasising Learning in Management Research', *Management Learning*, Vol.26, No.1, pp 55-72.

Von Hippel, E. (1988) *The Sources of Innovation.* Oxford University Press, New York.

Vykarnam, S. and Jacobs, R. (1993) 'Teamstart - Overcoming Blockages to Growth', Proceedings: *16th National Small Firms Research and Policy Conference*, November, Nottingham, Paul Chapman Publications, London.

Vykarnam, S., Jacobs, R. and Handelberg, J. (1996) 'Building and Managing Relationships: The Core Competence of Rapid Growth Business', 19th ISBA National Small Firms Policy and Research Conference: *Enterprising Futures*, November, Birmingham.

Walker J.W. (1992) *Human Resource Strategy.* McGraw-Hill, Maidenhead.

Walkowitz, J. R. (1980) *Prostitution and Victorian Society: Women, Class and the State.* McMillan, London.

Wall, T.D. and Lischeron, J.A. (1977) *Worker Participation: A Critique of the Literature and some Fresh Evidence.* McGraw-Hill, Maidenhead.

Walsh, J.P. and Ungson, G.R. (1991) 'Organizational Memory', *Academy of Management Review*, Vol. 16, No.1, pp 57-91.

Watkins, K. (1989) 'Business and Industry', in Merriam, S. and Cunningham P. (Eds.) *Handbook of Adult and Continuing Education.* Jossey-Bass, San Fransisco.

Watkins, K. E. and Marsick, V.J. (1992) 'Building the Learning Organization: A New Role for Human Resource Developers', *Studies in Continuing Education*, Vol.14, No.2, pp 115-129.

Watkins, K.E. and Marsick, V.J. (1993) *Sculpting the Learning Organization.* Jossey-Bass, San Fransisco.

Watson, T. (1994) *In Search of Management.* Routledge, London.

Webb, E. J., Campbell, D.T., Schwartz, R.D. and Sechrest, L. (1966) *Unobtrusive Measures: Non-Reactive Research in the Social Sciences.* Rand Mcnally, Chicago.

Weiss, C. (1972) *Evaluating Action Programmes.* Allyn and Bacon, Boston.

West, P. (1994 a) 'The Concept of the Learning Organization' *Journal of European Industrial Training*, Vol.18, No.1, pp 15-21.

West, P. (1994 b) 'The Learning Organization: Losing the Luggage in Transit?' *Journal of European Industrial Training*, Vol.18, No.11, pp 30-38.

Westley, F. and Mintzberg, H. (1989) 'Visionary Leadership and Strategic Management', *Strategic Management Journal*, Vol.10, pp 17-32.

Whiston, J. (1991) *'Changing Perceptions of Risk in Community Services'* M.Sc. Public Services Management Course Paper (unpublished.)

Wille, E. & Hodgson, P. (1991) *Making Change Work.* Mercury, London.

Williams, A., Dobson, P. & Walters, M. (1993) *Changing Culture: New Organizational Approaches.* (2nd ed.) IPM, London.

Willmott, H. (1993) 'Strength is Ignorance, Slavery is Freedom: Managing Culture in Modern Organizations', *Journal of Management Studies* , Vol. 30, No.4, pp 515-552.

Wilms, W. W., Hardcastle, Alan and Zell, Deone M. (1994) 'Cultural Transformation at NUMMI', *Sloan Management Review,* Fall, pp 99-113.

Wilson, D. C. (1992) *A Strategy of Change: Concepts and Controversies in the Management of Change.* Routledge, London.

Wisniewski, M. (1994) *Quantitative Methods for Decision Makers.* Pitman Publishing, London.

Wolfe, D. M. and Kolb, D. A. (1984) 'Career Development, Personal Growth and Experiential Learning' in Kolb, David A., Rubin, Irwin M. and McKintyre, James M.(Eds.) *Organizational Psychology* (4th ed.) Ch. 4, pp 124-153.

Wong, A. and Kleiner, B. H. (1996) 'Empowerment - in Today's Business Paradigm it is a Competitive Must', *Management Decision,* Vol.34, No.5, pp 7-8.

Wright, D. B. (1997) *Understanding Statistics: An Introduction for the Social Sciences.* Sage, London.

Zemke, R. and Schaaf, R. (1989) *The Service Edge: 101 Companies that Profit From Customer Care.* New American Library, New York.

Zhuang, L. (1995) 'Bridging the Gap between Technology and Business Strategy: A Pilot study on the Innovation Process', *Management Decision,* ,Vol.33, No.8, pp13-21.

Zuber-Skerritt, O. (1991) *Action Research for Change and Development.* Gower, Aldershot.

Zuboff, S. (1988) *In the Age of the Smart Machine: the Future of Work and Power.* Heinemann, Oxford.

APPENDIX 1
INDIVIDUAL AND FOCUS GROUP INTERVIEWS WITH MANAGERS
QUESTION SCHEDULE

APPENDIX 1

INDIVIDUAL AND FOCUS GROUP INTERVIEWS WITH MANAGERS

QUESTION SCHEDULE

ENGINEERING COMPANY 1
INDIVIDUAL INTERVIEWS WITH MANAGERS

1. In your view what are the main changes that have taken place in this Group?

2. What are the aims of the changes?

3. What is likely to happen when you leave / when the group manager leaves?

4. Has any other research been carried out recently in this Group?

5. How could the proposed research be useful to the Group?

ENGINEERING COMPANY 1
FOCUS GROUP INTERVIEW WITH SENIOR
MANAGERS

1. What changes have taken place in [Group A]?

2. How do these relate to the company as a whole?

3. How could the proposed research be useful to the company?

4. What form do you think the research should take?

5. What outcome would you like to see from the research?

APPENDIX 2

MANAGEMENT STRUCTURE GROUP A
ENGINEERING COMPANY 1

MAIN FACTORY GROUP COMMUNICATION NETWORK
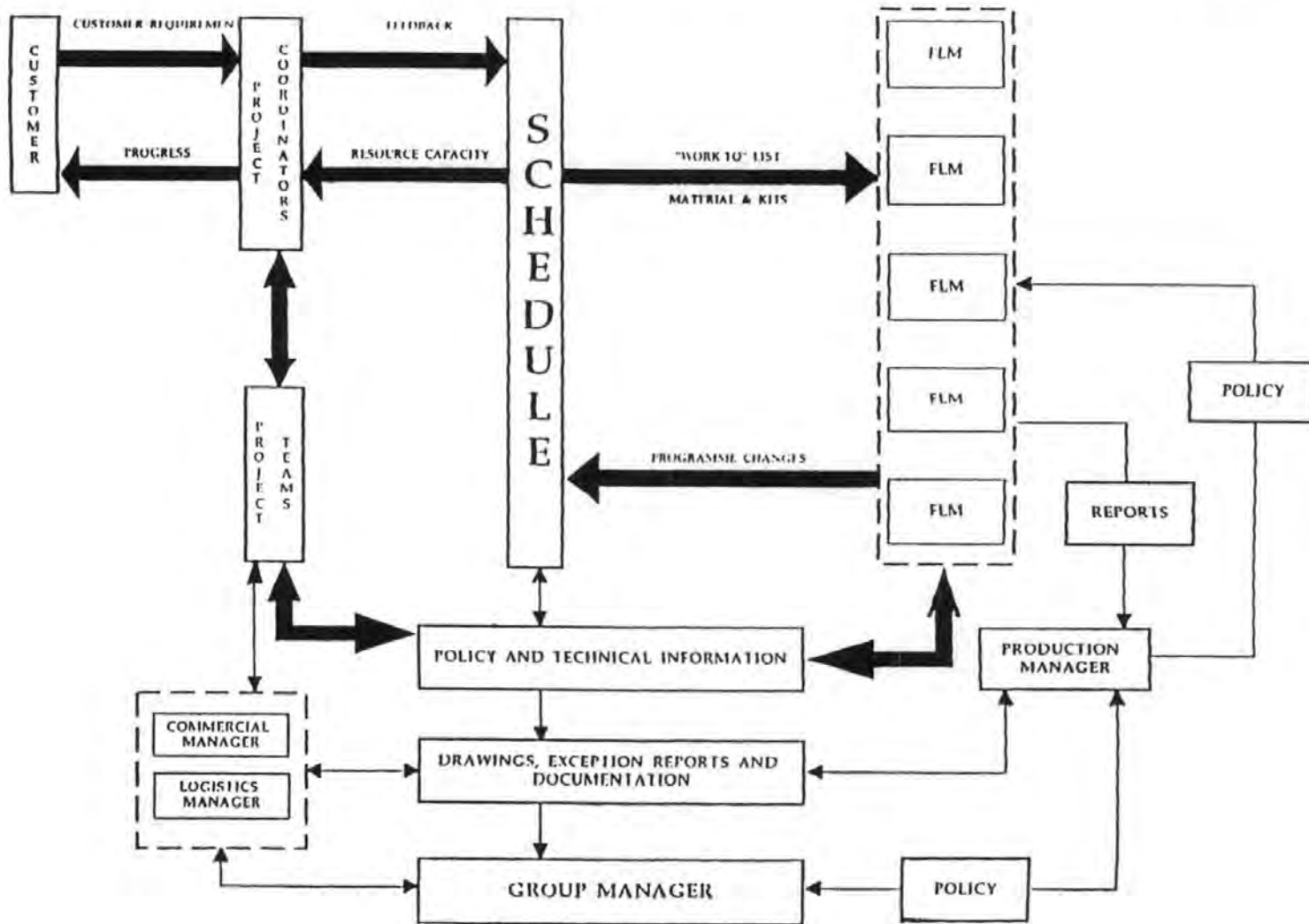
APPENDIX 3

QUESTIONNAIRE VERSION 1

LEARNING ORGANIZATION INVENTORY

This questionnaire is being distributed as part of a research project in conjunction with the University of Plymouth. It is attempting to find out to what degree your company is a learning organization and how you feel about learning opportunities available to you. In order for results to be valid it is important that most questionnaires are returned. Please return your form in the envelope provided. Any answers you give will be treated in confidence; your name will not be attached to this form at any stage. Thank you for your help.

Respondent Details.

1. Job description   industrial ☐   non-industrial ☐

		0-1	1-5	5-10	over 10
2.	How many years have you worked for this company?	☐	☐	☐	☐

This section is about your own learning and self-development.
(Please tick the box which reflects your view most accurately)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
3. I find my job satisfying.	☐	☐	☐	☐	☐	☐
4. I feel I am a member of a group, rather than just an employee.	☐	☐	☐	☐	☐	☐
5. I frequently contribute ideas to group discussions.	☐	☐	☐	☐	☐	☐
6. I am given the opportunity to solve problems.	☐	☐	☐	☐	☐	☐
7. I am encouraged to be responsible for my own training and development needs.	☐	☐	☐	☐	☐	☐
8. I feel valued in this organization.	☐	☐	☐	☐	☐	☐
9. My immediate supervisor lets me get on with my work without close supervision.	☐	☐	☐	☐	☐	☐
10. My supervisor provides support and coaching rather than direct control.	☐	☐	☐	☐	☐	☐
11. I have a personal appraisal meeting at least every twelve months.	☐	☐	☐	☐	☐	☐
12. In appraisal meetings my personal career aims are considered.	☐	☐	☐	☐	☐	☐
13. I am given regular feedback on my performance.	☐	☐	☐	☐	☐	☐

1

Questionnaire Version 1 (a)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
14. Training courses, workshops, etc. frequently take place .	❏	❏	❏	❏	❏	❏
15. I am aware of learning and training opportunities available to me, both on and off the job.	❏	❏	❏	❏	❏	❏

This section is concerned with learning strategy in this Group

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
16. I am satisfied with the changes that have taken place in this department in the last 3 years.	❏	❏	❏	❏	❏	❏
17. The changes were necessary for the organization to survive.	❏	❏	❏	❏	❏	❏
18. There is a clear vision of where the Group is going.	❏	❏	❏	❏	❏	❏
19. Everyone is aware of this vision.	❏	❏	❏	❏	❏	❏
20. We are all working towards departmental goals.	❏	❏	❏	❏	❏	❏
21. Strategic plans are often revised or improved.	❏	❏	❏	❏	❏	❏
22. We are asked how well plans are working out.	❏	❏	❏	❏	❏	❏
23. New ideas or different ways of working are sometimes incorporated into plans.	❏	❏	❏	❏	❏	❏

This section attempts to discover whether (Group A) has a learning climate

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
24. There are a number of unwritten rules about how things are done.	❏	❏	❏	❏	❏	❏
25. People are expected to fit in with the way things are done in this organization.	❏	❏	❏	❏	❏	❏
26. The atmosphere has improved as a result of the changes in the department.	❏	❏	❏	❏	❏	❏
27. We are encouraged to experiment and try new ways of doing things.	❏	❏	❏	❏	❏	❏

2

Questionnaire Version 1 (b)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
28. If people make mistakes they are not penalised.	❏	❏	❏	❏	❏	❏
29. We are encouraged to learn from mistakes.	❏	❏	❏	❏	❏	❏
30. Employees are rewarded for effort and good work (not necessarily financially.)	❏	❏	❏	❏	❏	❏
31. People are given the freedom to solve problems and think for themselves without consulting a superior.	❏	❏	❏	❏	❏	❏
32. Our opinions and suggestions are valued.	❏	❏	❏	❏	❏	❏
33. People are friendly and generally have good working relationships.	❏	❏	❏	❏	❏	❏
34. Everyone helps each other; there is a supportive atmosphere.	❏	❏	❏	❏	❏	❏
35. People share knowledge and resources with each other.	❏	❏	❏	❏	❏	❏
36. People from other teams/departments sometimes offer skills or support.	❏	❏	❏	❏	❏	❏
37. Standards are high, everyone tries to produce good quality work.	❏	❏	❏	❏	❏	❏
38. We are proud of the quality of the work we do.	❏	❏	❏	❏	❏	❏

This section looks at to what extent employees participate in policy making.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
39. All members of the company take part in policy decisions.	❏	❏	❏	❏	❏	❏
40. The views of employees are taken into account and reflected in policy statements.	❏	❏	❏	❏	❏	❏
41. Company policies cater for the interests of all employees, not just those of top management.	❏	❏	❏	❏	❏	❏
42. People voice differing opinions and conflicts are openly discussed and worked through.	❏	❏	❏	❏	❏	❏

3

Questionnaire Version 1 (c)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable

This section is about the use of information in your department.

43. Employees and teams share information; it is not kept secret. ❏ ❏ ❏ ❏ ❏ ❏

44. Information is shared across departments. ❏ ❏ ❏ ❏ ❏ ❏

45. Information technology is used to create communication systems which help everyone understand what is going on. ❏ ❏ ❏ ❏ ❏ ❏

46. Information technology is used to provide feedback on how the company or department is doing. ❏ ❏ ❏ ❏ ❏ ❏

47. There is a free and open flow of communication in the organization. ❏ ❏ ❏ ❏ ❏ ❏

This section is about empowerment in your department.

48. People are given the freedom to work and make decisions without being checked up on. ❏ ❏ ❏ ❏ ❏ ❏

49. More responsibility is usually granted to employees who want it. ❏ ❏ ❏ ❏ ❏ ❏

50. Employees are given more responsibility whether they like it or not. ❏ ❏ ❏ ❏ ❏ ❏

51. I feel I have the necessary skills and expertise to do my job without supervision. ❏ ❏ ❏ ❏ ❏ ❏

52. If I need help or advice my immediate supervisor will provide coaching. ❏ ❏ ❏ ❏ ❏ ❏

53. Our team regularly makes decisions which affect our work activities. ❏ ❏ ❏ ❏ ❏ ❏

54. As members of the team we are committed to our work. ❏ ❏ ❏ ❏ ❏ ❏

4

The column headers (top, rotated): Strongly agree · Agree · Neither agree nor disagree · Disagree · Strongly disagree · Not applicable

The next section is about leadership and organizational structure in (Group A)

55. There are good relations between employees and management.
☐ ☐ ☐ ☐ ☐ ☐

56. First line and group managers are open and honest with employees.
☐ ☐ ☐ ☐ ☐ ☐

57. Company managers frequently visit workshops to see what's going on.
☐ ☐ ☐ ☐ ☐ ☐

58. The management of this department is capable of motivating employees to follow its vision for the future.
☐ ☐ ☐ ☐ ☐ ☐

59. Departments or units are responsible for their own budgets.
☐ ☐ ☐ ☐ ☐ ☐

60. Departments see each other as customers and suppliers.
☐ ☐ ☐ ☐ ☐ ☐

61. People's roles and jobs are flexible according to circumstances.
☐ ☐ ☐ ☐ ☐ ☐

62. Rules or procedures are sometimes altered following discussion.
☐ ☐ ☐ ☐ ☐ ☐

The last section is about the links with the business environment.

63. People from this company sometimes meet members of other companies to share ideas and information.
☐ ☐ ☐ ☐ ☐ ☐

64. It is part of everyone's job to collect useful information about what is going on outside the company.
☐ ☐ ☐ ☐ ☐ ☐

65. We are encouraged to read in company time newspapers and magazines that inform us about external opportunities and competition.
☐ ☐ ☐ ☐ ☐ ☐

66. Management keeps us informed about external developments that might affect the company.
☐ ☐ ☐ ☐ ☐ ☐

P.T.O.

5

Questionnaire Version 1 (e)

67. Please add here any comments you have about changes in (the Group) and learning in particular.

THANK YOU FOR FILLING IN THIS QUESTIONNAIRE.

Penny Gardiner, University of Plymouth.

6

APPENDIX 4

QUESTIONNAIRE VERSION 2

LEARNING ORGANIZATION INVENTORY

This questionnaire is being distributed as part of a research project in conjunction with the University of Plymouth. It looks at how learning takes place in your department. In order for results to be valid it is important that all questions are answered and the forms returned. sealed in the envelope provided. All information given will be treated in confidence. Thank you for your help.

Respondent Details.

1. Job type.   industrial ☐   non-industrial ☐

	0-1	1-5	5-10	over 10
2. How many years have you worked for this company?	☐	☐	☐	☐

This section is about your own learning and self-development.

(Please tick the box which reflects your view most accurately)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
3. I find my job satisfying.	☐	☐	☐	☐	☐	☐
4. I feel I am a member of a group, rather than just an employee	☐	☐	☐	☐	☐	☐
5. I frequently contribute ideas to group discussions.	☐	☐	☐	☐	☐	☐
6. I am given the opportunity to solve problems.	☐	☐	☐	☐	☐	☐
7. I am encouraged to be responsible for my own training and development needs.	☐	☐	☐	☐	☐	☐
8. I feel valued in this organization.	☐	☐	☐	☐	☐	☐
9. My immediate supervisor lets me get on with my work without close supervision.	☐	☐	☐	☐	☐	☐
10. My supervisor provides support and coaching rather than direct control.	☐	☐	☐	☐	☐	☐
1. I have a personal appraisal/assessment meeting at least every twelve months.	☐	☐	☐	☐	☐	☐
2. In appraisal meetings my personal career aims are considered.	☐	☐	☐	☐	☐	☐
3. I read (the Group newsletter) regularly	☐	☐	☐	☐	☐	☐

1

Questionnaire Version 2 (a)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not applicable
14. I am given regular feedback on my performance.	☐	☐	☐	☐	☐	☐
15. Training courses, workshops, etc. frequently take place .	☐	☐	☐	☐	☐	☐
16. I am aware of part-time education and training opportunities available to me, both on and off the job.	☐	☐	☐	☐	☐	☐

This section is concerned with learning strategy in this Group

17. I understand the changes that have taken place in this Group over the last 3 years	☐	☐	☐	☐	☐	☐
18. The changes were necessary for the organization to survive.	☐	☐	☐	☐	☐	☐
19. There is a clear vision of where the Group is going.	☐	☐	☐	☐	☐	☐
20. Everyone is aware of this vision.	☐	☐	☐	☐	☐	☐
21. We are all working towards departmental goals.	☐	☐	☐	☐	☐	☐
22. Strategic plans are often revised or improved.	☐	☐	☐	☐	☐	☐
23. We are asked how well plans are working out.	☐	☐	☐	☐	☐	☐
24. New ideas or different ways of working are sometimes incorporated into plans.	☐	☐	☐	☐	☐	☐

This section attempts to discover what type of learning climate the Group has.

25. We are not expected to follow unwritten rules about how things are done.	☐	☐	☐	☐	☐	☐
26. The atmosphere has improved as a result of the changes in the Group	☐	☐	☐	☐	☐	☐
27. I don't feel that I am experiencing more stress now than before the changes took place.	☐	☐	☐	☐	☐	☐

2

Questionnaire Version 2 (b)

	Strongly agree	Agree	er agree nor disagree	Disagree	Strongly disagree	Not applicable
28. An individual approach to work is encouraged.	❑	❑	❑	❑	❑	❑
29. We are encouraged to experiment and try new ways of doing things.	❑	❑	❑	❑	❑	❑
30. If people make mistakes they are not penalised.	❑	❑	❑	❑	❑	❑
31. We are encouraged to learn from mistakes.	❑	❑	❑	❑	❑	❑
32. Employees are rewarded for effort and good work (not necessarily financially.)	❑	❑	❑	❑	❑	❑
33. We are not under a great deal of pressure at work.	❑	❑	❑	❑	❑	❑
34. People are given the freedom to solve problems and think for themselves without consulting a superior.	❑	❑	❑	❑	❑	❑
35. Our opinions and suggestions are valued.	❑	❑	❑	❑	❑	❑
36. People are friendly and generally have good working relationships.	❑	❑	❑	❑	❑	❑
37. Everyone helps each other; there is a supportive atmosphere.	❑	❑	❑	❑	❑	❑
38. People share knowledge and resources with each other.	❑	❑	❑	❑	❑	❑
39. People from other teams/departments sometimes offer skills or support.	❑	❑	❑	❑	❑	❑
40. Standards are high, everyone tries to produce good quality work.	❑	❑	❑	❑	❑	❑
41. We are proud of the quality of the work we do.	❑	❑	❑	❑	❑	❑

This section looks at to what extent employees participate in policy making.

42. All members of the group take part in policy decisions.	❑	❑	❑	❑	❑	❑

3

Questionnaire Version 2 (c)

Strongly agree

Agree

either agree nor disagree

Disagree

Strongly disagree

Not applicable

43. The views of employees are taken into account and reflected in policy statements.

❑ ❑ ❑ ❑ ❑ ❑

44. Company policies cater for the interests of all employees, not just those of top management.

❑ ❑ ❑ ❑ ❑ ❑

45. People voice differing opinions and conflicts are openly discussed and worked through.

❑ ❑ ❑ ❑ ❑ ❑

This section is about the use of information in your department.

46. Employees and teams share information; it is not kept secret.

❑ ❑ ❑ ❑ ❑ ❑

47. Information is shared across departments.

❑ ❑ ❑ ❑ ❑ ❑

48. We see the company magazine regularly

❑ ❑ ❑ ❑ ❑ ❑

49. Information technology is used to create communication systems which help everyone understand what is going on.

❑ ❑ ❑ ❑ ❑ ❑

50. Information technology is used to provide feedback on how the company or department is doing.

❑ ❑ ❑ ❑ ❑ ❑

51. There is a free and open flow of communication in the organization.

❑ ❑ ❑ ❑ ❑ ❑

This section is about empowerment in your Group.

52. People are given the freedom to work and make decisions without being checked up on.

❑ ❑ ❑ ❑ ❑ ❑

53. More responsibility is usually granted to employees who want it.

❑ ❑ ❑ ❑ ❑ ❑

54. Employees are not given more responsibility if they don't want it.

❑ ❑ ❑ ❑ ❑ ❑

4

Questionnaire Version 2 (d)

	Strongly agree	Agree	Either agree nor disagree	Disagree	Strongly disagree	Not applicable
55. I feel I have the necessary skills and expertise to do my job without supervision.	❑	❑	❑	❑	❑	❑
56. If I need help or advice my immediate supervisor will provide coaching.	❑	❑	❑	❑	❑	❑
57. Our team regularly makes decisions which affect our work activities.	❑	❑	❑	❑	❑	❑
58. As members of the team we are committed to our work.	❑	❑	❑	❑	❑	❑

The next section is about leadership and organizational structure in the Group.

59. There are good relations between employees and management.	❑	❑	❑	❑	❑	❑
60. First line and group managers are open and honest with employees.	❑	❑	❑	❑	❑	❑
61. Company managers frequently visit workshops to see what's going on.	❑	❑	❑	❑	❑	❑
62. The management of this department is capable of motivating employees to follow its vision for the future.	❑	❑	❑	❑	❑	❑
63. Departments or units are responsible for their own budgets.	❑	❑	❑	❑	❑	❑
64. Departments see each other as customers and suppliers.	❑	❑	❑	❑	❑	❑
5. People's roles and jobs are flexible according to circumstances.	❑	❑	❑	❑	❑	❑
6. Rules or procedures are sometimes altered following discussion.	❑	❑	❑	❑	❑	❑

5

The last section is about the links with the business environment.

