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IDENTIFYING AND DEVELOPING EXECUTIVE SKILLS

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Ph D Thesis

Submitted in total fulfilment of the requirements for the degree of Doctor of Philosophy in the Faculty of Management,

Deakin University, Victoria, Australia

August 1994
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IDENTIFYING AND DEVELOPING EXECUTIVE SKILLS

SUMMARY

This study aimed to identify those skills which, individually or in combination, contribute to a high standard of management practice by Chief Executive Officers in Australia. Based on an extensive review of the literature, a skill taxonomy was developed to reflect current research findings. Verification of this taxonomy was sought through field questionnaires and depth interviews with male and female CEOs drawn from large and small organisations in both the public and private sectors. This led to a revised skill taxonomy, with 17 skills reflecting three significant categories; understanding and interpreting the external environment, understanding and mobilising the internal environment and understanding and mobilising personal resources. Eight of the skills were identified as key differentiating skills. They are situational, contingent and interdependent. They reflect the broad context in which they are applied and their interrelationships in the wider environment.

The research then sought to determine how these skills were acquired or developed. The motivation and capacity for continual learning was a key factor. The most effective learning took place in a randomised, unstructured, incremental and integrative fashion. Experiences associated with breadth, diversity, challenge and with reassessing perspectives and personal paradigms were of particular significance. It was found that an ordered, structured and purposive learning approach — as implied by most existing learning models — does not necessarily enhance the acquisition of the key skills; it may well impede their development.

This led to the theoretical conclusion that there are three modes of learning relevant to senior executives; instrumental learning ('learning to do'), systemic learning ('learning to be') and meta-learning ('learning to learn'). The implications are drawn out, with particular reference to the experiences and facilitative organisational environments needed for the development of systemic and meta-learning; the modes considered of most importance if senior executives are to be able to effectively respond to the organisational and environmental challenges they face.
CHAPTER 1

OBJECTIVES AND RATIONALE OF THE RESEARCH

Effective management and effective leadership play a central role in organisational success. This proposition is well researched and documented (Richards and Greenlaw 1972, Adair 1983).

While skilful management is a key ingredient of organisational effectiveness at any time, the structural and organisational challenges and changes occurring within Australia at the present time place even greater demands on the skills of Australian management. A great number of changes are facing Australian management, largely as a result of economic circumstances and Australia's quest to be competitive on the international economic scene. Reforms and pressures in industry and tariff policy, financial policy, industrial relations policy, and in environmental, technological and social justice areas all place great demands on management to be able to deal with rapid change, while at the same time seeking to raise productivity and effectiveness within their organisations.

In its report on consultations carried out in relation to the Commonwealth Government's discussion paper on industry training in Australia (DEET 1988), the Employment and Skills Formation Council noted that "... few submissions made suggestions on how management skills and competencies could be upgraded or improved" and "... it is surprising that prior to the discussion paper ... there had been no national debate about this issue [of management education]" (NBEET 1989, p. 45).

The growing significance attached to the concept of the 'learning organisation' is another indication of the significance of this subject area, both in academic and commercial terms. It has been described by some of the leading researchers in the field as "... the key to survival and development for the companies of the 1990s" (Pedlar et al. 1991, p. 3). This concept is a key part of the Code of Practice of the UK Management Charter
Initiative (1991) and is the subject of one of the most widely acclaimed management texts of recent years (Senge 1990). If organisations are to move towards providing an environment of continuous learning, it clearly is important that the skills and learning processes of senior executives are better understood.

While calls for more — or better — executive training and development are common, there is relatively little detail in the Australian context as to what the key skills are and how they can be best be developed. This research seeks to investigate this, and consequently shed light on what enhancements can be made to executive training and development by the introduction of appropriate strategies at industry and enterprise level.

There is a great diversity of view in management theory as to the core skills of managers. This is a consequence of the multi-dimensional nature of the management task. While theories and research into management competency are aimed at clarifying the matter, the concept of competency (which usually refers to knowledge, skills and abilities) is fraught with operational and semantic difficulties. The adoption of scientific analytical methods, as in the study by Boyatzis (1982) provides one significant approach to defining management and its core elements. However there has been significant academic criticism of the basic assumptions of such studies (Collin 1989). Indeed, the view taken by Collin is that the concept of competence must be grounded in concrete experience, recognise the whole person, the context and the interaction between the two. "It is clear" states Collin "that methodologies to explore this will be qualitative in nature, employing techniques which will allow open ended responses such as interviews, the collection of critical incidents or action learning" (ibid., p. 24).

There is a growing body of research in relation to the development of management capacities which seems to indicate that increased work effectiveness can best be achieved by participative/action centred learning approaches (Bennett 1984, Margerison 1984, Mumford 1988, McCall et al. 1988). In this context, the theories developed by Kolb (1984) and elaborated by Honey and Mumford (1986) provide a base for testing out, in the Australian context, how managers learn from experience.
In summary, analysis of the issues involved in raising the standards of management — or seeking to bring about management excellence — requires an understanding of:

- the various skills or competencies which, individually or in combination, contribute to a high standard of management practice

- the processes through which these skills or competencies are acquired or developed in practice

- the differences, if any, between managers in the private and public sectors and large and small organisations in terms of the type of skills or the method of their development.

This study sought to address these issues, with a particular focus on the first two. It also aimed to determine the implications for management development programs, particularly at enterprise level. The specific research objectives were as follows:

1. To develop a taxonomy of core skills relevant and appropriate to senior executives in the current Australian environment based on a review of relevant research.

2. To test the validity of the taxonomy and modify it, if indicated, following field research.

3. To determine the methods used by a sample of Chief Executives to develop or acquire the core skills.

4. To identify the theoretical and practical implications for executive development.

The following central elements were included in the study:

a) An intensive review of the literature with particular emphasis on drawing out the dominant management skills identified by
theorists from various management 'schools'. The concept of 'skill' was used in this study in preference to 'competency' with the aim of providing a more realistic and operationally definable variable, thus reducing the scope for confusion.

b) Arising from this review, the development of a skill taxonomy to provide a basis for testing out (and possible modification) with a sample of Australian Chief Executive Officers.

c) The development of a written questionnaire, forwarded to the respondents with the taxonomy, to identify their perceptions of critical contingent skills and their correlates, and the significance of various learning pathways. A Learning Style Questionnaire (LSQ) was also administered, in order to enable subsequent analysis of learning style preferences and their possible relationship with skill development pathways.

d) After the above questionnaires were completed and returned to the researcher, depth interviews were conducted to explore more fully the perceived significance of the key skills identified and to explore the learning pathways. A number of other areas were also explored during the interviews, to build up an understanding of the context within which the CEOs were operating and the impact this may have had on critical skills and their development. Action research was a key methodology of the research, to enable the context of management action and the contingencies facing a particular manager at a particular time to be taken into account.

e) The interviews were fully transcribed, a coding system developed, and a rigorous qualitative data analysis process was undertaken. Both qualitative and quantitative analysis techniques were used to analyse and interpret the questionnaires.

A total of 17 Chief Executives were included in the study. Respondents were drawn from some of Australia's largest public and private sector organisations, as well as from a number of smaller ones. Males and females were included in roughly equal numbers. There was also
representation from various States.

The data provided a breadth and depth of material from which it became possible to develop a grounded theory. The data analysis and interpretation methodology developed by Glaser (1978) and elaborated by Strauss and Corbin (1990) was influential in this respect.

This study is of considerable significance in the current Australian context. A very large amount of money is spent on management training and development in Australia, notwithstanding the fact that the evaluation of the effectiveness of various management development approaches is limited.

Since this research commenced, the Australian Government has established a top level task force to advise on measures to strengthen the skills of Australian managers. Funding of $6m over three years was allocated for the development of a strategy. The significance of the subject is exemplified by the relevant statement, which declared: "The Government's decision recognises the pivotal role of leadership and skilled management in improving enterprise productivity, innovation and Australia's international competitiveness" (Beazley 1992).

Hence, research which helps to facilitate the identification of key skills of top managers and which seeks to draw out possible efficiencies in how they can be acquired has obvious practical benefits. From a theoretical point of view, it is seen as important that the prevailing models of management development are carefully tested to determine their relevance and validity, with a view to possible elaboration or variation. This research is intended to fulfil these practical and theoretical aims.
CHAPTER 2

REVIEW OF LITERATURE

2.1 Rationale and Structure of Chapter

While innumerable books and articles have been written on the subject of what managers do (and how they can do it better) the majority are unsupported by systematic evidence (Mintzberg 1973). Yet many of the writers and analysts of the past have had a profound impact on the role expectations of managers — both positive and negative.

An important backdrop to this study was a review of the major trends in thinking and research relating to the roles and responsibilities of managers. The purpose was to identify the skills and attributes perceived to be important, to review the type and nature of skill classification systems that have been developed and to investigate the extent and nature of research into the developmental processes associated with management skill acquisition.

The review, and this chapter, is divided into these three Sections. The first (2.2 below) examines various 'schools' of management, as they have developed from the disciplined approach of Frederick Taylor's 'Scientific Management' school to the contingency approaches of the 'Work Activity' school. The management skills explicitly or implicitly associated with the various schools will be identified. The second Section (2.3) focusses on the research and analysis dealing specifically with the nature of management skills and qualities. Emphasis will be placed on the classification systems adopted by the researchers, as a foundation to determine whether a taxonomy can be identified for use (or adaptation) in this study.

The third Section (2.4) reviews the literature concerning the development of executive skills. Inevitably, this Section also deals with research into the principles of adult learning generally, as well as focussing on findings related to management development processes. Some of the relevant
implications of previous research are then drawn out (Section 2.5).

2.2 Roles, Responsibilities and Skills of Managers: Theories and Schools of Thought

A review of the major 'schools' of management thought, with a view to identifying the skills and attributes needed by managers, is an important basis to this study. The type of skills regarded as relevant and desirable reflects the prevailing view of management of the time.

While it is recognised that, to some extent, groupings into 'schools' is somewhat arbitrary and oversimplistic, broadly similar ideas and conceptions can be ascribed to each of the major 'schools'.

Scientific Management

Frederick Winslow Taylor (1856-1917), the founder of this movement, believed the inefficiencies and negative attitudes he witnessed — first as a labourer, then an engineer and finally a consultant — could be overcome (Taylor 1947, Pugh et al. 1983). The method he developed involved a systematic study of work to discover the most efficient methods of performing the job, and then a systematic study of management, leading to the most efficient methods of controlling the workers.