Column headers (rotated): Strongly agree | Agree | ther agree nor disagree | Disagree | Strongly disagree | Not applicable

67. People from this company sometimes meet members of other companies to share ideas and information. ❏ ❏ ❏ ❏ ❏ ❏

68. It is part of everyone's job to collect useful information about what is going on outside the company. ❏ ❏ ❏ ❏ ❏ ❏

69. We are encouraged to read in company time newspapers and magazines that inform us about external opportunities and competition. ❏ ❏ ❏ ❏ ❏ ❏

70. Management keeps us informed about external developments that might affect the company. ❏ ❏ ❏ ❏ ❏ ❏

Please add here any comments you have about changes in the Group and about learning in particular.

THANK YOU FOR FILLING IN THIS QUESTIONNAIRE.

Penny Gardiner, University of Plymouth.

APPENDIX 5

MANAGEMENT STRUCTURE GROUP B

ENGINEERING COMPANY 1

GROUP B, ENGINEERING COMPANY 1
STRUCTURE

		SWSC PROGRAMMES & CONTRACTS 53143	WSE MIS/IT/BIDS 54200
	PROGRAMMES & CONTRACTS MANAGER 53143		WSE SUPPORT 53193
			ESTIMATOR 52761
		SWSC PRODUCTION SUPPORT 52364	AWSE DII 52364
			WSE (PSG) 54615
			AWSE (SPRT) 53192
		SWSC CO-ORDINATORS (SHIP) 52045 / 54104	WSE's/AWSE's WSC/HCO/RCO 52045/54104
	MANAGER COMMUNICATIONS, SENSORS, SPECIAL PROJECTS 53614	SENIOR WSE SONAR & TELECOMMS 52357	SONAR WSE's/AWSE's 52379/65357
			FLM 'L' FITTERS 52519/52109
			AWSE/SUPERVISOR (TELECOMMS-SHORE) 53197/52109
			AWSE/SUPERVISOR (TELECOMMS-SHIPS) 52109
		SENIOR WSE RADAR, COMPUTERS & INTEGRATION (RADIATION SUP'R) 52762	RADAR WSE's/AWSE's 52357
			COMP & INTEG WSE's/AWSE's 54327
		LEAD WSE COMPUTERS & INTEGRATION 54327	
		SENIOR WSE COMMUNICATIONS & ELECT. W/FARE 52557	ELECT. W/FARE WSE's/AWSE's 52358
GROUP MANAGER			W/T COMMS WSE's/AWSE's 54234
		LEAD WSE WT / SATELLITE COMMS (EMC/EMI/TEMPEST) 54234	
			WSE SPECIAL PROJECTS 52642
	MANAGER WEAPONS & SHIP SYSTEMS 52177	SENIOR WSE A/UWW (L) & NAVIGATION 52763	LEAD WSE A / W WEAPONS 53058
			WSE's/AWSE's 53058
			WSE's/AWSE's NAVIGATION 52381,52382,53262
		SENIOR WSE A/UWW (M) 53465	WSE's/AWSE's 52382
			FLM 'M' FITTERS 53811
		PSSE SHIP SYSTEMS 53714	SSE 'M' 53961 SHIP PROPULSION
			TE's PROP 53373,52012,54452,52717
		SSE 'L' 52127 SHIP AUXILIARIES	TE's AUX 52021,52971,52131,52825
		SSE 'H' 52182 SHIP HULL	TE's HULL 52378,52262,53373,54053

APPENDIX 6

FOCUS GROUP QUESTIONS

GROUP B

ENGINEERING COMPANY 1

QUESTIONS FOR FOCUS GROUPS

Section 1: Core Values and Organisational Vision.

1. Is there a good atmosphere in this Group?

2. How are relations between people? (open/friendly/honest)

3. What about employee / management relations?

4. Is management capable of motivating people?

5. Do people feel they are working towards organisational goals?

6. Is there a company/group vision? Is everyone aware of it?

7. Do people feel valued here? Why/why not? What could be done to improve this?

8. Do people contribute ideas? Are they used?

Section2: Policy and Communications.

9. What happens when mistakes occur? Are they viewed as learning opportunities?

10. To what extent do employees participate in policy making?

11. Do people speak out when they disagree with the way something is being done?

12. Is information shared throughout the group?

13. Is there a good communication system?
(Official or unofficial?)

14. Are people from here interested in what's going on outside the company: government policy, competition, etc.?

Section 3: Empowerment.

15. How empowered are people in this group?
    Do teams make their own decisions?

16. Is responsibility given to those who want it?

17. Are people encouraged to experiment, try out new ideas?

18. How closely are people supervised?

Section 4: Support, General organisational climate.

19. Do you think standards are good in this group?

20. Are people proud of their work? As individuals, as teams?

21.Is the atmosphere supportive?

Section 5: Culture and Training.

22. Are employees aware of training and educational opportunities?

23. Is there a strong culture here? Is it positive?
Are people expected to fit in with the way things are done?

Section 6: Stress

24. How stressed are people here?
Is there a lot of pressure?

25. Do you think it's likely to get worse? Why?

26. Do people worry about making mistakes? Are they penalised if they do?

Section 7: Expertise, Job satisfaction.

27. Are people confident of their own skills and expertise?

28. Do most employees find their jobs satisfying?
why/why not?

29. Can you see a need for change in this group?
What needs changing?

Section 8: Appraisal.

30. Do you have annual appraisals?

31. Are they useful?

32. Are you given feedback on your own performance?

33. Are your personal career goals discussed?

APPENDIX 7

PRELIMINARY INTERVIEW WITH MANUFACTURING DIRECTOR
ENGINEERING COMPANY 2

1. *Can you tell me something about the background of [Engineering Company 2]?*

The company is 98 years old and was started by Victorian philanthropists. It was sort of like a country club. [Engineering Company 2] is the world's largest supplier of shoemaking machinery in terms of the range of equipment produced. Its existence is related to the concentration of boot and shoe production in Northampton, not far away, and to a lesser extent in Leicester. The company was owned by the family until the 1960s, but they then sold out to a portfolio management organisation. Then there was a management buyout in 1988, followed by a couple of good years, and they then hoped to sell it. But the buyout had involved a fair amount of debt and little equity and when the profits were reduced, times became hard. There was pressure from the banks and other financially-based problems. During this period a number of changes were introduced with the aim of making the company more efficient, but many of these were allowed to slide after an initial few months. Management lost control of the company and in 1995 it was bought by a venture capitalist.

2. *How would you describe the culture here?*

There is an innate arrogance which stems from being the world's largest producer; 'we are the best' - this is not constructive. Many employees have been here a long time; some have only ever worked here and there are families where three generations have all worked here. There is a view that managements may come and go, but the workforce will still be here, and it is the job of managers to look after their employees.
There is also a 'them and us' feeling between different groups of managers; the old established ones feel superior to the ones who have joined the company more recently. Some of the older senior managers are ensconced in 'mahogany row' - a separate suite of offices all enclosed and with mahogany doors, this helps to reinforce feelings of superiority.
The company was formerly very hierarchical; it is said that at one time there were eight types of dining room! The company was made leaner following the management buyout, though, and now there is only one canteen.
The culture is very laid-back and lazy, so challenges to it are not appreciated.

3. *Are there similarities between the culture here and at [Engineering Company 1] when you first went there?*

Yes, quite a lot. It's an old established culture, the buildings asre very old, too. People have traditionally expected jobs for life here, as in [Engineering Company 1]. It's also a male-dominated culture; one senior product manager is female, but all the others at this level and above are male. There are a couple of female engineers, but otherwise women are only involved in secretarial roles.

4. *What is different from [Engineering Company 1] culture-wise?*

The main difference is that here there is a greater readiness to change. At lower levels of this company there is a certain amount of dissatisfaction with management decisions. Junior managers have been told in the past to do things they knew were ineffective, or do do things in an inappropriate way, so now they're glad to see changes taking place. Senior managers are a different story though; many of them have been with the comopany for many years and are reluctant to change now.
The other difference is the influence of the Asian culture here. About 40% of employees in the company as a whole are Indian or Pakistani, but in this department (machinery) the proportion is lower. In the materials division where labour is less skilled, there is a

higher percent of ethnic minority group workers. We have been trying to introduce TQM here and have already encountered difficulties in presenting this issue in the Asian culture.

5. *What changes in the culture would you like to see take place?*

I would like to see the barriers between management and employees broken down. there are problems with this already.
I'd also like to see us take on board more of a work ethic and get rid of the laid-back type of culture.
Established senior managers should become more amenable to change - we can help this to happen.
And we need to establish better communications throughout the company; this is a cultural issue as well as a general one.

6. *What changes have you made already?*

Since I came here 9 months ago, I have made changes in the structure of management and the communication system. Some managers are now presenting progress reports in a more formal way than previously, for example.
Team-based project groups have been introduced; here these are known as 'task forces'.
Long-term planning has been intrioduced, before everything was done on a very short term basis. Now there is short-term planning (up to 1 yr), medium-term (1-2yr span) and long-term (over a 5 year period). There is much more focus on change altogether.

7. *How do you see your role here? Is it similar to your job at Group A ,ie. agent of change?*

Yes, very similar. The only difference is that many of the programmes I am trying to implement have been introduced before and are familiar to many people here, but they were allowed to slide and people reverted to the old ways of doing things. Now it's a case of re-establishing these initiatives, which in some ways is harder because they're not new and exciting ideas now.

8. *Are changes needed here in order for [Engineering Company 2] to survive?*

Yes, this is a critical point in time - a rescue situation. Problems are financial, though not cultural.

9. *Are redundancies necessarily a part of these changes?*

I had to make about 15 people redundant last November, but no more are planned at present, it is not a large-scale operation like at [Engineering Company 1].

10. *Clearly you reorganised [Group A in Engineering Company 1] along the lines of learning organisation theory: empowerment, greater sharing of information, etc. Are you going to introduce the same types of programmes here?*

Yes - I want task forces, teamworking, empowerment and we have started to bring these in already, particularly task forces.

11. *Are you going to attempt to make this company a learning organisation, at least to some extent?*

Yes, definitely. I want to focus on continuous learning and change in the organisation.

12. *What is the projected time scale?*

I would like to get major changes underway in a couple of years. There are really 3 phases of change:
>1st phase (1yr)-a lot of activity in the right direction (this is happening now)
>2nd phase - the planning phase, recruiting two new people for the management team who will be more intellectually capable. Within two years we need to know fairly precisely what is needed to become world-class
>3rd phase - putting this into action; aiming to become world-class. Within five years we should become world-class.

13. *Can you foresee any particular problem areas?*

The problems are to do with cash, not culture. All the other problems; difficult people, lagging technology etc., are fixable.

14. *Is there anything you would do differently here from the way you did it at [Engineering Company 1]?*
Is this because you can see a better way of doing things, or because the culture is different here?

Perhaps the issue of communication; I don't think what we did at [Engineering Company 1] in this area was enough.
I wouldn't sack everyone in the Planning office here - they would go off and get another job. At [Engineering Company 1] there weren't any other jobs for them to get.

15. *Are you going to keep a record of how and when you implement various stages of the changes?*

I wish I had, already. I always mean to, but there never seems to be enough time to write it all down.

APPENDIX 8

LORI QUESTIONNAIRE

LEARNING ORGANISATION
RESEARCH INVENTORY

This questionnaire is being distributed as part of a research project in conjunction with the University of Plymouth.

The aim is to examine your views on organisational changes and how learning takes place in your department.

You are asked to read a number of statements and tick two sets of boxes according to whether you agree or not. The first boxes refer to the **current** situation in your organisation, while the second set asks how you think it **should** be in the ideal organisation.

Please return your completed form in the envelope provided. Replies will be treated with strict confidence and respondent anonymity will be maintained at all times.
On completion a summary of the findings of this survey will be made available to all employees.

Thank you for taking the time to respond.

Penny Gardiner
University of Plymouth

LEARNING ORGANISATION RESEARCH INVENTORY

	PRESENT ORGANISATIONAL POSITION					IDEAL ORGANISATIONAL POSITION				
	Strongly agree	Agree	Neither agree/disagree	Disagree	Strongly disagree	Strongly agree	Agree	Neither agree/disagree	Disagree	Strongly disagree
1. I frequently contribute ideas to group discussions	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. My immediate supervisor lets me work without close supervision	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. I am aware of training and education opportunities available to me, both on and off the job	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. People are given the freedom to make decisions without being checked up on	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5. The management of this company is capable of motivating employees to follow its vision for the future	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6. Our opinions and suggestions are valued	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7. Company managers frequently visit workshops to see what's going on	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8. Standards are high, everyone tries to produce good quality work	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9. Training takes place frequently	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10. I find my job satisfying	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
11. Ways of working are often revised to include new ideas	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
12. Employees are rewarded for effort and good work (not always financially)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
13. People's roles and jobs are flexible according to circumstances	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
14. I receive regular feedback on my performance	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

PRESENT ORGANISATIONAL POSITION

IDEAL ORGANISATIONAL POSITION

15. Teams and departments share information; it is not kept secret

16. All members of the department are given the opportunity to participate in policy decisions

17. We are encouraged to learn from our mistakes

18. I feel I am a member of a team rather than just an employee

19. Information technology helps everyone understand what is going on in the company

20. An annual appraisal is useful in helping to develop my personal career goals

21. We are proud of the quality of our work

22. People voice differing opinions on policy and conflicts are worked through

23. My supervisor provides support and coaching if I need it

24. If people make mistakes they are not penalised

25. I am encouraged to be responsible for my own training and development needs

26. I.T. is used to provide us with information on financial matters and company performance

The scale columns (for both Present and Ideal Organisational Position) are labelled:
Strongly agree | Agree | Neither agree/disagree | Disagree | Strongly disagree

27. I have a personal appraisal at least every twelve months

28. As members of a team we are committed to our work

29. Management keeps us informed about external developments that might affect the company

30. Supervisors and managers are open and honest with employees

31. I feel I have the necessary skills and expertise to do my job effectively

32. Increased responsibility is usually granted to employees who want it

33. There is a clear vision of where this department is going

34. The changes taking place in this department are not likely to make our jobs more stressful

35. People from other teams/departments sometimes offer skills or support

36. Members of this company sometimes meet people from other companies to share ideas and information

37. There is an open and effective flow of information in this organisation

38. People share knowledge and resources with each other

39. I feel valued in this organisation

Present Organisational Position scale (left to right): Strongly agree · Agree · Neither agree/disagree · Disagree · Strongly disagree

Ideal Organisational Position scale (left to right): Strongly agree · Agree · Neither agree/disagree · Disagree · Strongly disagree

40. We are all working towards departmental goals

41. It is part of everyone's job to collect useful information about what is going on outside the company

42. Contributing to company policy is seen as part of everyone's job

43. People are encouraged to solve problems and think for themselves without consulting a superior

44. The views of employees are taken into account and reflected in policy statements

45. There are good relations between managers and employees

46. Rules or procedures are sometimes altered following discussion

47. Company policies cater for the interests of all employees, not just those of top management

48. An individual approach to work is encouraged

49. People are friendly and generally have good working relationships

50. Our team regularly makes decisions which affect our work activities

51. We are encouraged to read newspapers and magazines that inform us about external opportunities and competition

PRESENT ORGANISATIONAL POSITION / **IDEAL ORGANISATIONAL POSITION**

Scale (both columns): Strongly agree | Agree | Neither agree/disagree | Disagree | Strongly disagree

52. Everyone helps each other; there is a supportive atmosphere

53. Departments or units are responsible for their own budgets

54. We are all involved in deciding how good work should be rewarded

55. Departments in the company view each other as customers and suppliers

56. We are encouraged to experiment and try new ways of doing things

57. Everyone is aware of the company vision

The following questions are only concerned with the present position of the organisation:

58. I read *Unison* regularly

59. BUSM is a forward looking organisation

60. I understand the changes that are taking place in this department

61. The organisation needs to change in order to survive

Respondent Details:

62. Age

Under 30	31-40	41-50	51-60	Over 60
☐	☐	☐	☐	☐

63. How many years have you worked for this company?

0-1	1-5	5-10	Over 10
☐	☐	☐	☐

64. Which section do you work in?

Stores ☐

Lasting Assembly ☐	Cubic ☐	Bottoming Assembly ☐	Upper Assembly ☐
Purchasing ☐	Building 66 ☐	FMS/Steel Stores ☐	Cylindrical ☐
PRC/Non Metallic ☐	Sub assembly ☐	Sheet metal/Painting ☐	Manufacturing Services ☐

If you have any comments you would like to add on the changes taking place or about learning within this department, please use the space below. All comments will be treated confidentially.

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.

APPENDIX 9

FACTOR ANALYSIS

INTRODUCTION

Analysis of the data obtained from the application of the questionnaire in Engineering Company 1 was carried out in terms of a number of conceptual categories established by the researcher. There were eight of these categories, later expanded to nine, based on theoretical characteristics of the learning organisation identified from the relevant literature. It was decided to conduct further analysis of the questionnaire in order to validate its use as a diagnostic tool for the measurement of learning organisation characteristics.

Initially factor analysis appeared to be an appropriate means of validating the questionnaire as this type of analysis classifies and reduces data to a smaller number of sets. Factor analysis has been described as the 'orderly simplification' of data (Burt 1940: p14). Child (1990) describes it as a process of identifying and classifying attributes, cataloguing similarities and differences with the aim of ordering the characteristics of the subject observed. Factor analysis may be either exploratory, in order to discover a possible underlying structure within the data, or confirmatory; where it seeks to confirm an existing hypothesis or a preconceived structure (Joreskog 1969).

The process of factor analysis in this study is carried out in a more exploratory manner without imposing predetermined ideas upon any structure identified. It was intended to produce a set of unbiased categories, the exact number of which could not be predicted, and which would be grouped according to mathematical principles rather than by verbal reasoning. However, although the categories were to be extracted in an exploratory manner, the researcher possessed some notion of the type of classification which it was hoped might be produced, which Child (op.cit) suggests is usually the case.

Factor analysis is based on the assumption that clusters of variables which exist in the correlation matrix probably indicate that the same or a similar dimension or ability is being measured. The purpose is to identify and quantify these dimensions mathematically by plotting the loading values of individual tests or variables; high loading values indicate greater importance of the dimension or factor in accounting for the correlations between tests. The factors may be interpreted geometrically as classifactory axes while the tests

are represented as points in space (Kinnear and Gray 1994). These mathematical factors are assumed to provide latent variables, which may only be classified by examination of the nature of the individual tests which have reasonably high co-ordinates on a specific axis, ie. the factors may be classified through studying the relationship between the items of which they are comprised.

The technique of factor analysis was inspired by the work of Galton (1869) who developed the notion of a common causal link and who discovered the concept of correlation. The specific procedure for factor analysis was devised by Pearson (1901) through a study of the geometry of multidimensional space, and has been much used in psychological studies (eg. Cattell 1967, Bynner and Romney 1986).This type of analysis is controversial, however; factor analysis has been criticised by a number of statisticians for its exploratory nature (eg. Sapsford and Jupp 1996) and as Kline (1994) argues, it can appear to impose apparent order on real chaos.

AIM

The questionnaire had been tested on two samples of employees; it was now intended to reduce the data into meaningful clusters (Kinnear and Gray op.cit). The purpose of this was to measure the degree of development of the learning organisation by means of a limited set of psychological dimensions rather than as a large number of individual items or a series of categories founded only on conceptual assumptions. It was also hoped through this process to add validity to the diagnostic tool by identifying any items which did not appear to fit the final classification.

METHOD

Factor analysis was carried out on the second data set obtained from employees in Engineering Company 2. The researcher first considered carrying out factor analysis on a merged data set, comprising the common variables from both questionnaire surveys. The main advantages of doing this would have been that the sample size would be very large, with a combined total of 419 cases.

However, there were a number of reasons why a combined sample would have been less valid. Between the time of the first and second surveys some modifications had been made to the questionnaire, a small number of individual items had been taken out and replaced by others, and although the merged data still had 57 variables in common, the wording of certain remaining questions had been altered, which made comparisons less valid. Furthermore, Child (op.cit) suggests the practice of pooling samples is frequently suspect, as factors specific to one population may become obscured if this sample is pooled with another. Although both populations in this study were employees of engineering companies, the two companies had different foci; one was defence-oriented while the other produced shoe-making machinery, and were situated in contrasting geographical locations.

A sample composed of two separate populations might also provide a misleading basis for factor analysis, by proving unrepresentative of any real population or of its two component parts (Kline op.cit). While the use of heterogeneous samples is advisable where possible, merging two distinct populations may not necessarily produce a satisfactory sample. Moreover, if one of the aims of the factor analysis is to validate the questionnaire, a merged data set would validate neither the original nor the modified version.

The data set from the second survey consisted of 113 cases. Although, as Kline (op.cit) recommends, a sample should include as many subjects as possible, a sample size of 100 is usually considered sufficient. Some writers have suggested that the ratio of subjects to variables may be a more useful guide to sample size; estimations of an appropriate ratio vary widely though (Child op.cit). Kline (op.cit: p74) claims these range from 10:1 down to what he considers a 'necessary minimum of 2:1, though some researchers have suggested a ratio of 1:1 is adequate. In this case there were 61 variables and 113 subjects, the ratio was therefore just less than 2:1. While not ideal, according to the varied criteria presented in the literature the size of this sample appeared to be acceptable.

PROCEDURE

Two tests were conducted on the data to ensure the appropriateness of factor analysis; these were the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.60) and the Bartlett test of sphericity (0.00), both of which showed that it was appropriate to proceed.

The number of factors to be extracted may be decided according to a number of different criteria. Guttman (1955) recommends extracting only those factors which are shown to have a latent root, or eigenvalue, of greater than one; this is also known as Kaiser's criterion (Child op.cit). Another method of deciding on the number of factors to be extracted is by constructing a scree plot.. This is a graph of the eigenvalues plotted against the order of extraction; the shape of the resulting curve can then be used to judge the point at which to stop extracting further factors. The cutoff point is normally where the curve changes shape and flattens out, although there may be more than one point on the curve where this appears to occur. The scree test was proposed by Cattell (1978) and is considered an effective method of determining optimum factor numbers; indeed Kline (1994: p75) argues that it is 'about the best solution to selecting the correct number of factors'. In this case, a scree plot was used to decide the number of factors.

A matrix of correlation coefficients was generated for all the variable combinations and a direct or unrotated solution was first produced, but as Child (op.cit) suggests, although this fulfilled mathematical requirements it failed to produce an effective interpretation of the variables being examined. It was decided to extract nine factors accounting for 56.15 of the variance. These were rotated to simple structure using the varimax method of rotation (Kaiser 1958), a form of orthogonal rotation where the simplest explanation to fit the facts is selected (Kline op.cit) and factors should be capable of replication and easy to interpret as they contain small numbers of variables with high loadings (Cattell 1978).

RESULTS

The correlation matrix (shown at the end of this section) shows the number of eigenvalues over one as eighteen. The scree test, which plots the latent roots (eigenvalues) against the number of factors was produced as a scree plot and is shown in Figure A1 below.
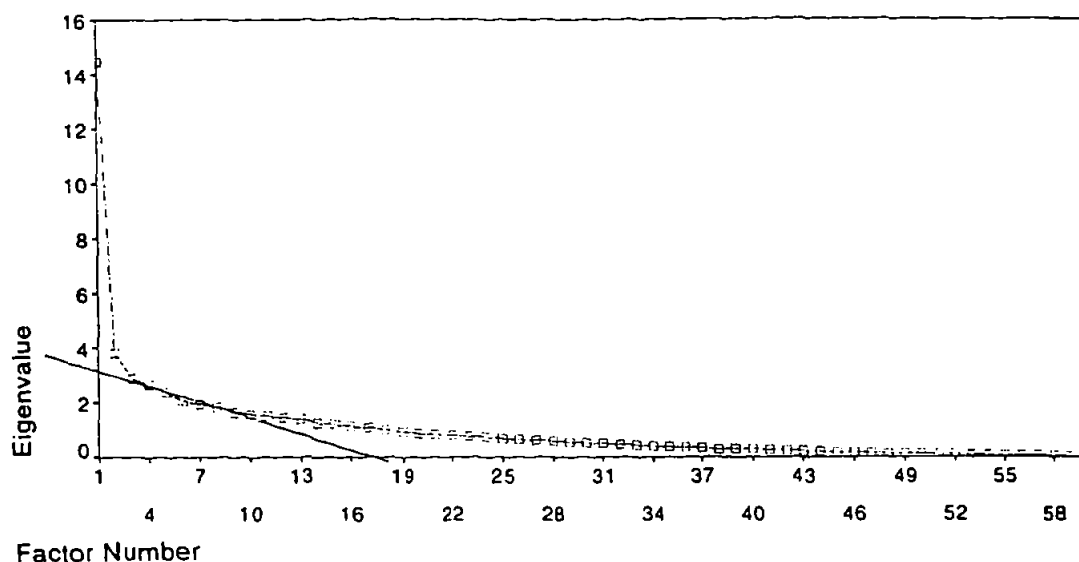
Fig A1: Scree Plot

It can be seen that the slope flattens out at six, nine and to a lesser extent at twelve factors. Beyond this point the slope may be described as 'factorial scree' (Cattell op.cit) like the rocky debris on the lower slopes of a mountain. As previously described, nine factors were extracted using the scree plot as a guide; these are shown in Table 1 on the following page. A description of each factor follows with the variables contained within it and a suggested labelling according to the nature of these variables.