To achieve an increase in efficiency, Taylor (1947) put forward what he regarded as four great underlying principles of management:

a) The development of a true science of work. Taylor referred to 'science' as systematic observation and measurement. So both 'boss and worker' are clear as to what is expected, and to determine what constitutes a fair day's work, scientific analysts should establish a 'large, daily task', as the amount to be done by a suitable worker under optimum conditions.

b) The scientific selection and progressive development of workers. As well as scientifically selecting workers, they must be systematically trained to be 'first-class.' Taylor believed it was the
responsibility of management to develop workers and offer them opportunities for advancement.

c) The bringing together of the science of work and the scientifically selected and trained workers. This process allegedly causes the 'mental revolution' in management. Taylor maintained the major resistance to scientific management comes from the management side.

d) The constant and intimate cooperation of management and workers. This close cooperation, Taylor asserted, means the opportunities for conflict are almost eliminated. Management takes over all the work for which it is better fitted than the workers. Managers continually demonstrate that their decisions are subject to the same disciplines as the workers, namely the scientific study of the work.

Taylor's insistence on minimum specialisation and the removal of all extraneous elements was, in his view, fundamental to managers' jobs as well as workers'.

From the viewpoint of skills, it is significant that Taylor separated the planning on how the work was to be done from the actual performance of the job by employees (Richards & Greenlaw 1972). Other management skills implicit in Taylor's approach involve research and analysis into the nature of the variables bearing upon problems; standardisation (applying trained workers to all applicable jobs); training workers in the best methods and seeking cooperation with them.

Classical or Functional School

Developments in European management thinking concentrated on upper management levels (ibid.). This is in contrast to the management movement in the USA in the early part of the twentieth century which focussed on managerial problems at the shop floor level.

Henri Fayol (1949) was the first to put forward a theoretical analysis of
managerial activities (Pugh et al. 1983) and is most associated with the classical school. His work was not based on detailed research but on his observations and experience as a manager in a mining company. The central focus of the classical school was on what the manager should do — for example, principles and advice regarding the desirable span of control.

Recent actual analysis of the work of managers indicates the difficulties of determining which functions are being performed at any point of time (Mintzberg 1973). Despite the lack of a research base for Fayol's theory, "It continues to dominate the writings on managerial work to the present day" (ibid., p. 9). However, from the point of view of the present study little of use can be found in the writings of the classical school in terms of identifying the actual behaviours and skills needed by managers for effective performance.

**Bureaucracy School**

Unlike the two previous 'schools' which place the emphasis on the roles of managers, the work of the sociologist Max Weber (1947) emphasised the structure of organisations and the authority relations existing within them.

Weber distinguished between organisational styles according to the way in which authority is legitimised. In particular, he differentiated between 'charismatic', 'traditional' and 'rational-legal' organisational types. In the charismatic type, the basis of authority is found in the personal qualities and inspiration of the leader. Hence, there is a built-in instability in this type of organisation, as the question of succession inevitably arises. The basis of order and authority in 'traditional' organisations are precedent and usage. The leader's authority is fixed by custom.

Weber saw the 'rational-legal' type as the dominant style of modern society. The manager's role flows from the rational management structure set up to deal with administering large organisations. Action taken occurs according to a defined system of procedures and rules. The system is designed to be rational as decisions are not made on the basis of personal desires or emotions.
The ideal bureaucratic structure calls for special skills to be developed to meet the needs of the job rather than the individual. Given the high degree of specialisation in skills and tasks, the consequence is that the full potential of individuals is said to be rarely utilised (Richards & Greenlaw 1972).

Most of the studies of the formal, structural characterisation of organisations have started from the work of Weber. His work shares with Fayol a view that the manager’s role can be codified, based on rationality and calls for skills of analysis, coordination and control — although in Weber’s case the coordination and control flow from the hierarchy of authority and the system of rules, and not from the skills and attributes of the manager.

**Human Relations School**

This movement is normally traced back to a series of experiments carried out at the Hawthorne Plant of the Western Electric Company in the 1920’s (Mayo 1933). A number of controlled experiments were undertaken into the effect of certain physical conditions upon worker output. Increases in worker output occurred when both positive and negative changes were made to the environment. The explanation eventually given was that the workers’ output was related to increased work satisfaction, which in turn was related to greater freedom in their work environment, greater control over pace-setting and improved communication systems with their supervisors.

From the point of view of this study, the significance of the Human Relations school is that it highlights the place of interpersonal skills and those associated with recognising and enhancing informal organisational arrangements. The manager’s role, Mayo considered, was to provide the basis for group affiliation. His work also emphasised the importance of the communication system (particularly upwards), and the general significance of the workers’ psychological and sociological needs and realities. Thus, the effective manager needs to demonstrate effective skills in communication, empathy and teambuilding.
Behavioural Science

Following on from the Human Relations school, a number of psychologists and sociologists undertook research to analyse the functioning of management systems. The research was typically well grounded in social science theory, and relied on both case studies and survey approaches. The importance of a multi-disciplinary orientation to management also became evident.

A common theme of these researchers was to stress the importance of the human aspects of performance, and on building effective work groups with high achievement goals. For example, Likert (1961) distinguished four management systems ranging from System 1 (Authoritarian) to System 4 (Participative). The latter, he claimed, generally produce high productivity. Nevertheless, Likert recognized that management is always a relative process. To be effective and to communicate, a leader must always adapt his behaviour to take account of the people he leads. Sensitivity to the values and expectations of subordinates is a crucial leadership skill.

Douglas McGregor (1960) sought to explain human behaviour in organisations as being the product of managers' assumptions and expectations of people. His research led him to the view, as postulated by Fayol, that much management action is based on the need to direct and control staff because an assumption is made that people dislike work and will avoid it if possible ('Theory X'). Nevertheless McGregor believed that what he called Theory Y is far more appropriate; that self direction and self actualisation is a more profound motivation. Management skills implied by this theory are concerned with coaching, listening, sensitivity and teambuilding.

Blake & Mouton (1964) were psychologists who believed that managerial competence can be taught and can be learned. Their managerial grid has two dimensions; one dealing with concern for production and the other dealing with concern for people. Different points on the grid represent different management styles (from 'country club' 1,9 to 'task management' 9,1).
A contingency or situational approach to leadership and management (to be discussed below) is rejected strongly by Blake & Mouton. In their view a 9,9 style is always the best as it builds on long-term development and trust. Skills of *counselling, conflict resolution, team development* and *group goal setting* are implicit in this approach.

Argyris & Schon (1978) believed a low level of managerial interpersonal competence is the cause of many contradictions and inefficiencies in organisations. Their basic approach to giving managers skills in adopting more open and less defensive forms of behaviour is to bring out into the open the gap between what is said and done in a group and what is actually felt by the members. This is done in situations where managers are able to reduce their defensiveness. A distinction is made between managers' 'theory in use' and 'espoused theory'. Effective managers demonstrate greater *insight, awareness* and *sensitivity* to communication.

**Decision Theory School**

This school of thought, largely inaugurated by H.A. Simon (1960), maintains that it is the analysis of decision making which is the key to understanding management processes. Exponents of this school take the view that the resources of any organisation are limited, so that goal achievement is constrained; goals cannot automatically be achieved without conscious choices being taken of the resources to be committed to action; questions of who, what, where, and when must be resolved. Thus making these choices — i.e. the decision process — constitutes the prime responsibility of managers (Richards and Greenlaw 1972).

To reach these decisions, *analytical* skills (particularly skills of quantitative analysis and systems analysis) are seen as central. Others such as Streufert (1986) regard *multi-dimensional thinking* as a key skill; it is not 'what' is thought, but 'how' it is thought that is critical; this implies the ability to generate alternate conceptualisations (differentiation) of events, situations, actions and outcomes, to interrelate (integrate) these differentiated thoughts and to possess the flexible adaptability to apply differentiation and integration at the right time and in the right place.
In short, this school seeks to highlight the value and role of quantitative approaches in the decision process (Richards & Greenlaw 1972). For instance, planning decisions and those related to evaluation and control are seen as amenable to quantitative analysis and the development of a systems approach.

Simon (1960) and subsequent researchers recognise that the classical model of 'economic man' is unrealistic; that there is a large non-rational, emotional and unconscious element in man's thinking and behaviour. Cyert & March (1963) also recognise that many management decisions are not rational. They consider it is the task of management to structure the environment in such a way that the individual's decisions are as close to rationality as is practicable. Efforts are made to reduce the complexity of decision making as far as possible so that uncertainty is avoided.

In deciding when to launch the Ground War in Kuwait, General Norman Schwarzkof summed up, rather graphically, the basis of his 'management' decision making. "In the end the decision will have to be at least partly intuitive. It will be a compendium of actual results, measurable results, estimated results, anecdotal reports and gut feel ..." (The Australian, 7 Feb 1991, p. 6).

Leadership School

Much of the work in the 'Leadership' school interrelates directly with the 'Behavioural Science' school. However, the focus is more restricted; the attention is given to the personality traits or managerial styles that lead a manager to effective leadership performance.

Early approaches to leadership can be defined as the 'trait' or 'quality' school. The prevailing view was that leadership was an 'in-bred superiority' — i.e. you were either born with it or not (Adair 1983). Various lists of qualities and traits have been compiled to define leadership. The lists are large and vary considerably. The notion of an inborn set of qualities, if validated, would indicate that training and development processes to improve and develop leadership skills are largely irrelevant. Fiedler (1967) maintains that to seek to change the leader's style is
unrealistic, and that leadership training which attempts to do this (e.g. increase openness or employee-centredness) is ineffective as the leadership style is too stable. While there is some evidence to suggest that some characteristics, such as interpersonal behaviour, have a high degree of internal stability, planned interventions and development opportunities can be effective in altering behaviour patterns (Howard & Bray 1988).

As discussed above, the Human Relations school and related developments in the 1950's and early 1960's stressed the importance of the leader adopting a particular and consistent participative and people oriented style in all situations (McGregor 1960, Blake & Mouton 1964). In contrast, theories of leader effectiveness adopted a contingency approach. Fiedler (1967), for example, developed a descriptive approach to leadership according to those who were relationship-motivated and those who were task-motivated. His research showed that both types of styles perform well under some conditions and poorly under others. Thus, it is not possible to have intrinsically 'good' or 'poor' leaders — the situation in which the leader functions must be examined. The implication for skills development is that training must be undertaken with knowledge of leadership style in relation to the situation, otherwise there will be little effect.

More recently, the work of Hersey and Blanchard (1982) has re-affirmed the significance of 'situational leadership'. They have developed a well codified framework of situational leadership, in which leadership is seen as an influence process with different combinations of directive and supportive behaviour. While many variables can impact on which leadership style is appropriate, they found the most important determinant of the amount of directional support that a leader should provide depends on the development level of the follower on a specific task or objective. This approach stresses the training function in the manager's job as being of great significance.

Some define leadership as leaders making followers do what followers would not otherwise do, or as leaders making followers do what the leaders want them to do. Burns (1978) defines leadership as leaders inducing followers to act for certain goals that represent the values and the motivations — the wants and needs, the aspirations and expectations — of
both leaders and followers. While Burns, who is a political scientist, tended to emphasise the political rather than executive arena, his insights are of interest in clarifying the concept of leadership.