There are thirteen variables which make up Factor One, all with factor loadings of over 3.0. The twelfth and thirteenth variables, 'I feel valued by the organisation' and 'Company policies cater for the interests of all employees' loaded on both Factors one and two, and although the values were slightly higher for Factor two (ie. a difference of 0.002 and 0.683 respectively) it was felt that a better fit was obtained for both these variables with Factor One. There appears to be an association between items within this factor; the use of terms such as 'all' and 'everyone' illustrate the participative nature of these items.

VARIMAX   rotation   1 for extraction   1 in analysis   1 - Kaiser Normalization.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
INVOL	.81661				
VIEWS	.73990				
MAGS	.73248				
EVJOB	.63789				.33162
USEFUL	.58590				
POLDE	.53577				
MEMBE	.51902		.34587		
RESPO	.51753	.31193			
VISION	.47200	.45212			
AWARE	.39719	.37956			
EDUC	.37114		.36102		
UNDERSTA		.70511			
STRESS		.67724			
FORWARD		.62541			
EMPSHA		.55907			
FREEFLO	.42623	.55221			
IT		.47619			
INTERES	.38867	.45697	.34658		
FLMS	.32275	.43643	.32243		
EXPERIM		.43195			
VALUED	.42767	.42967			
COMMS		.39043			
DIFFE	.33578	.35679	.35212		
MISTA			.64608		
REWA			.63880		
OPIN		.44350	.62841		
STAND			.55162		.51605
FLEX			.55161		
FEEDB	.30203		.53810		
SUPPOR			.49541	.38398	
TRAIN			.49204	.31109	
COMPN			.41681		
APPRA				.60093	
CUSTOM				.55401	
PERSA			.34667	.54798	
OTHERCO		.37097		.52210	
TEAMS				.51866	
RULES		.33374		.50950	
BUDGET				.45553	.37216
INDIVID				.35855	
DEGOALS					.62302
COMMI				.34474	.59726
MOTIV			.35299		.59031
PROUD					.57850
HELPS					.30983
RELAT					.44297
DECIS	.35745				.33729
SATIS					.33613
NEWID				.40033	
EXTDEV		.38212			

	Factor 6	Factor 7	Factor 8	Factor 9
SHARE	.75199			
HELPS	.61231			
RELAT	.50211			
WITHO		.76257		
CHUPO		.68576		
FREE		.58598		
PENAL		.50682		
DECIS		.47047		
EXPERT			.79620	
CHANGE			.76652	
TANDD			.43716	.40144
SATIS			.34802	
NEWID				.53759
UNISON				.46344
CONTRIB				.45622
EXTDEV				-.38953

Table A1: Rotated Factor Matrix (Varimax)

It is suggested that Factor one is concerned with employee participation in internal and external affairs.

Factor Two comprises ten items. This factor appears to concern communications and the way information is disseminated within the company. However, there are a number of variables which do not fit this classification, some of these appear to relate to readiness for change, which it is difficult to classify alongside communications. The variables with the highest loading values were actually concerned with organisational change. This factor could be labelled internal communications.

Factor Three contains nine variables all with loadings of over 4.0. This factor is a little less easy to label on immediate examination but most items seem to be related to the type of learning climate present. It is more difficult to relate the ninth variable,' 'Company managers frequently visit workshops to see what is going on', to such a category, but this variable did not load on other factors.

Factor Four has eight component variables. All of these have high value factor loadings and relate to appraisals, shared responsibilities and interaction between individuals, teams, departments and other companies. The eighth item which loaded on the factor appears to fit less well than the other seven variables. This is a rather general category however, combining several different issues and as such is difficult to label.

Factor Five consists of only four variables which have very high loadings and appear to be clearly related to each other. This factor could be said to deal with commitment to the job and to the organisation. Factor Six comprises only three variables, all of which again load highly on the factor, with values of over 0.50. These variables are all concerned with sharing and support; the factor could thus be labelled 'support and inter-personal work relations'.

Factor Seven is made up of five items; all of which have factor loadings of over 4.0. The content of Factor Seven appears to relate to personal autonomy and lack of close supervision; the factor could therefore be said to be concerned with employee empowerment.

The penultimate factor, Factor Eight, consists of four individual items, however it is difficult to classify. One variable, concerned with the need for organisational change, seems most out of place here, although it has a very high loading value (0.77). There appears to be little relation between items in this factor, it is therefore not possible to label the factor.

The last factor, Factor Nine, consists of four individual items with loading values ranging from 0.39 to 0.53. Again this is not easy to label; the first three items seem to be related to an exchange of ideas, and the fourth to information. the factor might be labelled 'exchange of ideas and information.

DISCUSSION

The nine factors extracted are shown in Table 2, with their suggested factor labels. Factor One is the largest factor, with its thirteen constituent items seeming to relate satisfactorily to each other. The variables form a classification which has to do with employee participation, both internal and external. It is perhaps interesting that participation should form such a strong category, as participation in policy making was the conceptual category which scored lowest in both questionnaire surveys.

Factor	Suggested factor labels
1	Employee participation in internal and external affairs
2	Communications
3	Type of learning climate
4	Interaction between individuals, teams, departments and other companies
5	Commitment
6	Support and work relations
7	Employee empowerment
8	Unlabelled
9	Exchange of ideas and information

Table A2: The Nine Factors with Suggested Labels

Factor Two combines communications and organisational change; readiness for change in this context would seem to imply the existence of an effective information sharing system. Links between good communications and readiness for change are confirmed by Lee and Kim (1996) who argue that achieving world-class status is dependent on information systems which support change. Similarly Armenakis, Harris and Mossholder (1993) reiterate the importance of access to information in bringing about organisational change. The eighth variable in Factor Two, 'we are encouraged to experiment' seems to fit in less well than the other items, but did not load on any other factor and could perhaps be construed as relevant to an acceptance of change.

The third factor, which contains ten variables appearing to relate largely to the type of learning climate, matches to a certain extent the items which went to make up the conceptual category of the same name. The ninth variable seems to fit this category less satisfactorily, but is related to the general work climate and thus might be considered relevant.

Interaction between people in this and other organisations appears to make up the fourth factor. This category relates to the category of 'internal exchange' in the composition of the learning company (Pedler, Burgoyne and Boydell 1997). The concept is mentioned frequently in the literature by exponents of the learning organisation (eg.Watkins and Marsick 1992, West 1994a) and it would seem logical that it forms a distinct category in this analysis. Mumford (1991) suggests that the greatest benefits to organisational effectiveness may be achieved through interaction and exchange of ideas. This interaction implies not only a sharing of ideas and knowledge but also a willingness to modify procedures to incorporate new learning.

The fifth factor comprises a small number of variables and suggests a category of employees' feelings of commitment to the organisation and to their jobs. Factor Six similarly contains few variables and appears to form a classification of supportive internal relationships.

It would seem that Factor Seven corresponds more closely than most other factors with one of the conceptual categories. Items within this factor seem to be concerned with

issues of empowerment. Four of the six variables formed part of the original conceptual category of empowerment category and the other two may be incorporated satisfactorily here.

As previously described, Factor Eight was more difficult to classify than the preceding factors, although it consisted of only four items. One variable, 'the organisation needs to change in order to survive', did not appear to bear any meaningful relationship to the other three items. The other variables referred to confidence in employees' abilities, a willingness to assume responsibility for training and the achievement of job satisfaction. The factor was therefore not labelled. The ninth factor was labelled 'exchange of ideas and information' and the four variables appeared to fit the classification reasonably satisfactorily. However, overall, the nine factors extracted using this sample did not provide categories more appropriate than the conceptual categories suggested by the literature. Although factors 2,3 and 7 appeared to correspond to the three conceptual categories similarly labelled, the individual items which formed the contents of the factors did not correlate with those of the conceptual categories. Furthermore, the other six factors were difficult to label and did not support the categories used in the analysis of the data.

Due to the relatively small size of the sample, it is suggested that these nine factors be viewed with caution. However, as the loading values of many variables are quite high the analysis indicates that the items which make up the questionnaire are valid and may be classified satisfactorily to describe a company learning orientation. The validity of the tool would be enhanced through replication studies. This should also help to resolve the problem of those variables which do not appear to fit any factor well, other than mathematically. In addition no data are available on test-retest reliability, and the tool's concurrent and predictive validity remains unclear.

SUMMARY

Factor analysis was conducted on a sample of 113 cases using the data obtained from the second questionnaire survey. Although a larger sample would have been

generated by combining data from the two surveys it was decided not to do this as a potential bias might have resulted due to the existence of sample-specific variables. Furthermore, such an analysis would not have adequately validated either version of the questionnaire as some modifications had been made between surveys.

Nine factors were extracted from the coefficient matrix. These were rotated using the Varimax method and appeared to form eight categories and one which could not be satisfactorily labelled. A number of variables did not appear to fit well with any of the factors on which they loaded. Several factors were not clearly defined and did not appear to form a satisfactory basis for analysis of the data at this stage.

As the sample on which the analysis was carried out was small, it is recommended that further factor analysis be carried out, using data collected using the same version of the questionnaire. The factors extracted might then be used as categories for analysis, in place of the conceptual categories employed in the analyses described in Chapters 8 and 10. Categories determined by statistical means, rather than through subjective judgement, are likely to provide a more reliable means of grouping variables for further analysis and may provide further insight into the components of a learning organisation. Such an approach may also lead to the development of a psychometrically sound instrument for learning organisation/orientation research.

נalysis number 1   Listwise deletion of cases with missing values

orrelation Matrix:

	CONTRIB	WITHO	EDUC	CHUPO	MOTIV	OPIN	COMPM
ONTRIB	1.00000						
ITHO	.18366	1.00000					
DUC	.30502	.19005	1.00000				
HUPO	.20813	.48475	.23220	1.00000			
OTIV	.19221	.25656	.45992	.22672	1.00000		
PIN	.22551	.23618	.50522	.27939	.40824	1.00000	
OMPM	.16624	-.15772	.31085	.04670	.18459	.25428	1.00000
TAND	.09089	.02108	.10674	.15685	.38795	.24491	.29157
RAIN	.18017	-.05632	.51936	.13314	.38176	.36159	.33447
ATIS	.12104	.24281	.20208	.24104	.39671	.27189	.02476
EWID	.23075	.25693	.24300	.06285	.18185	.26652	.24483
EWA	.19275	.15764	.42268	.15750	.29741	.56257	.35219
LEX	-.05885	.14119	.08958	.23500	.23200	.33385	.19192
EEDB	-.05803	.07116	.23613	.01577	.45451	.23589	.34550
MPSHA	.08256	.15180	.26070	.10435	.23217	.29255	.07186
OLDE	.26437	.03888	.32971	.07586	.23887	.31939	.28799
ISTA	.08234	.21302	.27891	.20858	.33785	.43949	.11989
EMBE	.12189	.13025	.34072	.14885	.42931	.42738	.26032
OMMS	.03650	.16603	.20746	.15829	.30804	.25530	.09588
PERSA	.17446	.18269	.44174	.15880	.45421	.36889	.14149
PROUD	.00152	.18722	.08145	.10155	.38130	.11086	.03018
DIFFE	.21883	.23632	.31819	.16999	.39250	.44460	.28760
SUPPO	.17196	.15462	.30395	.30587	.41913	.44544	.27367
PENAL	.02152	.36384	.00889	.25664	.05248	.14087	-.11801
TANDD	.29335	.07878	.26402	.21160	.34955	.17790	.41711
IT	-.00838	.15663	.01308	.12479	.16190	.23454	-.00475
APPRA	.14738	.17343	.27046	.27797	.16262	.12874	.05851
COMMI	.12000	-.06795	.20195	.01728	.32434	.02278	.20675
EXTDEV	.01614	.13904	.12704	.19769	.26170	.24861	.01715
FLMS	.17090	.16123	.33270	.22318	.41868	.43221	.16675
EXPERT	.11559	.04989	.04433	.15042	.13002	-.05590	.21347
RESPO	.11431	.00887	.29075	.13536	.19135	.31760	.29099
VISION	.20817	-.07171	.43631	.09474	.36599	.41097	.18404
STRESS	.31656	.01028	.21108	.12092	.18831	.23748	.10947
TEAMS	.08178	.21271	.11028	.21067	.10993	.12842	.14995
OTHCO	.09974	.29597	.29705	.21499	.28237	.31770	.22928
FREEFLO	.13548	.10915	.23128	.17283	.24609	.38430	.14020
SHARE	.00000	.00000	-.05740	.10758	.08598	.12396	.04345
VALUED	.26839	.25713	.34140	.26827	.39013	.45884	.06501

	CONTRIB	WITHO	EDUC	CHUPO	MOTIV	OPIN	COMPM
GOALS	.15373	.10027	.27508	.21116	.49899	.26506	.13539
EFUL	.16269	.17934	.22503	.19925	.15849	.20200	.06175
JOB	.18661	-.04042	.32198	.07101	.31995	.13451	.35199
REE	.01718	.34488	-.00152	.47832	.20081	.09296	-.09900
EWS	.31930	.11271	.49631	.15631	.31543	.38182	.34102
OODREL	.11318	.21779	.24807	.36433	.32161	.37119	.19682
ULES	.06535	.18757	.25191	.26225	.19754	.37544	.17012
NTERES	.16098	.14376	.36612	.20747	.27351	.44594	.36538
NDIVID	.16303	.28431	.34077	.33250	.28852	.32153	.18247
ELAT	.04096	.21578	.08192	.24240	.30020	.05590	.06527
ECIS	.32704	.39071	.43846	.42114	.47039	.31965	.03085
AGS	.14470	-.09370	.27510	-.09852	.13532	.05844	.13590
ELPS	.14579	.10990	.00514	.22442	.25265	.05449	-.06834
UDGET	.11831	.26438	.21711	.21775	.36561	.09182	.15444
NVOL	.09401	-.11239	.29219	-.04364	.23474	.09784	.17039
USTOM	.00763	.22755	.14819	.33499	.10875	-.03154	.12501
XPERIM	.22658	.12501	.35067	.18780	.12374	.42390	.20758
WARE	.02095	.03035	.26775	.16105	.14990	.13277	.07101
NISON	.02449	-.00093	-.04762	.00698	.04993	-.14277	-.00274
ORWARD	.01752	.08886	.06726	.11632	.25369	.28807	-.05825
NDERSTA	.30725	.16588	.32681	.19578	.36881	.51800	.23262
HANGE	.17287	.07470	.10782	-.02183	.09206	-.03610	.07760

	STAND	TRAIN	SATIS	NEWID	REWA	FLEX	FEEDB
STAND	1.00000						
TRAIN	.28559	1.00000					
SATIS	.23827	.26215	1.00000				
NEWID	.09573	.22899	.08084	1.00000			
REWA	.32485	.37633	.19405	.23016	1.00000		
FLEX	.32900	.15067	.27033	.09074	.27948	1.00000	
FEEDB	.32924	.34040	.25406	.16141	.28811	.30968	1.00000
EMPSHA	.10197	.29423	.28238	.19218	.36319	.08313	.19735
OLDE	.07909	.42172	.10140	.16649	.27122	.12267	.09985
ISTA	.45712	.38638	.36170	.09482	.37764	.31624	.32061
EMBE	.27132	.38154	.25449	.23699	.40525	.22941	.39046
OMMS	.11666	.09441	.23755	.22562	.26166	.15600	.13017
ERSA	.18602	.37521	.15190	.38907	.27240	.19346	.35506
ROUD	.35590	-.04056	.27810	.08013	.05329	.17295	.09097
IFFE	.26925	.33037	.25833	.34494	.41171	.34078	.26666
UPPO	.32354	.31987	.37811	.22588	.37674	.38045	.44925
ENAL	-.05564	.05947	.15790	.03139	-.01084	.15527	.13458
TANDD	.21516	.19343	.19229	.27291	.20940	.12275	.18391
IT	.16656	.01367	.18584	.15271	.20978	.10627	.03687
PPRA	.06199	.21525	.18845	.26472	.02811	.17185	.08541
OMMI	.27475	.33301	.37447	.08605	.02187	-.05927	.16155

	STAND	TRAIN	SATIS	NEWID	REWA	FLEX	FEEDB
KTDEV	.06570	.15581	.29977	.11724	.13333	.24102	.33062
LMS	.19305	.25185	.39545	.24130	.35650	.34196	.42122
KPERT	.07727	.09787	.27533	-.14829	-.05392	.02970	.09216
ESPO	.03683	.28493	.19548	.12437	.35019	.13992	.22618
ISION	.24676	.44805	.25510	.04907	.32081	.19280	.20260
TRESS	.00774	.15539	.28800	-.00780	.15603	-.02687	-.09325
EAMS	.08866	.20712	.22101	.34559	.12860	.06344	.16265
THCO	.02216	.32000	.06792	.28020	.23889	.12049	.16469
REEFLO	.07138	.27667	.17695	.29380	.42931	.25616	.16468
HARE	.15100	.15876	.34899	.27203	.17089	.37825	.15889
ALUED	.08303	.20560	.36501	.24024	.40362	.28124	.19277
EGOALS	.41504	.26848	.25941	.20929	.22227	.14218	.23013
SEFUL	.05328	.10245	.14492	-.04760	.08039	-.02370	.21897
VJOB	.16083	.15948	.12641	.07683	.26286	.03896	.18650
REE	.16893	.03496	.30270	-.10116	.18159	.11450	.03024
TEWS	.15583	.41134	.15937	.28520	.49028	.18137	.24764
OODREL	.16745	.17747	.29072	.18287	.36707	.31344	.08711
RULES	.03056	.25501	.17965	.28506	.25938	.25430	.11485
NTERES	.25595	.45852	.28776	.20166	.32402	.20852	.18937
NDIVID	.14716	.35429	.32529	.23313	.29657	.14092	.25594
RELAT	.28596	.05789	.54754	.16121	.00520	.25125	.29157
DECIS	.21669	.22521	.16946	.21315	.29648	.10589	.31201
MAGS	.13911	.19257	.03144	.04787	.35497	-.00672	.27835
HELPS	.06967	.03306	.34325	.20031	-.06277	.23242	.06044
BUDGET	.21562	.17279	.19425	.13381	.02875	.17035	.11115
INVOL	.04490	.19977	.07630	.09503	.24497	.11440	.28474
CUSTOM	-.09970	.01945	.18986	.12693	-.00983	-.06110	.09217
EXPERIM	-.07575	.33583	.15261	.15979	.34109	.09200	.17513
AWARE	.02899	.26943	.15724	.19738	.14280	.11833	.10256
UNISON	-.08916	-.06541	-.27887	.11626	-.12390	-.13405	-.02590
FORWARD	.08232	.08613	.18064	.12751	.08292	.12359	.03970
UNDERSTA	.16012	.32558	.33880	.32775	.38892	.18190	.17316
CHANGE	.00439	.12778	.19359	-.09508	-.03509	-.04493	.09375

	EMPSHA	POLDE	MISTA	MEMBE	COMMS	PERSA	PROUD
EMPSHA	1.00000						
POLDE	.35865	1.00000					
MISTA	.29315	.15559	1.00000				
MEMBE	.36870	.45373	.27471	1.00000			
COMMS	.41274	.27869	.14553	.49382	1.00000		
PERSA	.17141	.17683	.42879	.34617	.38557	1.00000	
PROUD	.11760	.05822	.10745	.07859	.23394	.04645	1.00000
DIFFE	.33161	.39730	.35148	.46604	.33692	.40989	.15801
SUPPO	.32744	.25892	.49485	.49631	.41530	.51223	.13149
PENAL	.20332	.15449	.08106	.28986	.19281	.14738	.04941

	EMPSHA	POLDE	MISTA	MEMBE	COMMS	PERSA	PROUD
ANDD	.21779	.16318	.14327	.27349	.31605	.25325	.05235
T	.26264	-.03356	.26684	.25480	.35215	.12876	.21799
PPRA	.17848	-.07059	.23745	.04665	.24566	.40888	-.06911
OMMI	.15494	.15838	.07780	.25857	.13185	.19723	.26687
XTDEV	.34646	.10992	.21259	.40876	.34933	.24452	.21655
LMS	.45229	.27902	.42007	.56728	.41709	.35266	.12939
XPERT	-.10499	-.02239	-.09670	-.02230	.02476	-.06359	.12546
ESPO	.36983	.22880	.15743	.41420	.29114	.30453	-.12221
ISION	.35864	.43443	.28124	.39631	.32702	.28705	.13934
TRESS	.24575	.09933	.16015	.18792	.30761	.08448	-.11973
EAMS	.21584	-.02916	.26607	.24632	.18129	.36409	.03753
THCO	.26534	.28049	.16142	.27236	.27954	.31127	.04727
REEFLO	.53447	.36771	.23256	.48221	.59085	.29949	.16490
HARE	.42181	.14283	.11550	.32985	.29524	.13274	.24725
ALUED	.42948	.34394	.22101	.54942	.37730	.27877	.08554
EGOALS	.30999	.19667	.29745	.28653	.26576	.25671	.33965
SEFUL	.23006	.30301	.24226	.25627	.23232	.24425	.03568
VJOB	.12272	.24545	.03147	.37564	.27183	.31822	.10800
REE	.01685	-.08432	.21654	.25272	.36552	.20548	.14626
VIEWS	.41192	.49414	.22583	.55754	.34188	.45419	.09035
GOODREL	.27632	.27412	.29886	.46114	.34385	.30359	.12523
RULES	.23289	.19673	.27338	.34393	.30775	.30484	-.04639
INTERES	.39445	.41848	.31490	.37847	.26603	.24185	.03993
INDIVID	.26636	.25243	.33278	.43960	.19844	.36114	.13790
RELAT	.23727	-.08068	.24488	.13313	.28514	.28398	.34402
DECIS	.07456	.26201	.19088	.42122	.17646	.33338	.19054
MAGS	.17253	.32655	.09412	.35582	.20629	.15877	-.06123
HELPS	.17767	.08879	.06502	.19709	.25393	.23911	.27345
BUDGET	-.01536	.04792	.16556	.08857	.22050	.31807	.16983
INVOL	.32083	.36513	.09297	.38193	.33130	.29607	-.01446
CUSTOM	.15876	-.01397	.13620	.11656	.17182	.26391	.09838
EXPERIM	.23895	.33402	.26754	.34546	.09880	.20809	-.14290
AWARE	.32121	.38785	.09693	.25163	.26830	.18564	.14343
UNISON	-.15339	.07073	-.21849	-.00722	.01240	-.07898	-.16819
FORWARD	.44101	.21528	.22835	.26967	.32266	.14106	.01569
UNDERSTA	.47440	.32920	.20283	.47900	.38365	.20462	.13668
CHANGE	.02869	-.09444	.08336	-.02437	-.07295	.00793	.00084

	DIFFE	SUPPO	PENAL	TANDD	IT	APPRA	COMMI
DIFFE	1.00000						
SUPPO	.52459	1.00000					
PENAL	.23018	.13361	1.00000				
TANDD	.25731	.33330	.12987	1.00000			
IT	.34684	.18304	.04068	.10510	1.00000		
APPRA	.19002	.25906	.00518	.09149	.15308	1.00000	

	DIFFE	SUPPO	PENAL	TANDD	IT	APPRA	COMMI
OMMI	.28098	.22718	.02371	.26836	.01451	.14658	1.00000
KTDEV	.36702	.39715	.25436	.00237	.43027	.07633	.31780
LMS	.39978	.63018	.22876	.31933	.24357	.20067	.16388
KPERT	.00000	-.10230	.08062	.33178	.10177	-.00699	.24444
ESPO	.34392	.30161	.15220	.36677	.14767	.00762	.12324
ISION	.48287	.41189	.10455	.14411	.16184	.06866	.30318
TRESS	.19623	.17120	.05179	.07111	.21065	.20456	.12046
EAMS	.20046	.26909	.11237	.30289	.39895	.37634	.13397
THCO	.44097	.44415	.29842	.17173	.15489	.23452	.16702
REEFLO	.45650	.45597	.23278	.27684	.33297	.12524	.18559
HARE	.27511	.25807	.23837	.16477	.15631	.14479	.18199
ALUED	.38543	.32683	.33891	.41854	.29748	.12377	.13832
EGOALS	.39519	.41812	-.06381	.39430	.15295	.14407	.47260
SEFUL	.37838	.19111	.45555	.21487	.09708	-.02425	.06017
VJOB	.34631	.20317	-.00131	.30810	.11679	.14134	.34686
REE	.08993	.22773	.16513	.01193	.20420	.15902	.02986
IEWS	.55931	.33212	.22736	.36082	.24045	.05981	.22256
OODREL	.42493	.48832	.12372	.30107	.11592	.19954	.17256
ULES	.41310	.40898	.14200	.28081	.21254	.33014	.24040
NTERES	.42289	.36381	.13524	.25872	.21590	.04798	.18537
NDIVID	.25129	.38479	.35221	.31208	.16232	.16423	.25188
ELAT	.30066	.45409	.13110	.24677	.19903	.30421	.31867
ECIS	.38195	.25058	.07546	.15216	.16939	.18007	.26576
IAGS	.10043	.01813	.01026	.05599	-.01423	-.10976	.13184
IELPS	.22933	.33884	.21948	.20333	.13814	.22536	.18628
UDGET	.21223	.20796	.02803	.29923	.04941	.30327	.27794
NVOL	.32604	.16662	.13317	.25536	.17640	-.01995	.11341
USTOM	.10061	.22059	.22015	.22556	-.03126	.21167	.31617
XPERIM	.28077	.25644	.11785	.07389	.25691	.06019	.00565
AWARE	.35084	.33744	.13554	.12160	.28923	.13614	.20796
UNISON	-.14851	-.21548	.10568	.00710	-.06618	.06794	-.08766
FORWARD	.32509	.34587	.15895	.11927	.30922	.19732	.11129
UNDERSTA	.45667	.36817	.02326	.33527	.34698	.18923	.18879
CHANGE	.01279	-.03106	.04475	.21457	.07325	.08772	.20054