The crucial variable in leadership, in Burns' view, is purpose. Burns identified two basic types of leadership: the transactional and the transforming. The former occurs when one person takes the initiative in making contact with others to exchange valued things — economic, political or psychological. There is no enduring or 'higher' purpose. Transforming leadership "...occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (ibid., p. 20).

Transforming leadership is, essentially, related to the way leaders can shape, alter, and elevate the motives, values and goals of followers through the teaching role of leadership. The premise is that, whatever separate interests people may hold, they are united in the pursuit of higher goals.

Burns canvasses psychological, social, political and moral issues in his search for a general theory of leadership. He highlights the complexities of the moral, ethical and interpersonal issues that are raised and describes transforming leadership as "...ultimately ... moral in that it raises the level of human conduct and ethical aspiration of both leader and led, and thus it has a transforming effect on both" (ibid., p. 20). In describing the behaviour of leaders, while he does not explicitly categorise or seek to identify their skills or capacities, certain themes emerge which point towards his view of the critical leadership competencies and skills. These are summarised as follows:

- leaders recognise and strengthen the motives and goals in potential followers. This involves bringing to consciousness the followers' sense of their own needs, values and purposes

- unfulfilled esteem needs (both self esteem and esteem by others) is the most potent source of political motivation

- the capacity to learn from others and from the environment is "...
the most marked characteristic of self-actualizers as potential leaders" (ibid., p. 117). This calls for an ability to listen, to judge others with affection and discrimination, and to have "... enough autonomy to be creative without rejecting the internal influences that make for growth and relevance" (ibid., p. 117)

- executive leaders must estimate accurately the motivation of members of their inner circle of subordinates and that of rival leaders. Granting (and withdrawing) respect, recognition and affection are important motivation points

- leader effectiveness is a product of their skills in activating resources as well as the relevant value of those resources. "They must be able to communicate in a way which is drawn not from manuals on how to influence people, but from authentic sources of individual character and genuine human need." (ibid., p. 374).

Drawing from this, the key skills or attributes implied by Burns are:

- sensitivity to subordinates' motivation and needs

- communication and awareness raising skills

- learning skills and motivation to learn.

In a widely acclaimed analysis of the 'art and practice of the learning organisation', Senge (1990) claims the traditional view of leaders — as special people who set the direction, make the key decisions and energise the troops — is deeply rooted in an individualistic and non-systemic world view. The idea of leaders as charismatic heroes who 'rise to the fore' in times of crisis, reinforces a focus on short-term events rather than on systemic forces and collective learning.

Senge's thesis, supported by others who have focussed on the learning organisation (e.g. Pedlar et al. 1991) is that the leader's role centres on subtler tasks: "... in a learning organisation leaders are designers, stewards and teachers. They are responsible for building organisations where people
continually expand their capabilities to understand complexity, clarify vision and improve shared mental models. That is, they are responsible for learning" (Senge 1990, p. 340).

Following this line of thinking, the core roles of the leader, as identified by Senge in his research and analysis (the former limited, the latter impressive) are:

a) The leader as designer – developing and building shared vision, values and purpose, enhancing integration and developing insights into current reality as well as a picture of the future. In essence the leader's task is designing learning processes requiring skills in mentoring, coaching and helping others to learn.

b) The leader as steward. The leader not only has a clear sense of vision, but this vision is placed in a broader context of 'where we've come from and where we're headed'. In this sense the organisation is seen as a vehicle for bringing learning and change into society.

c) The leader as teacher. This is seen as the key focus in learning organisations; helping people focus not just on current reality and events (the 'normal' approach, which is why most organisations are predominantly reactive) but primarily on the longer term, the broader purpose and the systemic structure.

The skills cited by Senge, which he claims develop as a result of a lifetime of effort, are: conceptual and communication skills; capacity to reflect on personal values and to align personal behaviour with values; to learn how to listen and to appreciate others' ideas.

His summary is of relevance to this thesis. "It is impossible to reduce natural leadership to a set of skills or competencies. Ultimately people follow people who believe in something and have the abilities to achieve results in the service of those beliefs." (ibid., p. 360) This is a reasonable statement. However it still begs the question as to what those 'abilities' actually are.
The Work Activity School

This last school starts at the other extreme from the classical school. Its primary thrust is to investigate, through inductive research, what managers actually do, rather than what they 'ought' to do. Observational and diary methods have been used to lead to statements on the roles of managers and their characteristics. The empirical research provides a sound base to determine the actual work of managers and the skills needed. The leading exponent of this school, Mintzberg (1973), suggests that the wide variety and fragmentary nature of managers' activities can be grouped into three areas (interpersonal, informational and decisional), which cover ten roles. An exploration of these roles and associated skills is undertaken in Section 2.3.

Mintzberg also takes a contingent view of management. What a manager actually does is contingent upon the person that he is, his situation, his job and the general environment. Unlike many of the earlier writers on management, Mintzberg's ideas and work on managers, decisions and structures, together underline the unstructured nature and the complexity of much that happens in organisations.

2.3 Key Qualities and Skills of Managers

Management competency is defined by Boyatzis (1982, p. 33) as "... any characteristic of a manager that enables him/her to perform successfully in a job". Thus it embraces qualities, traits, knowledge, attitudes as well as skills. Skill is a more operational concept, directly related to behaviour. In this context skill is defined as "... specific behaviour that results in effective performance" (Mintzberg 1973, p. 194). If common (and contingent) managerial skills can be identified (instead of qualities and traits which tend to be inherent) our understanding of management behaviour is enhanced, as it becomes possible to more readily identify methods of developing the relevant skills. This is one of the goals of this research.

While there are indications — often not made particularly explicit — of the management skills and qualities associated with the various theories and management schools, these indications are largely suppositions drawn
from the various theories.

This Section focusses on research designed to investigate directly the qualities and skills of managers. The review will seek to distinguish between management 'qualities and traits' on the one hand, and competencies and specific skills on the other.

There are broadly two categories of research reviewed in this Section. Firstly, there is research which could be termed 'desk research'. In this, the relevant literature was surveyed and common themes or theoretical models were developed to identify a classification system to draw together management competencies or skills. Secondly, there is empirical field research which seeks to identify key management skills by questionnaire, interview, observation or a combination of these three.

The following review will group the research into these two categories. Within each, the relevant research will be discussed chronologically.

Theoretical Approaches

Osmond (1973) evaluated the literature on the tasks, roles and skills of top management. As with many analysts, he accepted the same basic role structure portrayed by Fayol (1949) and referred to the tasks of the manager as 'planning, organising, directing and controlling'. However, in his conclusions he extended this structure and stressed the significance of the 'uniquely exposed position' in which the top manager is placed, and the fact that his decisions are intrinsically concerned with goals, values, standards, unquantified judgements, and his assessments of power and people. In short, to some extent he takes a step away from the rational, objective approach of many other writers.

In Osmond's view, in any attempt to be specific about top management skills, the immediate problems are those of meaning and of presentation. He asserts that a review of the literature has shown that there is most frequent emphasis upon the following (in approximate order):
Balancing (Resources, time, goals, skills etc.)
Integrating
Setting priorities
Setting and developing standards
Conceptualising
Leading
Matching oneself to one’s job
Delegating; risking oneself.

Osmond concedes that these 'skills' have a 'portmanteau quality'. Indeed they fail to provide us with an operational view of what precise capacities are called for. Yet Osmond believes that "Chief Executives fail, not because they make mistakes but because they do not learn from them" (1973, p. 84). If we are to learn from mistakes, the precise capacities/skills need to be better articulated. This emphasis on learning is a theme which pervades much of the literature, but frequently receives little emphasis.

The work of Ansoff and Brandenberg (1973) is predicated on two insights that, it is claimed, arise from efforts to find a common description of management. The first of these insights is that management is a problem solving activity and, second, that this activity is a complex information process. Flowing from this, Ansoff and Brandenberg have developed a descriptive role of a manager which is based on a connected chain of processes.

Importantly, for the purposes of this paper, each subcycle delineates a distinctive management role which calls for different knowledge, skills and personality characteristics. The key roles, and associated behavioural descriptions can be summarised as follows:

**Implementation Role** ('Leader').
This puts a premium on leadership qualities. The skills involve:
Communication
Motivation
Identifying "winners"
Vision
Personal charisma.
**Control Role** ('Administrator')
Analysis
Strategic planning
Incisiveness and objectivity
Methodical and logical approach
Isolating strategic variables
Inward oriented
Convergent.

**Extrapolative Role** ('Planner')
Analysis
Perceiving and establishing complex relationships
Designing and maintaining efficient decision making systems.

**Entrepreneurial** ('Entrepreneur')
'Outward oriented' towards changing the form
Imaginative creator of new possibilities
Risk taker
Divergent.

Not all needs can (typically) be met simultaneously. Ansoff asserts that historical evidence suggests a 'man for the moment' explanation. A process of natural selection has tended to bring to the top the role most critical to a particular phase in an organisation's life.

A review of the literature, reported in an innovative way by Ruderman (1987) led her to the development of a model which seeks to define the profile of the successful executive. It shows the relationship between the person, the environment, learning experiences and key behaviours. The specific model is shown at Figure 2.1 (see p. 23).

It should be noted that there is, in fact, very little identification of key skills in this model, although they are clearly implied.
FIGURE 2.1
Profile of Successful Executive
Pye (1988) argues that the use of competencies as a way of describing effective management is too static and proceduralised. Indeed, her approach, drawing on interviews with managers in a qualitative research study, is based on a 'tacit dimension'. She quotes (anecdotal) evidence to illustrate "... some sort of intuitive process by which a manager's audience can assess his/her performance and ... make some evaluation of his/her competence" (ibid., p. 81). She asserts (while claiming to 'establish') that the idea of a competent managerial performance is more than a summation of competencies, thus implying some interactive dimension. She also argues that the same case can be argued for contingency-based approaches; that successful performance is more than a mere summation of contingencies.

Pedlar, Burgoyne and Boydell (1978), in reaching their view as to the qualities and skills of successful managers, group them as follows:

**Basic Knowledge and Information**
Command of basic facts and an understanding of the relevant areas of work.

**Skills and Attributes**
Continuing sensitivity to events
Analytical/decision making skills
Social (interpersonal) skills and abilities
Emotional resilience
Proactivity (responding purposefully to events).