	EXTDEV	FLMS	EXPERT	RESPO	VISION	STRESS	TEAMS
EXTDEV	1.00000						
FLMS	.48092	1.00000					
EXPERT	.02758	.04343	1.00000				
RESPO	.27218	.29926	.16887	1.00000			
VISION	.33644	.40747	.08247	.30240	1.00000		
STRESS	.29880	.30243	.15068	.27326	.40078	1.00000	
TEAMS	.22118	.18155	.13786	.27770	.10187	.07413	1.00000
OTHCO	.25805	.34379	-.05144	.36240	.25410	.30366	.30805
FREEFLO	.43446	.59249	-.01631	.43937	.46745	.25368	.27378

	EXTDEV	FLMS	EXPERT	RESPO	VISION	STRESS	TEAMS
HARE	.34573	.40287	.10309	.17499	.14986	-.01810	.24397
ALUED	.35071	.61931	.07303	.44956	.38197	.28782	.23704
EGOALS	.29228	.44018	.05491	.08791	.29366	.13431	.12735
SEFUL	.27381	.35167	.17614	.32856	.34672	.09352	.01353
VJOB	.17348	.33801	.19330	.34747	.33023	.05821	.06708
REE	.15588	.14189	.01818	.02422	.03256	.11263	.17613
IEWS	.38680	.46859	.14940	.57649	.50031	.22560	.23549
OODREL	.32803	.45936	.06513	.32090	.32577	.14202	.12692
ULES	.26154	.43821	-.07390	.29133	.29683	.21761	.27298
NTERES	.32334	.35618	.07408	.49964	.34650	.33152	.22096
NDIVID	.26473	.44500	-.00996	.28005	.18243	.08002	.31787
ELAT	.25093	.37231	.27857	.03069	.16634	.06993	.21270
ECIS	.25031	.29816	.10311	.16507	.30806	.13374	.24145
AGS	.11638	.17837	-.02131	.41538	.26701	.08870	-.01416
ELPS	.26036	.34877	.18760	-.05865	.18259	.03259	.21776
UDGET	.07174	.13259	.16587	.15798	-.04242	.06407	.11790
NVOL	.36211	.35455	.07756	.48921	.45850	.13829	.13882
USTOM	.18167	.11800	-.01793	.07334	.02152	.21062	.22904
XPERIM	.30315	.33976	-.06239	.35674	.34015	.26941	.18342
WARE	.28194	.35711	.07937	.21997	.36481	.13390	.23328
UNISON	-.23428	-.09036	-.07619	-.20917	-.23287	-.04093	-.14752
FORWARD	.21111	.47560	-.13352	.18164	.18013	.22337	.06827
UNDERSTA	.31738	.50304	.17561	.48128	.38835	.44155	.35072
CHANGE	.08677	.09105	.51159	.21819	-.01965	.04787	.11509

	OTHCO	FREEFLO	SHARE	VALUED	DEGOALS	USEFUL	EVJOB
OTHCO	1.00000						
FREEFLO	.47989	1.00000					
SHARE	.11510	.48783	1.00000				
VALUED	.23744	.57661	.39685	1.00000			
DEGOALS	.25010	.29396	.27896	.26759	1.00000		
USEFUL	.22419	.25275	.09752	.25635	.13434	1.00000	
EVJOB	.08026	.25138	.21812	.34210	.32568	.38638	1.00000
FREE	.04494	.14307	.12805	.19311	.09956	.05935	.10885
VIEWS	.35834	.50509	.25527	.54724	.27551	.46513	.56382
GOODREL	.18569	.36249	.33926	.39301	.37752	.25518	.34858
RULES	.39467	.44625	.11740	.25771	.37021	.18910	.25686
INTERES	.50316	.39727	.17553	.27853	.26490	.29943	.21437
INDIVID	.33749	.38809	.34031	.39478	.26147	.28853	.15349
RELAT	.07253	.15400	.40092	.11113	.30298	.19919	.08653
DECIS	.26515	.22225	-.01913	.33165	.34044	.24761	.21318
MAGS	.09570	.29563	.09681	.33169	.01065	.26622	.38062
HELPS	-.00861	.23897	.47846	.36320	.17329	.13317	.10975
BUDGET	.28994	.10689	.02325	.09386	.35358	.08844	.12581
INVOL	.18159	.43601	.17142	.43451	.13834	.41979	.52222

	OTHCO	FREEFLO	SHARE	VALUED	DEGOALS	USEFUL	EVJOB
ISTOM	.22843	.11113	.08816	.09222	.16600	.12574	.08393
PERIM	.30688	.41597	.10935	.34847	.14362	.17825	-.00152
IARE	.36897	.48280	.22359	.27370	.11446	.28868	.15732
IISON	.07084	-.01045	-.23024	-.01787	-.04665	-.08071	-.03369
RWARD	.26704	.40211	.18128	.31489	.24588	.10985	-.00330
IDERSTA	.37318	.48934	.27704	.53838	.31394	.14185	.16375
IANGE	.08594	-.04432	-.04484	.08433	.08128	.19286	.06033

	FREE	VIEWS	GOODREL	RULES	INTERES	INDIVID	RELAT
REE	1.00000						
IEWS	.04443	1.00000					
OODREL	.21283	.45623	1.00000				
JLES	.17912	.38053	.49267	1.00000			
NTERES	.05899	.56086	.36841	.37724	1.00000		
NDIVID	.17878	.42377	.28453	.36809	.31273	1.00000	
ELAT	.28512	.03400	.27458	.18687	.01350	.20257	1.00000
ECIS	.19985	.41162	.29434	.31447	.23283	.35400	.06865
AGS	.09316	.47313	.14956	.14736	.28167	.16339	-.08030
ELPS	.23213	.12615	.45089	.24329	-.04956	.24034	.61039
UDGET	.19177	.18758	.28406	.34144	.26702	.21653	.23675
NVOL	.03305	.66580	.22104	.27518	.44352	.14670	-.12643
USTOM	.29542	.05777	.16085	.20321	.07753	.22911	.25670
XPERIM	.16299	.37480	.32081	.43092	.43881	.41182	-.00775
WARE	.08730	.39168	.22380	.33790	.41341	.30497	.25529
NISON	-.02035	-.17622	-.26716	-.03106	-.18169	-.08599	-.18067
ORWARD	.13525	.17270	.21465	.33446	.29556	.13276	.29964
NDERSTA	.13727	.48472	.32350	.31172	.47173	.29273	.25881
HANGE	-.14423	.09175	-.03408	-.07453	.06424	-.02683	.16434

	DECIS	MAGS	HELPS	BUDGET	INVOL	CUSTOM	EXPERIM
ECIS	1.00000						
AGS	.28287	1.00000					
ELPS	.11815	-.06412	1.00000				
UDGET	.33751	.04364	.16222	1.00000			
NVOL	.28696	.60423	.05539	.05836	1.00000		
USTOM	.12754	-.05858	.15570	.16992	.02289	1.00000	
XPERIM	.33149	.25290	.12103	.20846	.26133	.14198	1.00000
WARE	.26704	.28559	.38693	.06077	.38965	.09623	.32038
NISON	-.00422	.03126	-.11886	-.04319	-.08518	.03689	-.04603
ORWARD	.09702	-.06501	.22110	.27639	.13180	.13290	.16670
NDERSTA	.30560	.15145	.25911	.17695	.26755	.19020	.36993
HANGE	-.09416	-.07809	-.02605	.06313	-.03358	-.09769	.01375

```
- - - - - - - - - -    F A C T O R    A N A L Y S I S    - - - - - - - - - - -


              AWARE      UNISON     FORWARD    UNDERSTA     CHANGE

VARE         1.00000
VISON         -.00563    1.00000
DRWARD         .31028     .02338    1.00000
NDERSTA        .33490    -.07610     .53954    1.00000
HANGE         -.10040     .07993    -.16220     .07273    1.00000


eterminant of Correlation Matrix =      .0000000


aiser-Meyer-Olkin Measure of Sampling Adequacy =   .60371

artlett Test of Sphericity = 3450.9914, Significance =       .00000



xtraction    1 for analysis    1, Principal Components Analysis (PC)



nitial Statistics:
```

Variable	Communality	*	Factor	Eigenvalue	Pct of Var	Cum Pct
CONTRIB	1.00000	*	1	14.78739	24.2	24.2
VITHO	1.00000	*	2	3.89182	6.4	30.6
EDUC	1.00000	*	3	2.91824	4.8	35.4
CHUPO	1.00000	*	4	2.66543	4.4	39.8
MOTIV	1.00000	*	5	2.42230	4.0	43.7
OPIN	1.00000	*	6	2.07950	3.4	47.2
COMPM	1.00000	*	7	1.96845	3.2	50.4
STAND	1.00000	*	8	1.80174	3.0	53.3
TRAIN	1.00000	*	9	1.66767	2.7	56.1
SATIS	1.00000	*	10	1.59098	2.6	58.7
NEWID	1.00000	*	11	1.53160	2.5	61.2
REWA	1.00000	*	12	1.44388	2.4	63.6
FLEX	1.00000	*	13	1.41835	2.3	65.9
FEEDB	1.00000	*	14	1.32959	2.2	68.1
EMPSHA	1.00000	*	15	1.22513	2.0	70.1
POLDE	1.00000	*	16	1.14239	1.9	71.9
MISTA	1.00000	*	17	1.07525	1.8	73.7
MEMBE	1.00000	*	18	1.00107	1.6	75.3
COMMS	1.00000	*	19	.97589	1.6	76.9
PERSA	1.00000	*	20	.87615	1.4	78.4
PROUD	1.00000	*	21	.83290	1.4	79.7
DIFFE	1.00000	*	22	.81434	1.3	81.1

APPENDIX 10

TELEPHONE INTERVIEW SCHEDULE
ENGINEERING COMPANY 2

SCHEDULE FOR TELEPHONE INTERVIEWS

MARCH 19th 1997

1. Which department do you work in?

2. Did you fill in the questionnaire?
If not, could you tell me why?

3. Would you say there's a good communication system at (company name)?
How do you usually get information?

4. What's your view of empowerment in the company?
Do you feel people have enough control over decisions about their work?

5. What's the relationship like between management and employees?
(Prompt) Would you say they trust each other?

6. What's your view of leadership in the company?
(Prompt) Is it effective?

7. Have you got any suggestions for improving things?

8. This last question I've been asked by management to put to you.
Do you understand the need for the company to strive for continuous improvement and cost reduction?

APPENDIX 11

PUBLISHED AND UNPUBLISHED PAPERS

EMPLOYEE EMPOWERMENT AS A MEANS OF ENHANCING ORGANISATIONAL PERFORMANCE

Paper presented at the Employment Research Unit Annual Conference
Cardiff Business School
4 - 5th September 1995

Penny Gardiner
Plymouth Business School
University of Plymouth

Introduction.

Many employees in organizations working either individually or as members of a team already have a certain amount of power; the power to work enthusiastically or not, to produce high quality goods or services or not, to espouse corporate goals or not. But organizational goals and individual aims often conflict with each other, and in many cases personal objectives have higher priority. Furthermore, the power that individuals in organizations possess naturally is frequently used in a negative way, to withhold services, or guard information for personal advantage, for example.

Empowerment is not just about giving power to staff but giving it in a way which will ensure that it is used for the overall benefit of the company, i.e. the personal objectives of employees must be aligned with corporate aims. By passing a degree of power to the workforce, management replaces rigid control with the capacity to influence the climate, and ultimately the performance of the organization by creating learning opportunities, feedback mechanisms and an underlying basis of trust. However, the transition to empowerment cannot take place without modifications to the expectations of both employees and management.

A number of definitions of empowerment are considered, which help to demonstrate the scope of the concept, and some of the advantages and disavantages of this way of working are considered. A contingency approach is suggested which relates the degree of empowerment suited to a particular organization to its internal climate and the wider environment. The development of empowered organizations is traced and some reasons suggested for its suitability to today's companies within the general business context.

This paper examines employee empowerment in organizations today and looks at how this can be effectively accomplished. Reasons for resistance to empowerment by staff and managers are considered, and some suggestions offered as to how such barriers might be overcome. These include the creation of an inspired vision of the organization's future, modelling by managers of desired behaviour patterns and the development of a new relationship of respect and trust to replace the traditional authority based on exclusive possession of power. Empowerment is related to organizational learning and it is argued that learning and empowerment are mutually dependent. Various types of learning are examined and their significance to the organization's development discussed. It is proposed that the learning organization and empowerment of employees should exist side by side.

Strong and respected leadership is no less important within the empowered organization; power is devolved by management, but there is no total relinquishment of control. A number of models of participation and empowerment are considered, together with the association between them. The significant role of teams in an empowered organization is emphasised, and a new model of teamworking examined. The paper then discusses what constitutes superior performance and how this can be related to teamworking and empowered employees. Finally, a research project is described which proposes to introduce employee involvement to a change process in a traditionally structured service organization.

Definitions of Empowerment.

But what exactly is empowerment? Definitions abound, a few of these are noted here. Holpp (1995) suggests empowerment is helping the 'right people at the right levels make the right decisions for the right reasons'. Perhaps more explicitly, as Blundell ·(1994) suggests, it means enabling workers to make decisions and act with little overall management control. Zemke and Schaaf (1989) define empowerment as 'turning the front line loose'; workers are encouraged to use iniative and not necessarily do things by the book. Pickard (1993) claims that empowerment is taking participation to its logical extreme,and that it implies a whole philosophy governing the way people work. Blundell (op. cit.) submits that employees are presented with the authority and autonomy to carry out their work, while Leppitt defines empowerment as the creation in workers of the 'personal power to achieve, accomplish and succeed'. Marsick (1994) contends that empowerment implies 'interactive mutual decision making about work challenges' with shared responsibility for the results. A booklet produced by Develin and Partners (1994), (management consultants) describes empowerment comprehensively as a combination of practices and behaviour designed to enable workers to solve problems, exercise iniative, make relevant decisions, be responsible for results and to feel that their contributions are valued. And finally, Bowen and Lawler (1992) posit that empowering workers means that those performing tasks are those responsible for solving problems and proposing imaginative new ideas, which will subsequently influence the way in which those tasks are performed.

Benefits and Drawbacks of Empowerment.

The advantages of empowering staff are frequently cited. Firstly, successful empowerment programmes should provide workers with greater job satisfaction. Employees with a degree of autonomy tend to have greater self-esteem and to be more highly motivated, they interact more warmly with customers in service industries and are

likely to be more committed to achieving quality in products or services (Bowen and Lawler, op.cit.). Secondly, many organizations are now beginning to recognise that people are their most valuable resource; empowerment can be the means of unleashing the potential of creative ideas, diverse experience, talents and expertise held by staff.

Furthermore, the exacting customer demands of the 1990s and beyond are easier to meet in a situation where employees are not bound by traditional constraints. Responses can be personally tailored and rapidly produced where creative rule-breaking is permitted or encouraged in non-standard situations. Where clients may be dissatisfied with a product or service, empowered employees are in a position to devote attention to putting the situation right rapidly without recourse to higher authority (Ripley and Ripley 1992).

However, there may also be drawbacks to implementing an empowerment programme. First, it may prove costly initially, in terms of training costs and recruitment of suitable, creative, problem-solving staff (Holpp 1995). Further expense might be incurred through the need for permanent rather than temporary or part-time staff, who are often employed cheaply to meet variable staffing needs; empowering non-permanent workers is clearly impractical (Bowen and Lawler 1992). Production or delivery of services may suffer, too; inconsistencies based on varying responses to customers could produce delays; these might be construed by clients as unreliability. Empowerment also provides the potential for errors to occur, as they can when decision-making is the responsibility of management; safeguards need to be put in place before staff will be willing, or indeed should be expected to take risks. And, of course, there are circumstances where rule breaking is never appropriate (health and safety regulations need to be adhered to, for example) empowering employees must clearly involve specification of the boundaries within which they are permitted to operate.

The General Context of Empowerment.

The current interest in empowerment is largely due to a realisation that there is not a general prescription for success today, but that the distinguishing characteristic of so-called 'excellent' organizations seems to be the degree to which they are capable of exploiting the potential of their workforce (Edmonstone and Havergal 1993). Excellent employees need to be capable of adapting existing skills to new situations and crossing functional boundaries where appropriate, and they must be self reliant and receptive to learning.

Empowerment is to some extent a response to the flattening of organizational structures; layers of middle management are being removed in many organizations and the responsibility for decision making and problem solving, formerly undertaken by this group, needs to be shifted. It clearly makes sense for this process to be transferred to the shop floor. It is important to recognise that front line workers are in charge of customer perceptions and more in tune with changing demands, product or service satisfaction and customer concerns than management (Develin and Partners 1994). There is no doubt that employees are more productive today than ever before, they bear more responsibility for the sales, assets, equity and value of the company, too. Strategic decisions which enable workers to operate more efficiently or serve customers better thus carry increased significance. The continuing advance of technology, drives to cut costs and improve quality and ever more fierce competition means that 'fewer and fewer people will be asked to do more and more work' even should the general economic climate improve drastically (Gubman 1995).

Conventional organizational structures are frequently incapable of supporting creative ways of working, it follows that in order to encourage flexibility, major structural changes need to take place. Empowerment is a logical development in many instances; where work is designed around groups operating in close contact with clients, structures tend to be more fluid and there are fewer barriers to the sharing of knowledge and ideas.

However, the offer of greater power to individual workers is not always welcomed, particuarly in older organizations with a hitherto hierarchical structure and a history of management by control. In an already uncertain environment employees are frequently unwilling to assume reponsibility for decision making. The continuing drive to cut costs, increase production and simultaneously improve quality mean that more work is now being done by fewer and fewer people (Plunkett and Fournier 1991). Despite the lack of job security, some individuals feel unable to keep up with the pressure. Other groups of workers may generate resistance due to fear of failure in an empowered situation, or worry about losing their job if they cannot adapt quickly enough to new methods of working. Moreover, the flattening of management structures often means that there is less chance of promotion; with this financial incentive removed it is not surprising that some employees resist attempts to give them more responsibility.

Managers may also mistrust the empowerment approach, fearing a lack of overall control and, in some cases, worrying that power sharing might erode their own positions, perhaps eventually leading to the loss of their own jobs (Leigh and Maynard 1993). Empowering employees means asking management to behave in a way directly in

contrast to that which led to the succesful attainment of their positions; small wonder that many managers find this so difficult.

Ways of Overcoming Resistance.

Gubman (1995) claims the ideal relationship between employees and the organization is mutual interdependence; trust and honesty are the vital ingredients of this relationship. Many conventional structures are organised around traditional supervisory roles which placed power exclusively in the hands of management. In order to overcome resistance to change managers need to unlearn behaviour which regards power as their prerogative and to develop instead alternative forms of authority based on trust, effectiveness and respect (Burdett 1991).

A future vision of the organization needs to be created by top management, this vision can then be communicated to staff, and appropriate behaviour modelled by leaders to demonstrate the type of organization they hope to achieve (Brown and Brown 1994). Managers can thus promote the idea of shared knowledge and values and specify organizational goals to which everyone aspires. This is a big step from the control and direct style of management and can only be achieved if leaders are prepared to commit themselves wholeheartedly to the sharing of ideas and power. A shared vision is essential in order to inspire and motivate employees sufficiently to overcome barriers to empowerment.

Learning and Empowerment.

The next section of the paper will consider the association between learning and empowerment. A great deal of interest is currently focused on the learning organization, which developed as an extension of organizational learning theory, and which has gained popularity during the late 1980s and early 90s. A number of academics and practitioners believe that for organizations to cope successfully with a turbulent environment over long periods of time it is necessary for learning to take place regularly throughout the system (West 1994). This learning should focus on anticipation and avoidance of potential problems. The learning organization can be described as a place where working and learning take place simultaneously, where the emphasis is on acquiring and exploiting knowledge creatively and where organizational behaviour is constantly being modified to reflect new insights (Pedler, Burgoyne and Boydell 1991).

Empowerment of employees is claimed to be a necessary component of the learning organization. In a similar vein, Greenwood (1995) maintains that ongoing

learning and development is a quality essential to the empowered organization. Employees released from conventional constraints require support and training; this may be highly specialised, taking place over a long period, or may involve short term on-the-job learning. The relationship between empowerment and the learning organization is clear; without empowerment, individual members in an organization have neither the opportunity nor the motivation for individual learning which may, in turn, lead to organizational learning. Staff at all levels need to be in a position to contribute ideas and opinions without fear of ridicule or retribution and individuals must be committed to improving their own and others' performance; this commitment can only be derived from a shared sense of responsibility and a clear understanding of organizational goals (Brown and Brown, 1994).

The learning organization is not just a workplace where a lot of people are acquiring knowledge, it is a place where a climate has been created which facilitates learning and personal development for all its staff and uses the sum of shared experiences and insight derived from these to constantly transform itself. Three types of learning are said to take place within a learning organization; these are normally referred to as single loop learning (Argyris and Schön 1978), double loop learning (ibid.) and deutero learning, a term coined by Bateson (1973). Single or primary loop learning occurs in the everyday running of organizations, where the individual responds to changes in the internal and external environment by detecting errors and correcting them, modifying strategies and assumptions within consistent organizational norms to improve effectiveness. Within this type of learning, conflict is avoided and not discussed, while mistakes or failures are glossed over or suppressed. Thus there is no analysis of learning processes which have led to either successful or unsuccessful outcomes.

Double or secondary loop learning, on the other hand, emphasises the confrontation of assumptions and brings threatening issues out into the open. It is because accepted values are challenged and errors analysed that conventional solutions are able to be reframed and new responses invented. Mistakes are percieved as learning opportunities rather than threats to the system. Deutero, or second order learning is concerned with learning how to learn, using analysis of previous contexts for learning. Individuals discover which types of behaviour facilitated or inhibited learning, why certain situations led to successful learning and how this knowledge can be exploited to provide new learning strategies.

The first type of learning occurs naturally in most organizations; it is double loop and deutero learning which need to be facilitated so that the organization can move ahead rapidly and keep pace with its environment (Leigh and Maynard 1993). The significant

factor in the development of a creative organization appears to be the existence of a learning climate where new approaches and different ideas are experimented with as a matter of course. The potential of any organization consists of the knowledge, skills and experience of all its members. But this potential can only be realised where the atmosphere is receptive to suggestions and new ideas from employees, regardless of their position within the organization. Differences of opinion will inevitably occur, but these can in turn be used to develop further creative solutions. The risk of making mistakes is inherent in the sanctioning of this type of approach but, as we have already said, clear specification of boundaries and the creation of safeguards can minimize damage to the organization. The benefits of a risk-taking culture should outweigh any drawbacks, for without the opportunity to try out creative approaches and make errors the context for valuable learning is not present.

Leadership.

Both learning and greater employee empowerment are dependent to a great extent on strong and respected leadership. Empowerment does not mean handing over control, but altering the way in which control is exercised. Managers do not relinquish the responsibility to lead, they retain overall direction and understanding while sharing power with their staff. Leadership in an empowered organization is a more subtle method of management appropriate to complex, flexible organizations and a constantly changing environment. The old type of 'direct and control' leadership is replaced by one of two styles of management in an empowered structure. In the first approach the manager acts as a facilitator, on the basis of his/her greater awareness of the external environment. Management recognises the benefit of employee participation, probably as a result of improvements implemented following staff discussions or quality circles, and understands the importance of listening to employees' views and providing positiive reinforcement upon completion of objectives (Burdett 1991). This leadership style could be described as management-centred problem solving; the manager describes a problem and requests ideas for a solution; there is participaton on the part of workers, but not true empowerment.

The second approach goes one step further and shifts the responsibility for problem solving completely on to the work team, the manager acting as coach, providing support and advice where required. Here the employees have a wider understanding of the external market and an interest in organizational competitiveness, perhaps stimulated by some form of performance-based incentive scheme. The work group has been given the authority to make decisions and deal with problems without referring to management,

though supervisors are kept informed of initiatives taken and consulted where appropriate.