**Meta-Qualities**
Creativity
Mental agility
Self knowledge
Balanced learning habits and skills.

These elements include both personal (innate) qualities as well as those that can be learnt through formal or informal means. The latter are, of course, of particular relevance to this study.
Pedlar and his colleagues place particular emphasis on the meta-qualities; so called as they represent the capacity to develop new skills and approaches for dealing with new situations. They might be related to the 'double-loop' learning approach propounded by Argyris (1982) and discussed more fully in Section 2.4. These qualities are seen as particularly relevant in terms of managing in turbulent conditions. They have been described by Bottger et al. (1988, pp. 12.7-12.9) more fully as follows:

*Creativity* is the ability to generate new responses to situations and to have the breadth of insight to recognise and take up useful new approaches.

*Mental agility.* Although related to general intelligence, this concept includes the ability to grasp problems quickly, to think of several things at once, to switch rapidly from one problem to another, to see quickly the whole situation and to 'think on one's feet'.

Successful managers are capable of abstract thinking, as well as concrete practical thought. They are able to relate concrete ideas to abstract ones (and vice versa) relatively quickly. This ability, sometimes known as a 'helicopter mind', enables managers to generate theories from practice, and to develop practical ideas from theory.

The presence or absence of *balanced learning habits and skills* plays a significant part in the degree to which managers are successful. Successful managers use a number of different learning processes, including formal and informal input, generating personal meaning from experiences and reflection (a process of analysing and reorganising pre-existing experiences and ideas). *Learning to learn* is a phrase that encapsulates this process.

*Self-knowledge.* The managers' behaviour is affected by their own view of their jobs and roles, goals, values, feelings, strengths and weaknesses etc. Successful managers have skills in introspection, in order to understand and control or moderate these influences.
Sharpe (1989) developed a taxonomy based on research into detailed Australian company histories and appraisals of senior managers. This categorisation, according to Sharpe, enabled the identification of some of the common features in the approaches of those who have been successful at senior executive levels.

The profile is divided into two categories as follows:

**TANGIBLES**
- Autonomy and initiative
- Decision making efficiency
- Willingness to take risks
- Sensitivity to others
- Drive and productivity.

**INTANGIBLES**
- Builds lasting value
- Creates a vision
- Identifies success
- Self awareness
- Selects champions.

Some of the terms used in this taxonomy are qualities or traits, rather than specific skills. Others, such as 'decision making efficiency', are behaviourally based and lend themselves more readily to the opportunity to identify development pathways.

Baker (1989) called for the application of 'new' competencies, reflecting a 'new' style of leadership which is in some sense a response to changes in society. Drawing on Michael (1982) the new competencies he cites are:

- Acknowledging and sharing uncertainty
- Embracing error (i.e. accepting error is an element in all attempts at real achievement)
- Responding to the future
- Becoming interpersonally competent
- Gaining self-knowledge.

While of relevance to one of the key tenets of the present study (the need to respond to current needs and realities), Baker's listing fails to provide a sufficiently strong behavioural basis; i.e. the specific skills (and therefore the learning pathways) are still elusive.
Empirical Research

Based on detailed observations into the work that managers actually do, Mintzberg (1973) developed a framework for a contingency theory of managerial work. According to this framework, the work of a particular manager at a particular time is determined by the influence that four sets of variables have on the role requirements and work characteristics (and therefore the skills called for); the environment, the job, the person and specific situational variables.

His research led him to the view that there are ten working roles to be found in the work of a manager. Arising from these, he developed three broad categories to define managerial roles and activities — those concerned primarily with interpersonal relationships, those that deal primarily with information processing, and those that involve the making of significant decisions.

Arising from these roles, a set of managerial skills is postulated by Mintzberg. The key skills are:

- Peer skills
- Leadership skills
- Conflict-resolution skills
- Information-processing skills
- Decision making under ambiguity
- Resource allocation skills
- Entrepreneurial skills
- Skills of introspection.

The nature of Mintzberg's research, based as it is on observational techniques, together with the fact that subsequent studies have verified his conclusions, suggests that considerable weight should be given to these findings in the context of the current research.

An example of an attempt to be more precise in defining competencies and to draw out key skills is found in Stewart & Stewart (1976) who established
nine characteristics of the 'generally effective manager'. These were:

- Self management
- Group decision making
- Management of subordinates
- Social skills
- Specialist skills and knowledge
- Individual decision making
- Work relations
- Attitudes to change
- Communication skills.

While closer than a description of broad 'traits', this type of categorisation also fails to fully indicate or operationalise the underlying skills which lead to these characteristics or behaviours.

Margerison (1980) investigated the career paths and patterns of over 200 Chief Executives in the UK to discover the major issues of importance in their rise to senior management positions. This study is probably of more relevance in terms of its implications for management development, and will be discussed later in that regard. However, the managers regarded the following characteristics as of most significance:

- Ability to work with a wide variety of people
- Ability to 'do deals' and negotiate
- Ability to change managerial style to suit the occasion
- High need for achievement
- Appropriate risk taking
- Creativity.

Unlike the approaches which focus on qualities and traits, this formulation is more behaviourally based, and would enable the development of appropriate learning opportunities.

Boyatzis (1982) has undertaken probably the most extensive research into management competencies and skills. He stresses the situational factors in effective job performance, which he defines as "... the attainment of specific results (i.e. outcomes) required by the job through specific actions while maintaining or being consistent with policies, procedures and conditions of the organisational environment" (ibid., p. 12). In short, effective performance will occur when all three of the critical components are consistent or fit. They are:
The individual's competencies
The job demands
The organisational environment.