Leaders still have a significant part to play in an empowered situation; although power is shared with employees, management's power base is not eroded; there is not a finite amount of power in any one organization (Burdett op. cit.). The transition from management control to employee empowerment cannot take place without drive from the top and the establishment, by management, of a culture which reinforces values and expectations suitable to an organization where power is shared. This may mean the removal of elitist privileges or the redistribution of information formerly exclusive to a small group of managers. A number of writers (Burdett 1991, Plunkett and Fournier 1991) suggest that obvious demonstrations of desired types of behaviour can greatly assist the process of empowerment and cultural change generally. In a traditional structure, the supervisor relies largely on the authority that is inherent in his role and requires his staff to carry out tasks under his/her direction often without really needing to think. In the 1990s, managers are coming to realise that their employees' ability to think is probably their company's most valuable asset. In order to utilise this asset management needs to establish a relationship based on trust and respect which has to be built up with the workforce.

Brown and Brown (1994) list four specific roles of management in an empowered situation; firstly managers must make available to every employee all relevant information, both positive and negative. Secondly, they must permit staff to carry out their work without checking up on them, as refusal to relinquish control will quickly erode any trust between employees and managers. Thirdly however, managers need to remain accountable to workteams and to be available to provide coaching when required. The fourth role specified is the responsibility of leaders for setting the highest standards so that workers can emulate them. Two further roles could perhaps be added to this list; the need for managers to voice their expectations of staff, not only expectations of quality, but also of performance, behaviour or meeting targets. Finally, we have already noted that the boundaries within which it is acceptable to operate must be clearly specified. Leppitt (1993) contends that the key to successful empowerment of employees is the acceptance by management of responsibility for the establishment of an apposite organizational culture and for the behaviour and performance of their staff. Perhaps the most significant quality leaders need to possess, however, is insight. Much of the learning which occurs in any organization is unplanned and intuitive. Without leaders who can interpret *a priori* newly acquired knowledge this learning cannot be shared and developed throughout the organization.

Models of Participation and Empowerment.

Where empowerment has been successfully implemented, the workforce participates, either directly or indirectly, in operational decisions relevant to the activities of each particular group. Pheysey (1993) proposes three types of participation; strong and weak direct participation, and indirect participation.The strong form of direct participation exists where those employees who implement a decision are also involved in making thaat decision. Small autonomous workgroups take part in operational decisions appropriate to their work. Direct participation in its weaker form occurs where management consults employees and takes into account their views and experience, using these to make an informed decision. Yet many British companies still employ only indirect participation, relying on elected representatives to voice the feelings of the workforce on councils or committees.

But a number of writers suggest that empowerment goes much further than participation (Pickard 1993, Blundell 1994). Whilst participation is concerned with joint decision making and consultation with employees, empowerment means that the decisions are actually taken by individuals or teams endowed with the appropriate authority, without referring to management. Pickard (op. cit.) maintains that empowerment is much more than an involvement, rather it is a 'state of mind and a way of working'. She underlines the need for management to relinquish authority, stating that empowered workers cannot operate effectively and creatively within a rigid framework, instead they need flexibility and autonomy. In a truly empowered climate the benefits of this way of working should become clear; a sense of pride and ownership, continuous improvement and creative teamworking. Carr (1994) argues that autonomy should be valued *per se* because it helps to develop the true potential of individual employees, enabling them to experiment and innovate and thus feel more fulfilled.

Three models of empowerment are proposed which demonstrate the progression beyond participation. The first of these may be termed **consultative involvement** and is related to Pheysey's weaker type of direct participation (Pheysey 1993). In this model, employees are enabled to offer suggestions and ideas and express opinions through procedures such as group meetings and quality circles. Although staff are only empowered to make recommendations, there is a tacit agreement on the part of management that views will be listened to and proposals given due consideration. In the second model, which will be referred to as **total task involvement**, there is a bigger shift away from traditional management direction to a system where groups of employees are responsible for offering a complete service or manufacturing a whole product. Employees become multi-functional and thus develop a wider range of skills, thereby

enriching their jobs and obtaining greater intrinsic satisfaction. In most organizations, total task involvement is best achieved by the use of work teams. This model of empowerment, although it provides greater satisfaction and autonomy to workers, still does not include them in high level strategic decision making affecting organizational structure or reward systems. The third model of empowerment, **strategic involvement**, enables employees at all levels to influence the direction and performance of the organization, as well as making decisions relevant to their own work activities. Information on business outcomes is shared and staff learn teamwork skills and participate in management decisions, business operations and probably in profit sharing.

A Contingency Approach.

These approaches to empowerment are not the only possible alternatives for management practices today, though. A contingency approach has also been suggested which assesses the importance attached to five factors; business strategy, technology, customer relationships, business environment and employee needs (Bowen and Lawler 1992). On the basis of this assessment either an empowerment type of programme or a production line approach is decided upon. The critical factor is the fit between the organizational situation and the approach used; it is better to achieve a good fit rather than to opt for empowerment regardless of the business environment, just because it is the 'in thing'. The concept of 'excellent employees', for example, becomes problematic when applied to certain service organizations, particularly in health care, due to the professional boundaries inherent in many roles and a strong established culture which reinforces the vertical structure (Edmonstone and Havergal 1993). Although many service organizations may be ideally suited to applying tried and tested empowerment techniques, each organization needs to determine whether an empowerment approach would fit their individual circumstances.

Political Considerations.

Empowerment of employees must necessarily involve political factors to a certain degree; individuals operating in strategic decision making will inevitably bring their own objectives, allegiances and affiliations to bear on the outcomes (Chell 1985). The diversity of individual views, however, can only enhance the process of formulating decisions and policies, in that the *status quo* will be constantly challenged and the organizational image modified accordingly. A lack of diverse opinions and beliefs is actually a barrier to innovation, yet many organizations view difference as a threat and either assimilate and standardise diversity or isolate individuals with controversial ideas

so that they shall not pollute the main body of employee opinion (Herriot and Pemberton 1995).

Motivation and Empowerment.

Motivation is undoubtedly a significant factor in the success or otherwise of empowerment programmes; this can in part be inspired by the corporate vision and effective leadership. Individuals are motivated by the successful achievement of objectives, but also by personal commitment to a particular project or organizational aim. When employees become involved in an intensive effort, either as individuals or teams, to strive for creative success, then enhanced performance begins to take place. Yet management needs to recognise that high levels of performance cannot happen continuously (Leigh and Maynard 1993). Some experiments will lead to unsuccessful outcomes and people will need time to learn from such situations and formulate new solutions. High achievers inevitably experience ups and downs; there may be periods when productivity is lower. High performance teams may need to release pressure at times by having fun, perhaps in the workplace as well as outside it. These periods of lower performance or apparent time wasting will be more than compensated for by the extremes of superior performance and enhanced productivity at other times.

There are a number of theories of motivation relevant to empowerment. The first of these claims that greater involvement of employees is brought about by meeting the needs of individuals. These might include wishes for job security, social acceptance and approbation, the need for recognition of achievement or the chance to develop career potential. Reinforcement theories of motivation, on the other hand, maintain that the individual may respond to a given situation in a number of ways. Some of these lead to success and are praised or rewarded; positive reinforcement then acts as motivation to repeat the successful type of behaviour. However, these types of activities have mostly been studied in laboratory experiments or in institutions, there is little empirical evidence to support reinforcement theory. Expectancy theory was developed by Vroom (1964) as an alternative approach and modified by Porter and Lawler (1968). It comprises three elements; instrumentality; that successful performance will lead to desired outcomes, expectancy; that degree of effort will affect the level of performance and valence; the value people put on outcomes.

Teamworking.

The usual means of implementing an empowerment programme is by the development of work teams, each responsible for the completion of a product or the

delivery of a service and with the appropriate authority to make decisions and solve problems relevant to its own work. The distinguishing characteristic of a team is that the first priority of its members is achievement of shared goals, regardless of individual specialised skills or personal objectives. In addition, participants in a team communicate openly, collaborate constantly and support each other (Ripley and Ripley 1992). The benefits of teamworking are widely documented and include improved information flows, more efficient use of resources and skills, more effective decisions, increased commitment on the part of employees and, ultimately, enhanced performance. However, the establishment of effective teams takes time and it makes sense for aims, roles, processes and possibly relationships to be clarified at the outset. Another problem may be the lack of attention or reward for the individual employee in an empowered situation. Individuals who were previously known as experts in their field may feel less valued as members of a team. One way of resolving this situation is the development of new consultative roles within the organization (Plunkett and Fournier 1991).

There are a number of types of teams, which may be either permanent or temporary and which relate to differing levels of empowerment within organizations. Groups such as quality circles may come together only temporarily to seek methods of promoting productivity and quality while task forces, another usually non-permanent kind of team, are formed to approach problematic issues which cross functional lines in the company. Integrated work teams are multi-skilled and tend to work together on a more permanent basis, focusing on one particular product or service for which they are responsible (Plunkett and Fournier 1991). This type of team is also known as a case team and is frequently used to mediate between the customer and a complex organization; case teams are used in B.T., for example. The case team approach incorporates the ability to design individually tailored services to suit specific customers and works in an empowered way, though teams are not self-managing. Further down the road to empowerment, high performance or self directed teams are also functionally based, but assume many responsibilities previously undertaken by management, such as controlling budgets, timetabling workprojects or annual leave and performance management. Even recruitment and dismissal may be incorporated in the remit of these self directed teams, though few companies have attained this degree of empowerment to date (Holpp 1995).

Meredith Belbin has done a great deal of work on the roles of individuals within teams and has identified eight key personality types present in most organizations. He has suggested that the failure of ineffective teams can often be attributed to poor combinations of role types. Star teams usually contain a spread of mental abilities and a range of team roles (Belbin 1981). Other writers also contend that the strength of a team lies in its diversity, arguing that a variety in the knowledge frameworks of individual

employees is the chief potential source of innovation in any organization. Many workplaces have traditionally striven for homogeneity and encouraged uniformity of thinking among their staff and have disregarded any suggestion of recognising and catering for individual differences. But organizations now developing an empowerment approach are beginning to understand that diversity is a benefit, rather than something to be stifled, and as such should be valued for the different perspectives it introduces in any situation (Herriot and Pemberton 1995). Variety in backgrounds, ideas and experience is beginning to be seen as a useful asset which has been underexploited in most organizations until now.

A New Model of Teamworking.

Despite the increasing use of small teams in U.K. organizations since the late 1980s, improvements have been slow to materialise (Coulson-Thomas and Coe 1991). A new model of teamworking is proposed which incorporates a spread of team roles and elements of the internal environment, organizational processes and outcomes to enhance performance.

The organizational context, i.e. the climate within the organization and the wider business environment, sets the tasks with which the team must deal. The nature of the tasks then determines which processes are used to deal with these tasks. But the organizational context also influences the types of work processes employed. Similarly, certain aspects of the processes may affect the context; for example the influence of team members on both external and internal customers. People's roles are also instrumental in aiding the work processes and thus in completing tasks. Finally, each of these four components will, of course, have an impact on the outcomes, and it is by the outcomes that the performance of the organization is judged (Herriot and Pemberton, op.cit.).

It follows then that the first condition which must be satisfied for this new model of working to be put into place is the organizational context. This is dictated largely by external factors, such as the general economic climate and technological developments, but the corporate culture is also significant. The culture of the organization must set appropriate values, goals and standards for teamworking. These will determine factors such as the degree of co-operation available from others, the resources allocated, the extent of authority granted to the team and the tightness of deadlines.

High performance.

So what exactly constitutes superior performance and how can it be achieved? It has been variously suggested that high performance is the outcome of visionary leadership, clearly specified organizational goals or creative direction of teams (Leigh and Maynard 1993). These are all undoubtedly significsnt factors, but this paper posits that ssuccessful teams are those where a great deal of attention has been paid to the people that comprise them; their personal objectives, relationships with other team members, their degree of commitment and their self esteem. Many teams are actually capable of excellent performance, but need to be personally motivated to invest effort, enthusiasm and creative input in their work. Individuals may be inspired by one or more of several factors to involve themselves wholeheartedly in their work; in some cases outstanding charismatic leadership or extreme job satisfaction may provide the inspiration. In other instances, financial incentives such as profit sharing, or the offer of a particularly challenging opportunity may effect the required motivation.

Innovation may also act as an inducement to increase personal commitment, the development of a new product or a novel way of working often seems more attractive than those already in existence. Once established, the cycle of motivation shoud be self perpetuating; increased personal investment leads to greater job satisfaction, which in turn acts as motivation for further personal involvement (Leigh and Maynard op.cit.). Increased personal investment in the job naturally leads to the acceptance of greater responsibility by employees. It should be remembered though, that this may be a major change for many of them. It follows then, that the fostering of motivation needs to take place parallel to the empowering of staff by management.

This Project.

The University of Plymouth is working with two organizations in the South West on a project which is attempting to apply the principles of empowerment and the learning organization to the management of change.The first of these organizations is an engineering company with links with the defence industry, where major changes have been implemented over the past three years, embodying much of the theory contained in this paper. A large scale survey is currently being undertaken, to establish to what extent empowerment has been effective in this company, from the point of view of its employees, and what type of learning takes place regularly throughout the organization. From the findings of this survey we hope to establish an inventory of the characteristics of a learning organization, and to determine whether these factors are generalised and can be applied to all types of organization seeking to put these methods of working in place.

It may prove that some of the principles identified here are specfic to one organization or type of organization.

The second organization is the Public Health Laboratory Service, which is just embarking on a programme of reorganization. P.H. Laboratories will be grouped in regions, in order to respond more appropriately to their external environment, which is demanding quicker response, improved communications and quality controls, in line with other changes taking place in the National Health Service. The study is intending to examine specifically the processes which will lead to standardisation of testing methods, labelling, documentation and quality throughout the South West region, and the learning and employee involvement taking place during these processes. A series of preliminary interviews in various locations beginning in October 1995 will assess current staff attitudes and the degree of commitment to the proposed changes.

It is also hoped to identify potential barriers to successful implementation and to suggest methods of encouraging greater employee involvement in decision making and the adoption of new standard procedures. The project aims to produce a series of reports at various stages of the reorganization which will provide an input to the change process itself. Recommendations will be made as to what degree of employee empowerment can realistically be incorporated into the reorganization, to provide a suitable fit with the internal and external environment of the P.H.L.S. The findings are expected to provide empirical evidence of the benefits and the difficulties encountered in applying principles of empowerment, shared information, learning opportunities and involvement of employees at all levels. This is, of course, an organization traditionally run on bureaucratic lines, with a deeply entrenched culture and one where perceptions of professional boundaries may, in all probability conflict with management's goals for the future.

Summary and Conclusion.

So it can be seen that empowerment is not just this year's buzzword, the latest in a line of fashionable management gimmicks, but rather that it is a logical development of a process that has been gradually evolving throughout the late 1980s and the 1990s. It has begun to be recognised that conventional style, vertically aligned structures are not, in many cases, appropriate for meeting the needs of the business world of today. As a result of widespread recessions and changes in the external environment, all types of organizations have been forced to cut costs drastically, in many cases by reducing their manpower, and at the same time have had to increase the speed of response and improve quality.

Today's companies attempt to achieve a competitive edge by producing goods or services which not only satisfy customer requirements to the full, but also anticipate future customer needs and, in some cases invent new markets. The emphasis on value for money, quality and innovation inherent in these processes involves new and different demands on the workforce. It is no longer sufficient for companies to repeat tried and tested solutions to problems, or to merely turn out slightly updated products or services in response to situations. A workforce is needed which can adapt rapidly to whatever changes take place in the external environment, can design tailormade responses to exceptional circumstances if necessary, and above all can learn from a variety of outcomes and use this learning to improve future outcomes.

There are a number of management programmes which attempt to address some of these demands, empowerment of employees is one solution which can go some way towards increasing staff motivation, improving job satisfaction and thus enhance performance. Managers are not being asked to relinquish overall control or the responsibility to lead, but rather to share some of the power with their workers. This should help with the burden of management duties exacerbated by the removal of numbers of mid-level managers in many companies, and indeed has developed partly in response to just this problem.

But more than merely helping to spread the workload, empowerment should, in the long term, provide much greater benefits to both employees and the organization. After an initial period of adjustment and suitable training, most workers enjoy the added responsibility of participating in decision making, particularly when they can see how those decisions affect the work they are engaged in. Moreover, where staff feel their opinions and ideas are valued, they will be more likely to offer constructive suggestions which may prove valuable to the organization. The logical development of workteams, imbued with suitable authority and a degree of self management, provides the opportunity for employees to invest personal effort and commitment in their work and produce truly creative outcomes.

It is these creative solutions which have most influence on organizational performance, for other developments frequently follow on from one totally new idea, and it is by new outcomes or different ways of achieving these outcomes that companies gain advantage over their competitors. Star performance is not normally achieved by merely increasing the speed of production or delivering a service faster, but by discovering novel methods of addressing problems. The key to high performance lies in the creative capabilities of the workteams.

The manager's job is thus to create the right kind of conditions in which teams can function effectively and creatively, rather than to oversee every task they undertake. Employees need training in how to work in teams and make decisions without consulting management, but managers also need training in how to retain overall control, but allow workers to solve their own problems, and even possibly make mistakes, without interfering. The advantages of empowerment may not be felt for some time and initial costs may be perceived as expensive, but it should soon become evident that employees enjoy having control over their work. Other benefits will follow on from this. It should be clear that empowerment at its best can exploit employee expertise to the full, using existing knowledge and tacit skills to improve individual performance and ultimately the performance of the organization itself.

References.

Argyris, C. and Schön, D.A. 1978. *Organizational Learning.* Addison-Wesley, Reading, MA.

Bateson, G. 1973. *Steps to an Ecology of Mind.* Ballantine, New York.

Belbin, R.M. 1981. *Management teams: Why they Succeed or Fail.* Heinemann, London.

Blundell, Brian. 1994. 'Empowerment in Organizations: a Critical Review', *Management Bibliographies and Reviews,* Vol.20, no.5, pp2-10.

Bowen, David and Lawler, Edward E. 1992. 'The Empowerment of Service Workers: what, Why, How and when', *Sloan Management Review,* Spring, Vol.33, No.3, pp31-39.

Brown,Rob. and Brown, Margaret. 1994. *Empowered! A Practical guide to leadership in the Liberated Organization.* Nicholas Brealey, London.

Burdett, John O. 1991. 'What is Empowerment Anyway?' *Journal of European Industrial Training,* Vol.15, No.6, pp 23-30.

Carr, C. 1994. 'Empowered Organizations, Empowering Leaders', *Training and Development,* March, Vol.48, No.3, pp39-44.

Chell, Elizabeth. 1985. *Participation and Organization: a Social Psychological Approach.* MacMillan Press, London.

Coulson-Thomas, C. and Coe, T. 1991. *The Flat Organization: Philosophy and Practice.* British Institute of Management, Corby.

Develin and Partners, 1994. *Empowerment: You Can't Give It, People Have to Want It.* Develin and Partners Information Booklet, London.

Edmonstone, J. and Havergal, M. 1993. 'Empowerment: Holy Grail or a Blinding Case of the Obvious?' *Health Manpower Management,* Vol.19, No.2, pp22-28.

Greenwood, Mark. 1995. 'Managing the Transition from a Training to a Learning Organization', I.B.C. Conference; *Moving from Control to Coaching,* March, London.

Gubman, E. 1995. 'People are More Valuable than Ever', *Compensation and Benefits Review,* Vol.27, No.1, pp7-14.

Herriot, Peter and Pemberton, Carole. 1995. *Competitive Advantage Through Diversity: Organizational Learning from Difference.* Sage, London.

Holpp,L. 1995. "If Empowerment is So Good, Why does it Hurt? *Training,* Vol.32, No.3, pp52-57.

Leigh, Andrew and Maynard, Michael. 1993. *Ace Teams: Creating Star Performance in Business.* Butterworth-Heinemann Ltd., Oxford.

Leppitt, Nigel. 1993. 'The Path to Successful Empowerment', *Engineering Management Journal,* Dec., No.14, pp271-277.

Marsick, Victoria J.. 1994. 'Trends in Managerial Reinvention: Creating a Learning Map', *Management Learning,* Vol.25, No.1, pp11-33.

Pedler, Mike, Burgoyne, John and Boydell, Tom. 1991. *The Learning Company: a Strategy for Sustainable Development.* McGraw-Hill, Maidenhead.

Pickard, J. 1993. 'The Real Meaning of Empowerment', *Personnel Management,* Nov., Vol.25, No.11, pp28-33.

Plunkett, Lorne C. and Fournier Robert. 1991. *Participative Management; Implementing Empowerment.* John Wiley & Sons Inc., USA.

Porter, L.w. and Lawler, E.E. 1968. *Managerial Attitudes and Performance.* Irwin-Dorsey, Homewood, Illinois.

Pheysey, Diana C. 1993. *Organizational Cultures: Types and Transformations.* Routledge, London.

Ripley, Robert E. and Ripley, Marie J. 1992. 'Empowerment, the Cornerstone of Quality: Empowering Management in Innovative Organizations in the 1990s', *Management Decision,* Vol. 30, No.4, pp20-43.

Vroom, V. 1964. *Work and Motivation.* John Wiley & Sons, New York.

West, Penny. 1994. 'The Learning Organization: Losing the Luggage in Transit? *Journal of European Industrial Training,* Vol.18, No.11, pp30-38.

Zemke, Ron, and Schaaf, Dick.1989. *The Service Edge: 101 Companies that Benefit from Customer Care.* New American Library, New York.

Penny Gardiner   University of Plymouth 1995

The Case for Employee Empowerment as a Means of Enhancing Organisational Performance

Penny Gardiner

The potential for increasing organisational performance by empowering employees at all levels of the workforce and providing opportunities for participation and learning is now being recognised by many organisations. Empowerment is normally instigated by management as part of a necessary organisational change. It attempts to allow individual employees to contribute to the process of making decisions relevant to their own work and is normally a part solution to the flattening of organisational structures; where middle management layers are removed, the responsibility for decision making and problem solving must be shifted.

This paper discusses the empowerment of individuals in organisations today and how participation of employees within these organisations can be accomplished. It also describes a project which hopes to introduce employee participation in a change process in a hierarchical service organisation.

Firstly, a definition of empowerment is suggested, as distinct from the degree of power which all individuals in organisations possess naturally. A consideration of the advantages and disadvantages of the empowerment approach then follows, together with an examination of its general context within the organisation. The difficulties inherent in moving towards empowerment often stem from long established supervisory roles which relied on direction and control by management. The offer of greater power to individual workers is not always welcome, especially in older organisations with a traditional hierarchical structure. Resistance may be generated in groups of employees fearful for their job security or worried about the possibility of failure. The paper will look at ways of overcoming resistance, such as establishing a firm basis of trust between management and staff, inspiring motivation among workers and supplying safeguards to allow for experimental solutions to be tried out.

The second section of the paper outlines the role of learning in an empowered organisation and discusses the association between organisational learning and empowerment. A great deal of management interest is currently focused on the learning organisation. It is posited that in order for organisations to cope successfully over long periods of time with a turbulent environment, it is necessary for learning to occur regularly throughout the system. Learning needs to take place alongside normal working and is the outcome of creative problem solving and experimental methods of working. Three types of learning are specified, together with the means of encouraging their development among the workforce, and their relevance to organisational performance.

Both learning and greater employee empowerment are dependent to a great extent on strong and respected leadership. The third part of this paper looks at the role of managers in an organisation where power is devolved and shared by the workforce. Two types of relevant leadership are considered; the first where the manager acts as facilitator, outlining a problem and encouraging staff to suggest solutions; the second where the supervisor acts only as coach, the workteam dealing directly with the problem. Managers have a significant part to play in the development of a participative organisation, clearly specifying the aims and values of the organisation as a whole, and clarifying the responsibility assigned to an individual or team.

Where empowerment takes place successfully the workforce participates, directly or indirectly, in operational decisions appropriate to the activities of each particular group. The next section of the paper offers a definition of participation and discusses three types of participation relevant to UK organisations. Links are suggested with political factors and there is undoubtedly an influence of politics on the outcome of decisions. The effectiveness of participation however, regardless of the reasons for its implementation, depends on factors such as the skill, knowledge and expertise of workers, the type of work involved and the

competence of its leadership. Motivation is also a factor in the success or otherwise of the participative approach. Individual members of an organisation have needs which can be met by greater involvement in their workplace; needs such as social acceptance, appreciation and reward and the opportunity to develop their potential. Alternatively, motivation may be provided by positive reinforcement; the rewarding of successful outcomes leading to their repetition in similar circumstances. Expectancy theory is also considered as an approach to motivation.

The usual means of implementing a participative style of management is the development of small teams, which are appropriately empowered to take part in decision making and problem solving relevant to their own work. The paper looks at various types of teams and the ways in which they might be useful. The roles of individuals within teams are discussed and the value of diversity among team members is emphasised. Many organisations have traditionally encouraged homogeneity and uniformity of thinking among their employees. It is now contended that the organisation of today needs to be capable of responding to individual differences, and that variety in backgrounds, ideas and experience is in fact a valuable asset which has been under exploited in most organisations to date. A model of teamworking is proposed, which incorporates elements of the internal environment and organisational processes and also a diverse blend of team roles.

Despite the increasing use of small teams in UK organisations in the late 1980s and 90s improvements in performance have been slow to materialise. The paper will examine what comprises superior performance and how this can be achieved. It has been variously suggested that it is the outcome of visionary leadership, clearly specified organisational goals or creative direction of teams. These are undoubtedly factors in the enhancement of performance, but this paper posits that successful teams are ones where a great deal of attention has been paid to people; their personal objectives, relationships degree of commitment and self-esteem. Many teams are capable of superior performance but need to be personally motivated to invest effort, enthusiasm and creative input in their work. Factors which may influence the degree of this investment will be discussed, together with the implications of high personal involvement in the job.

The University of Plymouth is working with the Public Health Laboratory Service in the South West on a project which applies the principles of empowerment and participation to the management of change. Public Health Laboratories are currently undergoing reorganisation in response to the external environment, which is demanding quicker response, improved communications and quality controls in line with other changes in the Health Service. The project is looking specifically at standardisation of methodology, cost and quality, and regrading and skill mix. A series of preliminary interviews throughout the S.W. beginning in June 1995 will assess current staff attitudes and commitment to the proposed changes and suggest methods of encouraging greater employee involvement in decision making and the adoption of new standard procedures. The aim of the project is to provide a series of reports before and during various stages of the reorganisation, which will provide an input to the change process itself. Recommendations will be made as to how greater employee empowerment can be incorporated in the changes and how the transition period may be smoothed. The study is expected to provide empirical evidence of the advantages and disadvantages of worker participation in a hitherto bureaucratic organisation, and the problems which may be encountered in the implementation of greater employee empowerment.

Success factors in learning organizations: an empirical study

Penny Gardiner and Peter Whiting

The authors

Penny Gardiner is a Researcher at the University of Plymouth Business School, Plymouth, UK and Peter Whiting is Manufacturing Director at British United Shoe Machinery, Leicester, UK.

Abstract

The learning organization may be the key to future success for organizations. There is no blueprint for success, but companies need to recognize and utilize the experience and expertise of their employees. In return, they must provide appropriate rewards and generate an environment of mutual trust and openness. A significant factor in this is the sharing of information.

Attempts to assess learning organization characteristics in an engineering company using a specially developed questionnaire. Presents findings using eight conceptual groups. The company could not claim to have become a learning organization, though it had moved in this direction. Empowerment and employees' self-development were the areas where the company had developed most. Progress appeared to have been impeded by lack of change in other departments and by failure to share information throughout the company. This, in turn, had precluded the growth of trust between management and other employees.

Introduction

The high level of current interest in the learning organization indicates that many people now believe learning to be the key to the way forward for organizations. In today's rapidly changing business environment, the ability of the organization to adapt is considered to be the main factor in its survival and competitive success (West, 1994). Yet, adaptation to current problems and change is unlikely to prove sufficient; it is now suggested that companies need to develop proactive strategies so that future trends and environmental conditions can be predicted and continuous modifications made (Senge, 1990a). Contemporary literature exhorts the manager to practise new ways of thinking which place learning at the centre of the organization and encourage employees to develop their potential (Ezzamel, Lilley and Willmott, 1994).

It is beginning to be recognized that there is no general prescription for success today, but that the factor which many thriving companies have in common seems to be the degree to which they are capable of exploiting the skills and experience of their workforce (Edmonstone and Havergal, 1993). If the expertise of employees is to be fully utilized for the good of the company, though, there must be some sort of reciprocal agreement by which employees are rewarded for their efforts. Since the beginning of the 1980s, conventional employment agreements between organizations and their staff, which implied that hard work and loyalty to the company would ensure a good wage and job security, have disintegrated (Cashman and Feldman, 1995). It is no longer possible for organizations to guarantee jobs for life or even promotion prospects. Instead, an exchange of contributions is being founded, whereby the company values and rewards high-quality work by employees and helps them, in turn, to achieve their personal and career aims. The disadvantage of this type of agreement, however, is that it relies largely on the ability of employees to recognize and develop their potential, and at the same time make their own needs known.

Over the last decade and a half, companies have begun to recognize that traditional management systems have tended to stifle creative development and reduce employee motivation and self-esteem, by offering rewards only where outcomes matched expectations and

staff behaved in ways specifically designed to
gain management approval (Deming, 1986).
This precluded any possibility of discovering
creative new solutions or different methods of
working. The way in which many workplaces
were structured encouraged the assimilation
of behaviour and practices deeply embedded
in past experience and reinforced resistance to
change (Honey, 1991). A number of writers
have suggested a need to unlearn some of the
practices which worked well in the past but
which have now outlived their usefulness, and
to replace them with apposite new solutions
(McGill and Slocum, 1993). The new focus
on attributes such as creativity and risk-taking
means that authoritarian management styles
which insist on compliance and enforcement
of rules are now considered inappropriate.
Managers may now need to change the very
behaviour by which they attained their posi-
tion in the company (Burdett, 1991; Leigh
and Maynard, 1993).

Gubman (1995, p. 9) claims that the ideal
employment relationship today is one of
"mutual interdependence", the vital ingredi-
ents of which are trust, honesty and openness.
Managers in today's lean and empowered
organizations are asking a great deal of their
employees on the front line; the key to the
future success of the organization is the
degree to which they are willing to trust those
employees (Peters, 1995). The establishment
of a new relationship between members of the
organization at all levels – a relationship based
on trust – is an issue that is becoming increas-
ingly important to organizations (Handy,
1995). However, this cannot take place with-
out modifications to the expectations of both
employees and managers. Trust is a two-way
process incorporating both trustworthiness
and trust-responsiveness and although initiat-
ing the relationship contains an element of
risk, it is a self-reinforcing quality which tends
to grow with use (Pettit, 1995). Employees
need to trust management before they will
experiment with new ideas or perform at a
high level for the benefit of the organization,
and managers must have faith in their
employees to allow them the licence to make
decisions, take risks and work creatively. It has
been demonstrated that job satisfaction owes
more to the level of trust present in an organi-
zation than to background, experience or the
extent of participation (Driscoll, 1973).

Perhaps central to the growth of trust is the
way in which information is used in the com-
pany. Miller Hosley, Lau, Levy and Tan
(1994, p. 10) term communication "the vital
link". The sharing of information and knowl-
edge across the organization is advocated
(Iles, 1994); if these are shared in an effective
manner rapid, appropriate action should
result (Leitch, Harrison, Burgoyne and
Blantern, 1996). Information and its commu-
nication may be the most significant factor in
the success of learning organization imple-
mentation. Members of these companies need
to trust each other, but, to do so, they need
immediate and open access to information.
Only in this way can a true learning culture be
created (West, 1994). Drucker (1989) sup-
ports this view, claiming that information is
the element of organizations most capable of
development.

The principles of the learning organization
are rarely put into effect gradually. Frequent-
ly, the process is part of a major programme of
change, instigated as a result of some form of
environmental crisis and usually involving
restructuring and redundancies. The most
effective means of persuading the workforce
of the worth of learning and inducing com-
mitment to company values is through the
creation of a climate of trust. Yet, paradoxical-
ly, engendering such feelings in employees
whose job security is threatened may be one of
the most difficult tasks the organization has to
face.

Measuring the learning organization

Like many of the qualities associated with the
learning organization, the presence of a cli-
mate of trust is difficult to assess. However, if
we are to consider feedback as a vital part of
the information-sharing process then it is
essential that progress is evaluated. But if, as
Burdett (1993) posits, the learning organiza-
tion is a journey rather than a destination,
then measurement of this process is in danger
of becoming confused and overcomplex. In
some early studies of learning companies
Pedler, Burgoyne and Boydell (1988) demon-
strated examples of activities and styles of
behaviour which indicated that companies
had moved some way towards becoming
learning organizations without perhaps having
achieved complete learning company status
(Leitch et al., 1996).

Although a number of UK firms, (e.g.
Courage (Greenwood, 1995) and Coopers
and Lybrand (Fojt, 1995) have claimed to

"be" learning companies, the criteria for measurement of this state are nebulous and variable. Few specific tools exist and many of the claims to learning organization status, whilst they may be valid, appear to be based more on management's assessment than on any empirical evidence from the workforce. In this context, a diagnostic instrument was developed with the aim of measuring the level of change and the degree to which companies have moved towards becoming learning organizations.

Research site

The site chosen for the research was a large, defence-oriented engineering company in the south-west, which has undergone considerable change during recent years. This company was formerly run on very traditional lines and, until the late 1980s, its markets had been relatively stable. Recent insecurity can be attributed to changes in the external environment. Until that time there had been little competitive pressure, little exposure to outside ideas and no real necessity for learning. The characteristics of the existing culture were as follows:-

- The organization was hierarchical, with up to six levels of management.
- Managers had little time to consider direction and future strategy.
- Communications were inefficient; there was no overall system.
- Information was seen to be the prerogative of management.
- Many employees were highly skilled and only performed one type of specialized task.
- Decisions were top down, there was no discussion and no consensus.

At the end of the 1980s, it became clear that major changes were needed for the company to survive. It was decided to implement changes in one group of the company first. Before the reorganization took place, this group had been shown to be one of the poorest performing sections of the company; costs were high, deliveries were constantly behind schedule and many employees were trained to perform only one type of job. In 1992, a new manager was appointed to this group from outside to effect major improvements.

The way in which the group was reorganized incorporated many of the principles of learning organization theory. The emphasis was on a shared vision for the future and departmental goals towards which everyone would work. People with highly specialized expertise were encouraged to learn a wider range of skills and become multifunctional, so that when there was no call for their particular specialization they could be redeployed elsewhere. Shopfloor workers were organized in teams and given the authority to carry out work without direct supervision. Individuals and teams were empowered and encouraged to show initiative. Experimentation was promoted and people were permitted to try out new ways of working, with the implicit understanding that mistakes would not be penalized; instead, errors would be viewed as opportunities for learning. Inevitably, many employees and managers in the group proved resistant to change. This resistance was tackled in a number of ways.

The programme of change began in October 1992. Three years on, in November 1995, we attempted to assess the impact of the reorganization and the level to which the group had become a learning organization.

Research methods

The research was carried out through interviews with individual managers followed by a large scale questionnaire survey, which was distributed to all employees in this group of the company below the level of group managers. This approach was taken due to the large numbers of employees involved and the need to target as many of these as possible, and also because of managers' wishes regarding access.

The questionnaire comprised 70 items, with possible responses using a five-point Likert scale ranging from strongly agree to strongly disagree. This type of format was chosen, first, to minimize the time required to complete the survey and, second, to facilitate coding. For the purposes of the survey, questions were divided up into eight sections which were a composite of those identified from the literature (most especially Pedler, Burgoyne and Boydell (1991)) and those emerging from discussions with managers in the organization. Employees were also given the opportunity to offer their own comments and opinions on the changes and about learning within the group. The amount of personal information requested was minimal as the

pilot survey indicated a strong desire for respondent anonymity. A number of envelopes were double sealed or marked in some way to avoid tampering, suggesting that employees felt threatened in stating their views, but that this was overcome by a desire to make their feelings known.

The data were analysed using SPSS (statistical package for social scientists). Frequencies were computed and some variables crosstabulated to provide comparisons. A summary of frequencies in each section was created, providing an overall score to indicate whether the mean response tended towards positive or negative. Departmental variations were also noted. Tests of association have been included where relevant. Percentages quoted in the report are valid percentages, i.e. percentages of total responses given, with missing values discounted.

In all, 502 questionnaires were distributed, 318 of which were returned completed – giving a response rate of 63 per cent, which is high enough to be representative of the sample, permitting some valid conclusions to be drawn about the success of learning organization implementation within this company. Additional comments on the changes made in the company were volunteered by 21 per cent of respondents. These were analysed separately to provide supporting qualitative data.

Research findings

These are considered here in terms of descriptive statistics for each section of the questionnaire. The data within each of the eight sections of the questionnaire were also summarized and a mean overall score calculated for each group on a scale of 1-5, the mid-point of the scale being 3 (see Table I).

Reliability analysis between items within each section was carried out using Cronbach's Alpha; standardized correlation figures ranged from 0.5654 to 0.8684, indicating that questions within each of the eight sections possessed a sufficient degree of association.

Individual learning and self-development

Responses in this section tended to be positive (see Table II), with a mean score of 3.23. A high proportion of respondents felt they were allowed to work without close supervision and were given opportunities for problem solving, supervisors providing support rather than control. A majority achieved job satisfaction, felt a sense of belonging to a group and frequently contributed ideas. However, there was some dissatisfaction about training provision and feedback on performance was generally felt to be insufficient. Moreover, a significant number of employees did not feel valued by the organization. Responses to this question are obviously bound up with general feelings of insecurity about employment and current questions hanging over the future of the defence industry. If employees are required to be committed to their work and to the company then they need to feel valued as members of that company, which is clearly not the case at present.

Learning strategy

The second section of the questionnaire was concerned with learning strategy within the group; the mean score for this section was 2.87. A majority of respondents claimed to understand the changes which have taken place and believed that new ideas and different ways of working were frequently incorporated into plans.

Table 1 Mean Scores for Each Section

Section	Mean score	Standard deviation
Self-development	3.23	.63
Learning strategy	2.87	.72
Learning climate	3.01	.58
Participation in policy making	2.30	.77
Use of information	2.94	.69
Empowerment	3.47	.55
Leadership and structure	3.05	.64
Links with External Environment	2.73	.67

Table II Individual Learning and Self-development

Question	% Agree	% Disag
Happy with level of supervision	88.9	5.1
Given opportunity to solve problems	70.2	13.8
Found job satisfying	56.9	16.6
Felt sense of belonging	53.3	28.6
Aware of educational opportunities	45.2	38.6
Frequently contributed ideas	43.0	28.9
Personal aims considered in appraisals	39.5	36.5
Training took place regularly	33.4	41.5
Felt valued by organization	31.2	45.6
Received regular feedback on performance	21.3	56.8

On questions of departmental vision, however, replies were less positive. Only 20.4 per cent felt that there was a clear vision for the future. Furthermore, few felt that everyone was apprised of this vision. The perceived lack of shared vision here is clearly a significant problem. Senge (1990b) claims that vision provides the energy behind organizational learning and highlights the importance of *shared* vision as the means of inspiring commitment, as distinct from imposed vision which is only likely to achieve compliance.

Learning climate

The next section, which attempted to establish what type of learning climate was present in the group, produced a mean score of 3.01. As shown in Table III, a majority of respondents felt that work quality was high, knowledge and resources were shared and the atmosphere was generally supportive. Most also indicated that individuality was welcomed and mistakes were not penalized but were viewed as learning opportunities.

On the negative side, though, there was not seen to be adequate sharing of skills or resources with other departments and few respondents thought their suggestions were valued or their efforts appropriately rewarded. There is a strong argument for linking rewards and incentives to corporate aims and values; where such links are in place, organizational objectives are reinforced – but where they are not, conflicting signals are passed to the workforce (Bradley, 1995).

As a result of the changes which have taken place in the department over the past three years, many respondents seemed to feel that

Table III Type of Learning Climate

Question	% Agree	%Disagree
Quality standards high	69.2	17.1
Good working relationships	68.1	10.6
Freedom to solve own problems	61.9	16.0
Mistakes seen as learning opportunities	58.6	13.7
Knowledge and resources shared	54.4	22.3
Employees not penalized for mistakes	50.5	21.9
Supportive atmosphere	48.8	26.1
Individual approach encouraged	46.6	21.3
Skills/resources shared with other depts	35.0	39.1
Opinions and suggestions valued	30.5	38.1
Atmosphere improved as a result of changes	14.8	60.3
Felt rewarded for effort	11.6	71.3

the atmosphere had deteriorated. These views were of course influenced by the informal culture of the organization; 77.1 per cent of respondents had worked in the organization for over ten years and most had expectations, on starting work there, of a job for life. These factors inevitably have an impact on attitudes towards major changes.

Employee participation in policy making

This section had an overall mean score of 2.3. A large majority of employees rejected the idea that members of the group took part in policy decisions and only 15.5 per cent of people believed that employees' views were taken into account and reflected in policy statements. Few respondents believed that conflicts were discussed openly and differing opinions voiced.

It may be that this is one of the directions in which the company has chosen not to move at present, perhaps because other groups in the company have not yet undergone the same level of reorganization. Nevertheless, the chance for all employees to take part and contribute to policy decisions would be a logical extension to the process of empowerment already under way in the company and would foster open debate on important issues and working through conflicts as a means of reaching decisions through consensus (Pedler et al., 1991).

Use of information

Questions in section five dealt with the use of information. The score for this section was 2.94, but this was mainly due to positive responses on the availability and use of the in-house magazine, with 83 per cent confirming they read the publication regularly. Few respondents felt that information was shared adequately between teams and other employees, or that IT had created an effective communication system within the department. Only 28.2 per cent of employees believed that feedback on performance was provided. Again, findings from this section may have been influenced by recent uncertainty threatening the future of the organization and thus the security of people's jobs. Moreover, a deeply entrenched culture has traditionally assumed that management does not share information with the workforce. This assumption can only be altered by the growth of a climate based on trust, which would benefit

both managers and shopfloor employees (Miller Hosley *et al.*, 1994).

Empowerment

This section, which dealt with empowerment in the group, produced the most positive overall findings and a mean score of 3.47, with all the questions resulting in responses more positive than negative, suggesting that this group has already moved a considerable distance down the road towards empowerment (see Table IV).

A majority of employees felt they were given responsibility and the freedom to make decisions without being checked up on. Most respondents thought that supervisors provided appropriate help and advice rather than control and that their workteams made relevant decisions regularly. The strongest and most positive views were revealed on the subjects of commitment and personal expertise – 62.8 per cent feeling they possessed a high degree of commitment as members of a team and 90.1 per cent confident that they had the necessary skills and expertise to work without supervision.

A number of correlations were found between employees' sense of empowerment and responses in the first section on self-development. Employees who felt empowered also appeared to experience satisfaction in their jobs ($p = < 0.001$), to feel valued in the organization($p = < 0.001$) and to feel positive about their own learning and self-development generally ($p = 0.001$). Not surprisingly, those who were happy with their degree of empowerment were also content to be responsible for their own training and development ($p = 0.002$) and were aware of educational opportunities available to them ($p = 0.001$).

Leadership and organizational structure

The mean response rate over this section appeared to be relatively high with a score of 3.05. In fact, responses to questions on structure were very positive, while questions on leadership produced slightly negative responses on average. Most respondents claimed that departments viewed each other as customers and suppliers and were responsible for their own budgets. Almost 50 per cent felt that rules or procedures were sometimes amended following discussion and over 70 per cent of employees felt that jobs and roles were flexible.

However, findings on leadership style were less positive. Only 27 per cent of respondents felt that management/employee relations were good, while few found first-line managers and group managers open and honest with employees or thought company managers visited workshops sufficiently often. Moreover, only 22.1 per cent felt that management was capable of motivating employees through its vision for the future.

Links with the external environment

Questions in this final section of the questionnaire examined links with the external environment. The mean score was 2.73. One-third of respondents believed that ideas and information were sometimes shared with members of other companies, but only 29.7 per cent thought that part of their job was to collect useful information from outside the company. A majority maintained that management did not keep them informed about external developments affecting the company; only 31.4 per cent felt that they were kept sufficiently informed. Furthermore, few agreed that they were encouraged to read newspapers and magazines which informed them about external opportunities and competition.

Summary of findings

Table IV Degree of Empowerment

Question	% Agree	% Disagree
Confident of own skills and expertise	90.1	3.8
Committed as members of team	62.8	12.5
Supervisors provided appropriate help	57.6	22.6
Allowed to make decisions/not checked up on	52.3	25.4
Employees granted responsibility where required	51.3	20.5
Teams regularly make relevant decisions	43.6	23.9

It appears from these findings that though this company could not claim to "be" a learning organization, it has moved towards becoming a learning company in some respects. The group is most like a learning company in terms of its degree of empowerment and employees' own learning and self-development. A number of positive findings have emerged from the survey and there is little doubt that many of the changes introduced

over the past three years have proved benefi-
cial, not only to the company but also to its
workforce in terms of improved performance
and job satisfaction.

Employees appear to be satisfied with their
degree of empowerment and are capable of
working in teams, with supervisors providing
coaching and support rather than control.
Many respondents possessed a positive atti-
tude towards their own learning and develop-
ment and seemed confident to take responsi-
bility for their own education and training
needs within the group. The way in which the
organization is now structured appeared
satisfactory to many employees, but most
were critical of the group's leadership style.
The management needs to seek ways of artic-
ulating their vision for the future more clearly
to employees, many of whom are perhaps
unsure of the direction in which the group,
and the company, is attempting to move. The
key to improving employee/management
relations is undoubtedly the strengthening of
a climate of trust and openness, but man-
agers' problems have been compounded by
external factors which have threatened the
future of the organization and thus the job
security of the workforce. The success of
empowerment initiatives in this company
could now be extended into the area of policy
making, where at present employees take little
part, though it may be that the extent to which
this is possible is limited by the lack of change
in other sectors of the company.

Information also needs to be more readily
available to employees at every level. The
study seems to indicate that newly acquired
knowledge, feedback on performance and
company/group vision could be communicat-
ed more effectively. Enhanced internal com-
munication systems could also incorporate
some means of publicly recognizing excellent
performance by individuals or teams, thereby
addressing the problem of perceived low
rewards.

Conclusions

It is clear that successful organizations in the
1990s are moving towards a focus on "soft"
qualities (Garvin, 1993) such as insight,
learning, intuition and creativity in order to
achieve competitive advantage and, ultimate-
ly, survival. But missing from many compa-
nies striving to become learning organizations

is an inbuilt and ongoing process of evalua-
tion. Where present, this process tends to be
performed exclusively by management and
often lacks a capacity for accepting shortcom-
ings in the company and using these to modify
behaviour and thereby enhance learning and
performance. This study offers an example of
such an evaluation and demonstrates the use
of this type of instrument for assessment
purposes.

It is important to stress that the learning
organization is an orientation rather than an
activity (Leitch et al., 1996) and, as such it
requires a monitoring process aligned to a
scale rather than the realization of a set goal,
and managers who are prepared to grasp and
address deficiencies in the system. Further-
more, whilst the creation of a learning organi-
zation was undoubtedly a major aim in this
company, the main goal in any reorganization
is ultimately to improve company perfor-
mance and increase profits.

In this case there are factors which have
limited the extent to which the company has
progressed towards becoming a learning
organization. Some of these are specific to this
organization; notably, the way in which only
one section of the company has been devel-
oped and its deeply entrenched organizational
culture. In addition, the implementation of
learning organization principles simultane-
ously with a major restructuring programme
has led, as we suggested, to insecurities on the
part of many employees which have tended to
undermine the climate of shared learning and
open access to information which the group
was attempting to promote.

The development of a relationship based
on trust between management and non-
management employees is critical to the
success of a learning organization. Some
evidence of the low degree of trust extant in
this organization is indicated by the findings
of the section on availability and use of infor-
mation. West (1994) contends that the con-
cept of the learning organization demands a
greater recognition of the importance of
issues such as trust and information sharing,
which influence both individual and organiza-
tional learning. Learning is currently consid-
ered by many organizations to be their major
competitive asset (Miller Hosley et al., 1994).
A number of writers have forecast that the
learning organization will continue to provide
an effective model for the development of

many types of organizations in years to come (Lessem, 1993; Coopey, 1995). Studies such as this demonstrate the worth of regular evaluation of learning-orientated businesses in terms of recognizing weaknesses within the learning system and addressing the critical issues.

References:

Bradley, P. (1995), "Linking corporate and reward strategies for high performance: the case of the NHS", Conference Paper, Employment Research Unit Annual Conference, *Organizing Employment for High Performance*, Cardiff Business School, September.

Burdett, J.O. (1994), "What is empowerment anyway?" *Journal of European Industrial Training*, Vol. 15 No. 6, pp. 23-30.

Burdett, J.O. (1993), "Managing in the age of discontinuity", *Management Decision*, Vol. 13 No. 1, pp. 10-17.

Cashman, K. and Feldman, J. (1995), "Reengineering the employment contract", *Executive Excellence*, Vol. 12 No. 2, pp. 15-16.

Coopey, J. (1995), "The learning organization: power, politics and ideology", *Management Learning*, Vol. 26 No. 2, June, pp. 193-213.

Deming, W.E. (1986), *Out of the Crisis*, MIT Centre for Advanced Engineering Study, Massachusetts.

Driscoll, J.W. (1973), "Trust and participation in organizational decision making as predictors of satisfaction", *Academy of Management Journal*, Vol. 21 No. 1, pp. 41-9.

Drucker, P.F. ((1989), *The New Realities*. Heinemann, New York, NY.

Edmonstone, J. and Havergal, M. (1993), "Empowerment: Holy Grail or a blinding case of the obvious?", *Health Manpower Management*, Vol. 19 No. 2, pp. 22-8.

Ezzamel, M., Lilley, S. and Willmott, H. (1994), "The 'new organization' and the 'new managerial work'", *European Management Journal*, Vol. 12 No. 4, December, pp. 454-61.

Fojt, M. (Ed.) (1995), "Being taught how to learn", *Journal of European Industrial Training*, Vol. 19 No. 6, pp. 7-8.

Garvin, D.A. (1993), "Building a learning organization", *Harvard Business Review*, July-August, pp. 78-91.

Greenwood, M. (1995), "Managing the transition from a training to a learning organization", *Moving from Control to Coaching* IBC Conference, London, March.

Gubman, E.L. (1995), "People are more valuable than ever", *HR Strategy*, January/February, pp. 7-14.

Handy, C. (1995), "Trust and the virtual organization", *Harvard Business Review*, Vol. 73 No. 3, May/June, pp. 40-50.

Honey, P. (1991), "The learning organization simplified", *Training and Development*, July, pp. 30-3.

Iles, P. (1994), "Developing learning environments: challenges for theory, research and practice", *Journal of European Industrial Training*, Vol. 18 No. 3, pp. 3-9.

Leigh, A. and Maynard, M. (1993), *Ace Teams: Creating Star Performance in Business*, Butterworth-Heinemann, Oxford.

Leitch, C., Harrison, R., Burgoyne, J. and Blantern, C. (1996), "Learning organizations: the measure of company performance", *Journal of European Industrial Training*, Vol. 20 No. 1, pp. 31-44.

Lessem, R. (1993), *Business as a Learning Community*, McGraw Hill, Maidenhead.

McGill, M.E. and Slocum, J.W. (1993), "Unlearning the organization", *Organizational Dynamics*, Vol. 22 No. 2, Autumn, pp. 67-79.

Miller Hosley, S., Lau, A., Levy, T.W., Ferdinand K. and Tan, D.S.K. (1994), "The quest for the competitive learning organization", *Management Decision*, Vol. 32 No. 6, pp. 5-15.

Pedler, M., Boydell, T. and Burgoyne, J. (1988), Learning Company Project: A Report on Work Undertaken October 1987 to April 1988, The Training Agency, Sheffield.

Pedler, M., Burgoyne, J. and Boydell, T. (1991), *The Learning Company*, McGraw-Hill, Maidenhead.

Peters, T. (1995), "Six big ideas", *Incentive*, Vol. 169 No. 1, p. 18.

Pettit, P. (1995), "The cunning of trust", *Philosophy and Public Affairs*, Vol. 24 No. 3, pp. 202-25.

Senge, P. (1990a), The *Fifth Discipline: The Art and Practice of the Learning Organization*, Doubleday, New York, NY.

Senge, P. (1990b), "The leader's new work: building learning organizations" *Sloan Management Review*, Fall, pp. 7-23.

West, P. (1994), "The concept of the learning organization" *Journal of European Industrial Training*, Vol. 18 No. 1, pp. 15-21.

EMPOWERING EMPLOYEES FOR MORE EFFECTIVE LEARNING

Paper presented at the South West
Institute of Personnel and Development
Conference, 'Making It Happen'

Torquay
January 1996

PENNY GARDINER
PLYMOUTH BUSINESS SCHOOL
JANUARY 1996

ABSTRACT.

The potential for increasing organisational performance by empowering employees at all levels of the workforce and providing opportunities for participation and learning is now being recognised by many organisations. This paper discusses the empowerment of individuals in organisations today and how participation of employees within these organisations can be accomplished. Firstly, a definition of empowerment is suggested, as distinct from the degree of power which all individuals in organisations possess naturally. The advantages and disadvantages of the empowerment approach are considered, together with an examination of the general context of empowerment within the organisation. The difficulties inherent in moving towards empowerment often stem from long established supervisory roles which relied on direction and control by management. The offer of greater power to individual workers is not always welcome, especially in older organisations with a traditional hierarchical structure. The paper looks at ways of overcoming resistance, such as establishing a firm basis of trust between management and staff, inspiring motivation among workers and supplying safeguards to allow for experimental solutions to be tried out.

The role of learning in an empowered organisation is outlined and the association between organisational learning and empowerment discussed. Both learning and greater employee empowerment are dependent to a great extent on strong and respected leadership. The role of managers must alter in an organisation where power is devolved and shared by the workforce; two types of relevant leadership are considered. The paper differentiates between participation and empowerment and discusses a number of models of each. Links are suggested with political factors and there is undoubtedly an influence of politics on the outcome of decisions. Motivation is also a factor in the success or otherwise of the participative approach. Individual members of an organisation have needs which can be met by greater involvement in their workplace, or motivation may be provided by positive reinforcement.

The usual means of implementing an empowerment programme is the development of small teams appropriately authorised to take part in decision making relevant to their own work. Different types of teams are discussed and a diversity of roles among team members emphasised. Many teams are capable of superior performance but need to be personally motivated to invest effort, enthusiasm and creative input in their work. Factors which may influence the degree of this investment will be discussed, together with the implications of high personal involvement in the job. This paper argues that successful teams are ones where a great deal of attention has been paid to people; their personal objectives, relationships, degree of commitment and self-esteem.

Introduction.

Many employees in organizations working either individually or as members of a team already have a certain amount of power; the power to work enthusiastically or not, to produce high quality goods or services or not, to espouse corporate goals or not. But organizational goals and individual aims often conflict with each other, and in many cases personal objectives have higher priority. Furthermore, the power that individuals in organizations possess naturally is frequently used in a negative way, to withhold services, or guard information for personal advantage, for example.

Empowerment is not just about giving power to staff but giving it in a way which will ensure that it is used for the overall benefit of the company, i.e. the personal objectives of employees must be aligned with corporate aims. By passing a degree of power to the workforce, management replaces rigid control with the capacity to influence the climate, and ultimately the performance of the organization by creating learning opportunities, feedback mechanisms and an underlying basis of trust. However, the transition to empowerment cannot take place without modifications to the expectations of both employees and management.

A number of definitions of empowerment are considered, which help to demonstrate the scope of the concept, and some of the advantages and disavantages of this way of working are considered. A contingency approach is suggested which relates the degree of empowerment suited to a particular organization to its internal climate and the wider environment. The development of empowered organizations is traced and some reasons suggested for its suitability to today's companies within the general business context.

We examine employee empowerment in organizations today and look at how this can be effectively accomplished. Reasons for resistance to empowerment by staff and managers are considered, and some suggestions offered as to how such barriers might be overcome. These include the creation of an inspired vision of the organization's future, modelling by managers of desired behaviour patterns and the development of a new relationship of respect and trust to replace the traditional authority based on exclusive possession of power. Empowerment is related to organizational learning and it is argued that learning and empowerment are mutually dependent. There are a number of types of learning relevant to the development of an empowered organization. It is proposed that the learning organization and empowerment of employees should exist side by side.

Strong and respected leadership is no less important within the empowered organization; power is devolved by management, but there is no total relinquishment of control. A number of models of participation and empowerment are considered, together with the association between them. None of these is proposed as an ideal prescription to suit any organization, rather there are different degrees of empowerment which may be more or less appropriate to different situations.

Definitions of Empowerment.

What exactly is empowerment? Definitions abound, a few of these are noted here. Holpp (1995) suggests empowerment is helping the 'right people at the right levels make the right decisions for the right reasons'. Perhaps more explicitly, as Blundell (1994) suggests, it means enabling workers to make decisions and act with little overall management control. Zemke and Schaaf (1989) define empowerment as 'turning the front line loose'; workers are encouraged to use iniative and not necessarily do things by the book. Pickard (1993) claims that empowerment is taking participation to its logical extreme,and that it implies a whole philosophy governing the way people work. Blundell (op. cit.) submits that employees are presented with the authority and autonomy to carry out their work, while Leppitt defines empowerment as the creation in workers of the 'personal power to achieve, accomplish and succeed'. Marsick (1994) contends that empowerment implies 'interactive mutual decision making about work challenges' with shared responsibility for the results. A booklet produced by Develin and Partners (1994), (management consultants) describes empowerment comprehensively as a combination of practices and behaviour designed to enable workers to solve problems, exercise iniative, make relevant decisions, be responsible for results and to feel that their contributions are valued. And finally, Bowen and Lawler (1992) posit that empowering workers means that those performing tasks are those responsible for solving problems and proposing imaginative new ideas, which will subsequently influence the way in which those tasks are performed.

Benefits and Drawbacks of Empowerment.

The advantages of empowering staff are frequently cited.
Firstly, successful empowerment programmes should provide workers with greater job satisfaction. Employees with a degree of autonomy tend to have greater self-esteem and to be more highly motivated, they interact more warmly with customers in service industries and are likely to be more committed to achieving quality in products or services (Bowen and Lawler, op.cit.). Secondly, many organizations are now beginning to recognise that people are their most valuable resource; empowerment can be the means of unleashing the potential of creative ideas, diverse experience, talents and expertise held by staff.

Furthermore, the exacting customer demands of the 1990s and beyond are easier to meet in a situation where employees are not bound by traditional constraints. Responses can be personally tailored and rapidly produced where creative rule-breaking is permitted or encouraged in non-standard situations. Where clients may be dissatisfied with a product or service, empowered employees are in a position to devote attention to putting the situation right rapidly without recourse to higher authority (Ripley and Ripley 1992).

However, there may also be drawbacks to implementing an empowerment programme. First, it may prove costly initially, in terms of training costs and recruitment of suitable, creative , problem-solving staff (Holpp 1995). Further expense might be incurred through the need for permanent rather than temporary or part-time staff, who are often employed cheaply to meet variable staffing needs; empowering non-permanent workers is clearly impractical (Bowen and Lawler 1992). Production or delivery of services may suffer, too; inconsistencies based on varying responses to customers could produce delays; these might be construed by clients as unreliability. Empowerment also provides the potential for errors to occur, as they can when decision-making is the responsibility of management; safeguards need to be put in place before staff will be willing, or indeed should be expected to take risks. And, of course, there are circumstances where rule breaking is never appropriate (health and safety regulations need to be adhered to, for example) empowering employees must clearly involve specification of the boundaries within which they are permitted to operate.

The General Context of Empowerment.

The current interest in empowerment is largely due to a realisation that there is not a general prescription for success today, but that the distinguishing characteristic of so-called 'excellent' organizations seems to be the degree to which they are capable of exploiting the potential of their workforce (Edmonstone and Havergal 1993). Excellent employees need to be capable of adapting existing skills to new situations and crossing functional boundaries where appropriate, and they must be self reliant and receptive to learning.

Empowerment is to some extent a response to the flattening of organizational structures; layers of middle management are being removed in many organizations and the responsibility for decision making and problem solving, formerly undertaken by this group, needs to be shifted. It clearly makes sense for this process to be transferred to the shop floor. It is important to recognise that front line workers are in charge of customer perceptions and more in tune with changing demands, product or service satisfaction and customer concerns than management (Develin and Partners 1994). There is no doubt that employees are more productive today than ever before, they bear more responsibility for the sales, assets, equity and value of the company, too. Strategic decisions which enable workers to operate more efficiently or serve customers better thus carry increased significance. The continuing advance of technology, drives to cut costs and improve quality and ever more fierce competition means that 'fewer and fewer people will be asked to do more and more work' even should the general economic climate improve drastically (Gubman 1995).

Conventional organizational structures are frequently incapable of supporting creative ways of working, it follows that in order to encourage flexibility, major structural changes need to take place. Empowerment is a logical development in many instances; where work is designed around groups operating in close contact with clients, structures tend to be more fluid and there are fewer barriers to the sharing of knowledge and ideas.

However, the offer of greater power to individual workers is not always welcomed, particuarly in older organizations with a hitherto hierarchical structure and a history of management by control. In an already uncertain environment employees are frequently unwilling to assume reponsibility for decision making. The continuing drive to cut costs, increase production and simultaneously improve quality mean that more work is now being done by fewer and fewer people (Plunkett and Fournier 1991). Despite the lack of job security, some individuals feel unable to keep up with the pressure. Other groups of workers may generate resistance due to fear of failure in an empowered situation, or worry about losing their job if they cannot adapt quickly enough to new methods of working. Moreover, the flattening of management structures often means that there is less chance of promotion; with this financial incentive removed it is not surprising that some employees resist attempts to give them more responsibility.

Managers may also mistrust the empowerment approach, fearing a lack of overall control and, in some cases, worrying that power sharing might erode their own positions, perhaps eventually leading to the loss of their own jobs (Leigh and Maynard 1993). Empowering employees means asking management to behave in a way directly in contrast to that which led to the succesful attainment of their positions; small wonder that many managers find this so difficult.

Ways of Overcoming Resistance.

Gubman (1995) claims the ideal relationship between employees and the organization is mutual interdependence; trust and honesty are the vital ingredients of this relationship. Many conventional structures are organised around traditional supervisory roles which placed power exclusively in the hands of management. In order to overcome resistance to change managers need to unlearn behaviour which regards power as their prerogative and to develop instead alternative forms of authority based on trust, effectiveness and respect (Burdett 1991).

A future vision of the organization needs to be created by top management, this vision can then be communicated to staff, and appropriate behaviour modelled by leaders to demonstrate the type of organization they hope to achieve (Brown and Brown 1994). Managers can thus promote the idea of shared knowledge and values and specify organizational goals to which everyone aspires. This is a big step from the control and direct style of management and can only be achieved if leaders are prepared to commit themselves wholeheartedly to the sharing of ideas and power. A shared vision is essential in order to inspire and motivate employees sufficiently to overcome barriers to empowerment.

Learning and Empowerment.

The next section of the paper considers the association between learning and empowerment. A great deal of interest is currently focused on the learning organization, which developed as an extension of organizational learning theory, and which has gained popularity during the late 1980s and early 90s. A number of academics and practitioners believe that for organizations to cope successfully with a turbulent environment over long periods of time it is necessary for learning to take place regularly throughout the system (West 1994). This learning should focus on anticipation and avoidance of potential problems. The learning organization can be described as a place where working and learning take place simultaneously, where the emphasis is on acquiring and exploiting knowledge creatively and where organizational behaviour is constantly being modified to reflect new insights (Pedler, Burgoyne and Boydell 1991).

Empowerment of employees is claimed by many to be a necessary component of the learning organization. Similarly, Greenwood (1995) maintains that ongoing learning and development is a quality essential to the empowered organization. Employees released from conventional constraints require support and training; this may be highly specialised, taking place over a long period, or may involve short term on-the-job learning. The relationship between empowerment and the learning organization is clear; without empowerment, individual members in an organization have neither the opportunity nor the motivation for individual learning which may, in turn, lead to organizational learning. Staff at all levels need to be in a position to contribute ideas and opinions without fear of ridicule or retribution and individuals must be committed to improving their own and others' performance; this commitment can only be derived from a shared sense of responsibility and a clear understanding of organizational goals (Brown and Brown, 1994).

The learning organization is not just a workplace where a lot of people are acquiring knowledge, it is a place where a climate has been created which facilitates learning and personal development for all its staff and uses the sum of shared experiences and insight derived from these to constantly transform itself. Three types of learning are said to take place within a learning organization; these are normally referred to as single loop learning (Argyris and Schön 1978), double loop learning (ibid.) and deutero learning, a term coined

by Bateson (1973). Single or primary loop learning occurs in the everyday running of organizations, where the individual responds to changes in the internal and external environment by detecting errors and correcting them, modifying strategies and assumptions within consistent organizational norms to improve effectiveness. Within this type of learning, conflict is avoided and not discussed, while mistakes or failures are glossed over or suppressed. Thus there is no analysis of learning processes which have led to either successful or unsuccessful outcomes.

Double or secondary loop learning, on the other hand, emphasises the confrontation of assumptions and brings threatening issues out into the open. It is because accepted values are challenged and errors analysed that conventional solutions are able to be reframed and new responses invented. Mistakes are percieved as learning opportunities rather than threats to the system. Deutero, or second order learning is concerned with learning how to learn, using analysis of previous contexts for learning. Individuals discover which types of behaviour facilitated or inhibited learning, why certain situations led to successful learning and how this knowledge can be exploited to provide new learning strategies.

The first type of learning occurs naturally in most organizations; it is double loop and deutero learning which need to be facilitated so that the organization can move ahead rapidly and keep pace with its environment (Leigh and Maynard 1993). The significant factor in the development of a creative organization appears to be the existence of a learning climate where new approaches and different ideas are experimented with as a matter of course. The potential of any organization consists of the knowledge, skills and experience of all its members. But this potential can only be realised where the atmosphere is receptive to suggestions and new ideas from employees, regardless of their position within the organization. Differences of opinion will inevitably occur, but these can in turn be used to develop further creative solutions.

Learning requires the constant advance of knowledge frontiers. In order for this to take place, employees have to develop skills in experimenting so that knowledge does not remain at the same level (Leonard-Barton 1992). Innovation is the successful outcome of experimentation. However, implicit in the encouragement of trying new ways of working is the licence to make mistakes. The organization must be prepared to permit its members to take risks, provided the boundaries are clearly delineated. A small percentage of experiments will probably fail; accountability for mistakes must therefore be established. It is the responsibiltiy of managers to create safeguards which will minimise the extent of damage to the organization that might result from unsuccessful outcomes (Bowen and Lawler 1992). Risk taking strategies are generally seen to be advantageous to today's organizations; without the opportunity to try out creative approaches and make errors the context for valuable learning is not present.

Appropriate Leadership.

Both learning and greater employee empowerment are dependent to a great extent on strong and respected leadership. Empowerment does not mean handing over control, but altering the way in which control is exercised. Managers do not relinquish the responsibility to lead, they retain overall direction and understanding while sharing power with their staff. Leadership in an empowered organization is a more subtle method of management appropriate to complex, flexible organizations and a constantly changing environment. The old type of 'direct and control' leadership is replaced by one of two styles of management in an empowered structure. In the first approach the manager acts as a facilitator, on the basis of his/her greater awareness of the external environment. Management recognises the benefit of employee participation, probably as a result of improvements implemented following staff discussions or quality circles, and understands the importance of listening to employees' views and providing positiive reinforcement upon completion of objectives (Burdett 1991). This leadership style could be described as management-centred problem solving; the manager describes a problem and requests ideas for a solution; there is participation on the part of workers, but not true empowerment.

The second approach goes one step further and shifts the responsibility for problem solving completely on to the work team, the manager acting as coach, providing support and advice where required. Here the employees have a wider understanding of the external market and an interest in organizational competitiveness, perhaps stimulated by some form of performance-based incentive scheme. The work group has been given the authority to make decisions and deal with problems without referring to management, though supervisors are kept informed of initiatives taken and consulted where appropriate.

Leaders still have a significant part to play in an empowered situation; although power is shared with employees, management's power base is not eroded; there is not a finite amount of power in any one organization (Burdett op. cit.). The transition from management control to employee empowerment cannot take place without drive from the top and the establishment, by management, of a culture which reinforces values and expectations suitable to an organization where power is shared. This may mean the removal of elitist privileges or the redistribution of information formerly exclusive to a small group of managers. A number of writers (Burdett 1991, Plunkett and Fournier 1991) suggest that obvious demonstrations of desired types of behaviour can greatly assist the process of empowerment and cultural change generally. In a traditional structure, the supervisor relies largely on the authority that is inherent in his role and requires his staff to carry out tasks under his/her direction often without really needing to think. In the 1990s, managers are coming to realise that their employees' ability to think is probably their company's most valuable asset. In order to utilise this asset management needs to establish a relationship based on trust and respect which has to be built up with the workforce.

Brown and Brown (1994) list four specific roles of management in an empowered situation; firstly, managers must make available to every employee all relevant information, both positive and negative. Secondly, they must permit staff to carry out their work without checking up on them, as refusal to relinquish control will quickly erode any trust between employees and managers. Thirdly however, managers need to remain accountable to workteams and to be available to provide coaching when required. The fourth role specified is the responsibility of leaders for setting the highest standards so that workers can emulate them. Two further roles could perhaps be added to this list; the need for managers to voice their expectations of staff, not only expectations of quality, but also of performance, behaviour or meeting targets. Finally, we have already noted that the boundaries within which it is acceptable to operate must be clearly specified. Leppitt (1993) contends that the key to successful empowerment of employees is the acceptance by management of responsibility for the establishment of an apposite organizational culture and for the behaviour and performance of their staff. Perhaps the most significant quality leaders need to possess, however, is insight. Much of the learning which occurs in any organization is unplanned and intuitive. Without leaders who can interpret *a priori* newly acquired knowledge this learning cannot be shared and developed throughout the organization.

Models of Participation and Empowerment.

Where empowerment has been successfully implemented, the workforce participates, either directly or indirectly, in operational decisions relevant to the activities of each particular group. Pheysey (1993) proposes three types of participation; strong and weak direct participation, and indirect participation. The strong form of direct participation exists where those employees who implement a decision are also involved in making thaat decision. Small autonomous workgroups take part in operational decisions appropriate to their work. Direct participation in its weaker form occurs where management consults employees and takes into account their views and experience, using these to make an informed decision. Yet many British companies still employ only indirect participation, relying on elected representatives to voice the feelings of the workforce on councils or committees.

But a number of writers suggest that empowerment goes much further than participation (Pickard 1993, Blundell 1994). Whilst participation is concerned with joint

decision making and consultation with employees, empowerment means that the decisions are actually taken by individuals or teams endowed with the appropriate authority, without referring to management. Pickard (op. cit.) maintains that empowerment is much more than an involvement, rather it is a 'state of mind and a way of working'. She underlines the need for management to relinquish authority, stating that empowered workers cannot operate effectively and creatively within a rigid framework, instead they need flexibility and autonomy. In a truly empowered climate the benefits of this way of working should become clear; a sense of pride and ownership, continuous improvement and creative teamworking. Carr (1994) argues that autonomy should be valued *per se* because it helps to develop the true potential of individual employees, enabling them to experiment and innovate and thus feel more fulfilled.

Three models of empowerment are proposed which demonstrate the progression beyond participation. The first of these may be termed **consultative involvement** and is related to Pheysey's weaker type of direct participation (Pheysey 1993). In this model, employees are enabled to offer suggestions and ideas and express opinions through procedures such as group meetings and quality circles. Although staff are only empowered to make recommendations, there is a tacit agreement on the part of management that views will be listened to and proposals given due consideration. In the second model, which will be referred to as **total task involvement**, there is a bigger shift away from traditional management direction to a system where groups of employees are responsible for offering a complete service or manufacturing a whole product. Employees become multi-functional and thus develop a wider range of skills, thereby enriching their jobs and obtaining greater intrinsic satisfaction. In most organizations, total task involvement is best achieved by the use of work teams. This model of empowerment, although it provides greater satisfaction and autonomy to workers, still does not include them in high level strategic decision making affecting organizational structure or reward systems. The third model of empowerment, **strategic involvement**, enables employees at all levels to influence the direction and performance of the organization, as well as making decisions relevant to their own work activities. Information on business outcomes is shared and staff learn teamwork skills and participate in management decisions, business operations and probably in profit sharing.

A Contingency Approach.

These approaches to empowerment are not the only possible alternatives for management practices today, though. A contingency approach has also been suggested which assesses the importance attached to five factors; business strategy, technology, customer relationships, business environment and employee needs (Bowen and Lawler 1992). On the basis of this assessment either an empowerment type of programme or a production line approach is decided upon. The critical factor is the fit between the organizational situation and the approach used; it is better to achieve a good fit rather than to opt for empowerment regardless of the business environment, just because it is the 'in thing'. The concept of 'excellent employees', for example, becomes problematic when applied to certain service organizations, particularly in health care, due to the professional boundaries inherent in many roles and a strong established culture which reinforces the vertical structure (Edmonstone and Havergal 1993). Although many service organizations may be ideally suited to applying tried and tested empowerment techniques, each organization needs to determine whether an empowerment approach would fit their individual circumstances.

Political Considerations.

Empowerment of employees must necessarily involve political factors to a certain degree; individuals operating in strategic decision making will inevitably bring their own objectives, allegiances and affiliations to bear on the outcomes (Chell 1985). The diversity of individual views, however, can only enhance the process of formulating decisions and policies, in that the *status quo* will be constantly challenged and the organizational image modified accordingly. A lack of diverse opinions and beliefs is actually a barrier to innovation, yet many organizations view difference as a threat and either assimilate and

standardise diversity or isolate individuals with controversial ideas so that they shall not pollute the main body of employee opinion (Herriot and Pemberton 1995).

Motivation and Empowerment.

Motivation is undoubtedly a significant factor in the success or otherwise of empowerment programmes; this can in part be inspired by the corporate vision and effective leadership.
Individuals are motivated by the successful achievement of objectives, but also by personal commitment to a particular project or organizational aim. When employees become involved in an intensive effort, either as individuals or teams, to strive for creative success, then enhanced performance begins to take place. Yet management needs to recognise that high levels of performance cannot happen continuously (Leigh and Maynard 1993). Some experiments will lead to unsuccessful outcomes and people will need time to learn from such situations and formulate new solutions. High achievers inevitably experience ups and downs; there may be periods when productivity is lower. High performance teams may need to release pressure at times by having fun, perhaps in the workplace as well as outside it. These periods of lower performance or apparent time wasting will be more than compensated for by the extremes of superior performance and enhanced productivity at other times.

There are a number of theories of motivation relevant to empowerment. The first of these claims that greater involvement of employees is brought about by meeting the needs of individuals. These might include wishes for job security, social acceptance and approbation, the need for recognition of achievement or the chance to develop career potential. Reinforcement theories of motivation, on the other hand, maintain that the individual may respond to a given situation in a number of ways. Some of these lead to success and are praised or rewarded; positive reinforcement then acts as motivation to repeat the successful type of behaviour. However, these types of activities have mostly been studied in laboratory experiments or in institutions, there is little empirical evidence to support reinforcement theory. Expectancy theory was developed by Vroom (1964) as an alternative approach and modified by Porter and Lawler (1968). It comprises three elements; instrumentality; that successful performance will lead to desired outcomes, expectancy; that degree of effort will affect the level of performance and valence; the value people put on outcomes.

Teamworking.

The usual means of implementing an empowerment programme is by the development of work teams, each responsible for the completion of a product or the delivery of a service and with the appropriate authority to make decisions and solve problems relevant to its own work. The distinguishing characteristic of a team is that the first priority of its members is achievement of shared goals, regardless of individual specialised skills or personal objectives. In addition, participants in a team communicate openly, collaborate constantly and support each other (Ripley and Ripley 1992). The benefits of teamworking are widely documented and include improved information flows, more efficient use of resources and skills, more effective decisions, increased commitment on the part of employees and, ultimately, enhanced performance. However, the establishment of effective teams takes time and it makes sense for aims, roles, processes and possibly relationships to be clarified at the outset. Another problem may be the lack of attention or reward for the individual employee in an empowered situation. Individuals who were previously known as experts in their field may feel less valued as members of a team. One way of resolving this situation is the development of new consultative roles within the organization (Plunkett and Fournier1991).

There are a number of types of teams, which may be either permanent or temporary and which relate to differing levels of empowerment within organizations. Groups such as quality circles may come together only temporarily to seek methods of promoting productivity and quality while task forces, another usually non-permanent kind of team, are

formed to approach problematic issues which cross functional lines in the company. Integrated work teams are multi-skilled and tend to work together on a more permanent basis, focusing on one particular product or service for which they are responsible (Plunkett and Fournier1991). This type of team is also known as a case team and is frequently used to mediate between the customer and a complex organization; case teams are used in B.T., for example. The case team approach incorporates the ability to design individually tailored services to suit specific customers and works in an empowered way, though teams are not self-managing. Further down the road to empowerment, high performance or self directed teams are also functionally based, but assume many responsibilities previously undertaken by management, such as controlling budgets, timetabling workprojects or annual leave and performance management. Even recruitment and dismissal may be incorporated in the remit of these self directed teams, though few companies have attained this degree of empowerment to date (Holpp 1995).

Belbin has done a great deal of work on the roles of individuals within teams and has identified eight key personality types present in most organizations. He has suggested that the failure of ineffective teams can often be attributed to poor combinations of role types. Star teams usually contain a spread of mental abilities and a range of team roles (Belbin 1981). Other writers also contend that the strength of a team lies in its diversity, arguing that a variety in the knowledge frameworks of individual employees is the chief potential source of innovation in any organization. Many workplaces have traditionally striven for homogeneity and encouraged uniformity of thinking among their staff and have disregarded any suggestion of recognising and catering for individual differences. But organizations now developing an empowerment approach are beginning to understand that diversity is a benefit, rather than something to be stifled, and as such should be valued for the different perspectives it introduces in any situation (Herriot and Pemberton 1995). Variety in backgrounds, ideas and experience is beginning to be seen as a useful asset which has been underexploited in most organizations until now.

Summary and Conclusions.

So we may deduce that empowerment is not just this year's buzzword, the latest in a line of fashionable management gimmicks, but rather that it is a logical development of a process that has been gradually evolving throughout the late 1980s and the 1990s. It has begun to be recognised that conventional style, vertically aligned structures are, in many cases, inappropriate for meeting the needs of the business world of today. As a result of widespread recessions and changes in the external environment, all types of organizations have been forced to cut costs drastically, in many cases by reducing their manpower, and at the same time have had to increase the speed of response and improve quality.

Today's companies attempt to achieve a competitive edge by producing goods or services which not only satisfy customer requirements to the full, but also anticipate future customer needs and, in some cases invent new markets. The emphasis on value for money, quality and innovation inherent in these processes involves new and different demands on the workforce. It is no longer sufficient for companies to repeat tried and tested solutions to problems, or to merely turn out slightly updated products or services in response to situations. A workforce is needed which can adapt rapidly to whatever changes take place in the external environment, can design tailormade responses to exceptional circumstances if necessary, and above all can learn from a variety of outcomes and use this learning to improve future outcomes.

There are a number of management programmes which attempt to address some of these demands, empowerment of employees is one solution which can go some way towards increasing staff motivation, improving job satisfaction and thus enhance performance. Managers are not being asked to relinquish overall control or the responsibility to lead, but rather to share some of the power with their workers. This should help with the burden of management duties exacerbated by the removal of numbers of mid-level managers in many companies, and indeed has developed partly in response to just this problem.

But more than merely helping to spread the workload, empowerment should, in the long term, provide much greater benefits to both employees and the organization. After an initial period of adjustment and suitable training, most workers enjoy the added responsibility of participating in decision making, particularly when they can see how those decisions affect the work they are engaged in. Moreover, where staff feel their opinions and ideas are valued, they will be more likely to offer constructive suggestions which may prove valuable to the organization. The logical development of workteams, imbued with suitable authority and a degree of self management, provides the opportunity for employees to invest personal effort and commitment in their work and produce truly creative outcomes.

It is these creative solutions which have most influence on organizational performance, for other developments frequently follow on from one totally new idea, and it is by new outcomes or different ways of achieving these outcomes that companies gain advantage over their competitors. Star performance is not normally achieved by merely increasing the speed of production of delivering a service faster, but by discovering novel methods of addressing problems. The key to high performance lies in the creative capabilities of the workteams.

The manager's job is thus to create the right kind of conditions in which teams can function effectively and creatively, rather than to oversee every task they undertake. Employees need training in how to work in teams and make decisions without consulting management, but managers also need training in how to retain overall control, but allow workers to solve their own problems, and even possibly make mistakes, without interfering. The advantages of empowerment may not be felt for some time and initial costs may be perceived as expensive, but it should soon become evident that employees enjoy having control over their work. Other benefits will follow on from this. It should be clear that empowerment at its best can exploit employee expertise to the full, using existing knowledge and tacit skills to improve and extend learning. This learning can then be shared throughout the organization with the ultimate goal of improving organizational performance.

References.

Argyris, C. and Schön, D.A. 1978. *Organizational Learning*. Addison-Wesley, Reading, MA.

Bateson, G. 1973. *Steps to an Ecology of Mind*. Ballantine, New York.

Belbin, R.M. 1981. *Management teams: Why they Succeed or Fail*. Heinemann, London.

Blundell, Brian. 1994. 'Empowerment in Organizations: a Critical Review', *Management Bibliographies and Reviews*, Vol.20, no.5, pp2-10.

Bowen, David and Lawler, Edward E. 1992. 'The Empowerment of Service Workers: what, Why, How and when', *Sloan Management Review*, Spring, Vol.33, No.3, pp31-39.

Brown,Rob. and Brown, Margaret. 1994. *Empowered! A Practical guide to leadership in the Liberated Organization*. Nicholas Brealey, London.

Burdett, John O. 1991. 'What is Empowerment Anyway?' *Journal of European Industrial Training*, Vol.15, No.6, pp 23-30.

Carr, C. 1994. 'Empowered Organizations, Empowering Leaders', *Training and Development*, March, Vol.48, No.3, pp39-44.

Chell, Elizabeth. 1985. *Participation and Organization: a Social Psychological Approach*. MacMillan Press, London.

Coulson-Thomas, C. and Coe, T. 1991. *The Flat Organization: Philosophy and Practice*. British Institute of Management, Corby.

Develin and Partners, 1994. *Empowerment: You Can't Give It, People Have to Want It.* Develin and Partners Information Booklet, London.

Edmonstone, J. and Havergal, M. 1993. 'Empowerment: Holy Grail or a Blinding Case of the Obvious?' *Health Manpower Management,* Vol.19, No.2, pp22-28.

Greenwood, Mark. 1995. 'Managing the Transition from a Training to a Learning Organization', I.B.C. Conference; *Moving from Control to Coaching,* March, London.

Gubman, E. 1995. 'People are More Valuable than Ever', *Compensation and Benefits Review,* Vol.27, No.1, pp7-14.

Herriot, Peter and Pemberton, Carole. 1995. *Competitive Advantage Through Diversity: Organizational Learning from Difference.* Sage, London.

Holpp,L. 1995. "If Empowerment is So Good, Why does it Hurt?' *Training,* Vol.32, No.3, pp52-57.

Leigh, Andrew and Maynard, Michael. 1993. *Ace Teams: Creating Star Performance in Business.* Butterworth-Heinemann Ltd., Oxford.

Leonard-Barton, Dorothy. 1992. 'The Factory as a Learning Laboratory', *Sloan Management Review,* Fall, pp 23-37.

Leppitt, Nigel. 1993. 'The Path to Successful Empowerment', *Engineering Management Journal,* Dec., No.14, pp271-277.

Marsick, Victoria J.. 1994. 'Trends in Managerial Reinvention: Creating a Learning Map', *Management Learning,* Vol.25, No.1, pp11-33.

Pedler, Mike, Burgoyne, John and Boydell, Tom. 1991. *The Learning Company: a Strategy for Sustainable Development.* McGraw-Hill, Maidenhead.

Pickard, J. 1993. 'The Real Meaning of Empowerment', *Personnel Management,* Nov., Vol.25, No.11, pp28-33.

Plunkett, Lorne C. and Fournier Robert. 1991. *Participative Management; Implementing Empowerment.* John Wiley & Sons Inc., USA.

Porter, L.w. and Lawler, E.E. 1968. *Managerial Attitudes and Performance.* Irwin-Dorsey, Homewood, Illinois.

Pheysey, Diana C. 1993. *Organizational Cultures: Types and Transformations.* Routledge, London.

Ripley, Robert E. and Ripley, Marie J. 1992. 'Empowerment, the Cornerstone of Quality: Empowering Management in Innovative Organizations in the 1990s', *Management Decision,* Vol. 30, No.4, pp20-43.

Vroom, V. 1964. *Work and Motivation.* John Wiley & Sons, New York.

West, Penny. 1994. 'The Learning Organization: Losing the Luggage in Transit?' *Journal of European Industrial Training,* Vol.18, No.11, pp30-38.

Zemke, Ron, and Schaaf, Dick.1989. *The Service Edge: 101 Companies that Benefit from Customer Care.* New American Library, New York.

EVALUATING THE SUCCESS OF LEARNING ORGANISATION IMPLEMENTATION

NOTES FOR A PARTICIPATIVE WORKSHOP

THE LEARNING COMPANY CONFERENCE

UNIVERSITY OF WARWICK

MARCH 1996

EVALUATING THE SUCCESS OF LEARNING ORGANISATION IMPLEMENTATION

With reference to an engineering group, part of a large company in the defence industry.
(Notes for a Participative Workshop)

During the 1980s, the rapid advance of technology and widely fluctuating economic conditions made apparent the need for organisations to be capable of adapting in order to survive.[i] So that companies could respond sufficiently rapidly to environmental change, it became clear that learning was necessary and this learning needed to be integrated throughout the organisation by the actions of individual members.

Following the impact of Japanese economic success, it became clear that one factor which Japanese companies had in common was a high degree of employee commitment. The means for achieving this appeared to be through the development of strong value systems and a culture which emphasised the need for rapid adaptation and constant learning.[ii]

A learning organisation is now taken to mean a workplace where learning is consciously promoted at all levels. Working and learning take place alongside each other and the staff are aware of opportunities for acquiring knowledge, applying it creatively to their work and sharing the resulting learning with their colleagues. These opportunities for learning may be intentionally designed or may occur incidentally; in either case employees need to be aware of the potential for learning and capable of exploiting this usefully.

This project, based at Plymouth Business School, is looking at the application of learning organisation theory to the management of change in organisations. The research has three strands; firstly an evaluation of one department in a large company, where change along learning organisation lines has taken place, secondly a survey of employee attitudes in another department of the same organisation, where no such changes have been implemented and thirdly, a study of another engineering company where attempts are just beginning to establish a learning organisation. This workshop involves the first stage of this project; an evaluation of the degree of success achieved in a department which has introduced a number of aspects of learning organisation theory.

The site for the research was Group 'A', one Group within a company; part of a consortium which took over the management of Devonport Dockyard, amid much publicity, in 1987, as commercial contract managers. The company is large with approximately 3,500 employees and an annual turnover of £200-250m. There are 14 different groups within the company, one of which is Group 'A' where about 520 people are currently employed.

The Existing Culture.
Devonport Royal Dockyard was established in 1692 by William of Orange to defend the Western Approaches. It was constructed in such a way that in times of conflict, the gates could be closed and ships continue to be repaired and maintained with no need for outside

involvement. It functioned independently within its walls with no real competitive pressure, little exposure to outside ideas and no necessity for learning. Some things changed, as the demand for different types of naval vessels progressed, but essentially the culture remained similar for 295 years.[iii]

These then were some of the characteristics of the culture before any changes were made;

*The organisation was hierarchical, with a confused structure and up to six levels of management.

*Managers were very busy with day-to-day problems and had little time to think about direction and future strategy.

*Communications were inefficient, there was no overall communication system.

*Information was seen to be the prerogative of management and was not shared with other employees.

*Many employees were very highly skilled; they only performed one type of specialised job.

*Decisions were top-down. There was no discussion or input from the shop floor.

At the end of the 1980s it became clear that major changes were needed in order to survive.

Some of the reasons for change were the following:- (See handout)

It was decided to implement changes in one Group of this company first and a new manager was appointed to this group from outside in 1992 to implement intensive changes and improvements in Group 'A'.

Before the changes took place, the group had been shown to be one of the poorest performing sections of the company. Costs were high, deliveries were constantly behind schedule and many employees were so highly specialised that at times there was no work they were trained to do.

The changes took place in a number of stages, which are summarised briefly here: (See handout)

Stages of Change.
The way in which the group was reorganised incorporated many of the principles of learning organisation theory.
The emphasis was on a shared vision for the future, and departmental goals towards which everyone would work.

People with highly specialised expertise were encouraged to learn a wider range of skills and become multi-functional, so that when there was no call for their particular specialisation, they could be temporarily redeployed elsewhere.

Shop floor workers were organised in teams, with the authority to carry out work without direct supervision.

Individuals and teams were empowered and encouraged to show initiative.

Experimentation was promoted and people were permitted to try out new ways of working, with the implicit understanding that mistakes would not be penalised.

This all sounds very idealistic; of course many employees were resistant to change, and in the course of the reorganisation many were made redundant, not all of them voluntarily.

The programme of change began in October 1992.

Three years on, in November 1995, this project attempted to assess the impact of the reorganisation and to measure the degree to which the Group had become a learning organisation.

It is probably more appropriate to think of a learning organisation as a road to travel rather than a place at which a company arrives. It is also easy for management to become complacent about what has been achieved and to gloss over areas where further improvements might be desirable.

Methods by which success or otherwise might be measured

This research was carried out using a small number of interviews with individual managers, followed by a large scale survey using a questionnaire, which was distributed to all employees below the level of group managers. The decision to use mainly quantitative methods was arrived at partly due to the relatively large numbers of employees involved and also because of top managers' wishes regarding access and time taken out of work. 502 questionnaires were distributed and 318 returned, a response rate of almost 64%, which most people would probably agree is encouraging and permits the researcher to draw some valid conclusions about the current situation.

Constraints.

The next stage of the workshop examines some of the factors and constraints affecting the way in which measurement of a learning organisation might be carried out.

1) **Access** to the organisation.

If you are a member of the organisation to be measured, gaining access initially will probably not present a problem, though some people may wish to have a say in the type of methods you use. If you are an outsider, access is an important factor in deciding on methods of assessment. Will you be allowed to talk to people at all levels in the organisation? How many times will you be permitted to come into the organisation and talk to people? To ensure objectivity, it is important to have access as open as possible, so that you may study the organisation in the way you decide will be most effective.

2) **Time.**

There are two ways in which time constraints might apply. Firstly, the overall time available for carrying out a project, collecting information and analysing the findings is

likely to influence the type of method chosen. Individual interviews are probably more time consuming to carry out, to transcribe and to collate but the data resulting from them may be much wider-ranging than the findings from a questionnaire, for example. Secondly, the amount of time which employees are permitted to devote to answering questions or discussing principles of the learning organisation may be predetermined by management, as interviews or group discussions would normally haver to be carried out in work time.

3) The wishes of top management.
This factor is linked to both the preceding types of constraint. It may be that senior managers are happy for questionnaires to be issued but not for personal interviews to be carried out, as was the case with this research; perhaps because of the time it would take up during work hours. In other instances management are happy for staff to be interviewed, but are averse to questionnaires.

These various constraints may apply to any organisation. But there are some factors which are relevant to one particular organisation. The handout shows some factors specific to this organisation.

Probably most people can think of some factors which might be specific to their particular organisation, factors which would influence the implementation of learning organisation principles.

Categories for measurement.
In order to evaluate the success or otherwise of learning organisation implementation it is necessary to have some form of classification of the factors which comprise such an organisation.
These are the categories used in this survey; they were influenced by the Learning Company Project's 'Eleven Characteristics'.[iv]
(Please see handout)

Would you add to these or use different ones? Are there any here you think might be unnecessary or irrelevant?

If a majority of managers and/or employees respond positively to questions based on these categories, perhaps we could assume that a certain degree of success has been achieved. Could we then state that this company is, to some extent, a learning company?

Using a scoring system.
Finally, this project used a method by which 'scores' were given to each of the eight categories which made up the questionnaire. Questions within the eight categories were in the form of statements and respondents had to agree or disagree with each statement on a five-point Likert-type scale (Strongly agree, agree, neither agree nor disagree, disagree,strongly disagree). The responses to each statement were coded 5,4,3,2,1. So it was possible, therefore, to calculate a mean score for each individual question, and for each category within the questionnaire. Scores were obviously all in the range of 1+ to 4+, as averages of either 1 or 5 would be extremely unlikely.

The last handout shows the mean scores found for each of the eight categories of learning organisations at DML Engineering.
This may perhaps be an effective method of providing generalised overall measures of success.

Peters, Tom & Waterman, Robert (1982) *In Search of Excellence: Lessons from America's Best-Run Companies.* Harpers & Row, London.

[1] West, Penny (1994) ' The Concept of the Learning Organization' *Journal of European Industrial Training,* Vol.18, No.1, pp 15-21.

[1] Whiting, Peter (1995) *DML Engineering: A Learning Experience,* Unpublished Discussion Paper, Plymouth Business School.

[1] Pedler, Mike, Boydell, Tom & Burgoyne, John (1993) 'The Eleven Characteristics Questionnaire: Basic Data from Ten Organisations', Case Paper No.1, *The Learning Company Project,* Sheffield.

LINKS BETWEEN EXPERIMENTING AND LEARNING

Participative Workshop

LEARNING COMPANY CONFERENCE

UNIVERSITY OF WARWICK
MARCH 1997

INTRODUCTION   (20 MINS)

Innovation - one of buzzwords of 1990s.
Often misinterpreted.
It is <u>not</u> the same as quality, putting the customer first, striving to be the best or refusing to accept things as they are.
<u>Not</u> being successful in one area and then replicating this success in another.

Definitions of innovation: (OHP)
        Putting new ideas into practice
        The commercial development of experiments
        Successful exploitation of new ideas
        Translating ideas into products with a prospect of success

What is experimentation?

How does it fit in with innovation?
Learning requires the advance of knowledge and the shifting of conceptual frameworks.
In order to move from one state to another new frameworks have to be tested.
EXPERIMENTS ARE NEEDED TO DEVELOP INNOVATIONS

2 types of experiments: (OHP)

Regular small-scale experiments can provide feedback & lead to adaptation and continuous improvements.
But also need larger scale experiments trying out new ideas & different ways of working.
These experiments are the building blocks of innovation.

Experimenting with **process** rather than **product**.

Definitions of experimenting: (OHP)

        Practising new ways of working

        Seeking different combinations for success

        Discovering creative methods of learning and sharing knowledge

        Trying out innovative ideas

        Taking (calculated) risks

        A principal problem-solving process of a non-routine kind

2

Reasons for experimenting: (OHP)

1. For competitive advantage
New products/ different ways of working/ faster solutions can all result in competitive edge over others.
Conventional management methods have tended to reinforce conformity, reward people for doing things the acccepted way, stifle creativity and punish mistakes

2. Keeping pace with environmental change (it's not enough just to adapt)

3. A proactive approach - developing to meet the latent needs of customers, not just matching current demand

4. To create a new ethos of motivation, interest in the job, greater job satisfaction - it's good for employees too.

ESTABLISHING THE CLIMATE.

In order for people to experiment in organisations the right kind of climate has to be in place.
We know about creating learning climates.
What factors would comprise a climate for experimentation?

IN GROUPS OF 4: DRAW UP A LIST (10 MINS.)

Discuss.........Pool ideas

Creative Thinking (20 mins)

Metaphor -

Left brain thinking	**Right brain thinking** (OHP)
logical, analytical	intuitive, emotional
step-by-step	uses visual images
verbal & numerical reasoning	makes new connections
	challenges boundaries of left brain thinking

Professional occupations have stressed value of left brain activity, eg. engineering, computing, accounting

Entertainment industry, musical & artistic occupations have bias more towards right brain.

Not proved!

3

Managerial jobs said to need both types of thinking:

Left brain - for attention to facts and logical planning

Right brain - for a holistic view, a vision for the future

To experiment & be creative we need <u>whole brain thinking.</u>

Training may help people to develop whole brain thinking

<u>Lateral thinking</u>   (OHP)

Assoc. with Edward de Bono.
Some lateral thinking ideas are:

>   Reversals - pull to push, etc.
>   Turning conventional thinking upside-down
>   Wouldn't it be great if...
>   Random juxtaposition:
>   eg. intro of an unexpected idea in meetings

Six thinking hats: A communication device.   SEE NEXT SHEET   (OHP)

LATERAL THINKING: SIX THINKING HATS

By becoming more aware of different thinking processes we can refine our thinking skills, and also improve communications and therefore performance when working with others. **The Six Thinking Hats** communication device, developed by Edward de Bono, involves six thinking processes, which we can select, and deploy according to circumstances. The process is similar to selecting from a hat-rack of different hats. Each hat has been given a different colour to help you recognise and remember them.

The Six Thinking Hats:

White hat: Facts and figures. Data. (Spider diagrams)

Red hat: 'Hot' emotional judgments. Hunches and feelings

Black hat: Evaluation. Concentrating on why something will not work

Yellow hat: Looking on the bright side. ('Yes and' thinking)

Green hat: Creating new and valuable ideas. (Lateral Thinking techniques)

Blue hat: Managing the other hats. ('Which hat to wear?')

Some practical applications

* Practice recognising which hat is involved in specific thinking tasks, and how well it has done its intended job. This will gradually strengthen your reflective thinking skills.

* In meetings agree a common (hat) language to avoid misunderstandings and conflicts.

  As a rule of thumb prefer the following sequences:

 * Blue hat before deliberate use of other colour hats

 * White hat and/or Red hat at the start of discussions

 * Yellow hat and/or Green hat before Black hat

Differences in working styles: (Michael Kirton)

Adaptors & innovators

Adaptors prefer to work within existing work schedules, changing things gradually. Innovators like to look for completely new ways of doing things.

You can't necessarily change the type you are but be aware of other peoples' working styles.

The best creative teams contain a mix of the two types.

GROUPWORK
PROBLEM SOLVING.

Hot summer, lots of insects, windows open.
Need something to deal with the problem of insects in cars.
Design a solution.

Groups of 4. (10 Mins)

Come together, describe solutions.

How did you arrive at these - consensus? one innovator in the group?

Developing an experimental approach in organisations: (20 Mins)

Barriers to creativity: (OHP)

Idea that creativity is rare & valuable

You can't be taught to experiment or have good ideas

No scope in my organisation

It's a lonely, individual process

Solutions: **(OHP)**

Everyone's creative & has ideas

Training can help to develop personal potential

All jobs have scope for new ideas

Creativity can be encouraged or discouraged depending on the organisational climate

Conclusions: **(OHP)**

Learning from successful experiments can be captured and spread throughout the company.

Good communications/effective information systems are critical

Discuss why other experiments didn't work - is there anything that can be used?

Don't repeat the mistakes

Publicise success internally through newsletters,noticeboards, informal communications

Reward people for having ideas and experimenting, even if they weren't successful this time

i