He undertook a study of over 2000 managers in 41 different jobs in 12 organisations, to determine which characteristics of managers are related to effective performance. Boyatzis concluded that a competency model should have two dimensions — one to describe the type of competencies (for example, 'planning and influencing') and one to describe the level of each competency. As well as distinguishing conceptually between different levels and types of competencies, he regards roles and traits (e.g. 'risk orientation') as different from skills. However, both are subsumed under the heading of 'competency'.

As a result of his empirical research, 12 'competencies' and seven 'threshold competencies' were found. Five clusters were developed. A summary of the clusters, and the skill competencies associated with each, is shown in Table 2.1.
<table>
<thead>
<tr>
<th>CLUSTER</th>
<th>SKILL</th>
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<tbody>
<tr>
<td>Goal and Action Management</td>
<td>Diagnostic use of concepts</td>
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<td></td>
<td>Efficiency</td>
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<tr>
<td></td>
<td>Orientation</td>
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<td></td>
<td>Proactivity</td>
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<td></td>
<td>Concern with impact</td>
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<tr>
<td>Leadership</td>
<td>Conceptualisation</td>
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<td></td>
<td>Logical thought</td>
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<td></td>
<td>Self confidence</td>
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<tr>
<td></td>
<td>Use of oral presentations</td>
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<tr>
<td>Human Resource Management</td>
<td>Managing group process</td>
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<td></td>
<td>Accurate self-assessment</td>
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<td></td>
<td>Positive self regard</td>
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<tr>
<td>Directing Subordinates</td>
<td>Developing others</td>
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<tr>
<td></td>
<td>Spontaneity</td>
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<tr>
<td></td>
<td>Use of unilateral power</td>
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<tr>
<td>Objectivity</td>
<td>Focus on others</td>
</tr>
<tr>
<td>Specialised Knowledge</td>
<td></td>
</tr>
</tbody>
</table>
Boyatzis cautioned against generalising on the basis of the results, as the sample was not seen as fully representative. Nevertheless he found that different environments (including public compared to private sector organisations) demanded different competencies. The major weakness is that job demands were not empirically examined in the study; it was based on an initial (hypothesised) list of competencies. Boyatzis sought to relate his clusters to the 'functional requirements' of a manager's job, and to do this reverted to the five basic functions of planning, organising, controlling, motivating and coordinating, i.e. the 'Functional' or 'Classical' school, which, as shown earlier, has little empirical support.

In short, in seeking to develop a generic model of management, Boyatzis is very heavily influenced by an initial hypothesis built around qualities/traits, and hence the 'skills' identified are not precisely grounded in the research.

While many lists of management competencies are extremely broad and frequently vaguely defined, others are very specific. Such an approach is exemplified by the work of Streufert et al. (1986) who believes that how executives think is the principal determinant of success or failure. The main characteristics of successful executives are based on multidimensional thinking, in particular:

*Differentiation*; the ability to develop multiple, alternate interpretations of events, facts and relationships.

*Integration*; the differentiated thoughts are seen in a new light and interrelated.

*Adaptability*; styles shift from a strategic thinking pattern to a decisive pattern and back again, so that one or the other of the above approaches is applied in the right place at the right time.

Streufert has developed computer assisted simulations to measure executive multi-dimensionality, as a base for training. The effectiveness of this seems capable of very exact measurement. "By going through our training program, ... executives increase their capacity for planning, on
average, by 37%; their competent use of strategy by 38% and their breadth of strategic overview by a considerable 87%." (Streufert 1986, p. 9)

The contingent nature of the managers' roles and responsibilities is a recurring theme in the literature. As their roles change, so do the skills they need. Cockerill (1989) reported on a four year research program to identify managerial behaviour resulting in outstanding performance under dynamic and turbulent conditions. He used the 11 'high performance managerial competencies' developed by Schroder (1989) and showed that each could be reliably measured. Research was done to test the hypothesis that these competencies were related strongly to performance in turbulent environments. More recently the competencies were used in NatWest as a basis for management development through action learning. This will be described later in this chapter.

The 11 competencies are:

- Information search
- Concept formation
- Conceptual-flexibility
- Interpersonal search
- Managing interaction
- Developmental orientation
- Impact
- Self-confidence
- Presentation
- Productive orientation
- Achievement orientation.

Situational and contingency approaches to management skills reach full expression in their application to individual companies such as BP (Greatrex & Phillips 1989). Key behavioural patterns associated with effective and ineffective managerial performance were identified and classified. This analysis resulted in 11 competencies grouped in four clusters:
Achievement Orientation
Personal drive
Organisational drive
Impact
Communication.

People Orientation
Awareness of others
Team management
Persuasiveness.

Judgement
Analytical power
Strategic thinking
Commercial judgements.

Situational Flexibility
Adaptive Orientation.

These competencies were developed using various methodologies such as critical incident and repertory grid, where a sample (unspecified) of senior managers (predominantly British and male) identified which key behaviours they associated with effective and ineffective managerial performance. This approach enabled the development of competencies which reflected the corporate culture and values of the organisation.

To further develop and validate such a competency design, and to enable development through various jobs reflecting strengths or needs of individuals, the authors recognised that research would need to be done to identify which jobs demanded particular competencies. For example, flexible, adaptive and organic organisations would require managers with different skills as compared with mechanistic and predictable bureaucratic organisations (Kanter 1983).

A similar approach was adopted in Westpac, in Australia (Saul 1989). Like other financial organisations, Westpac was faced with the challenge of adapting to an increasingly competitive environment. Effective
performance was no longer equated with following the rules, avoiding errors and treating customers in a fixed and rigid fashion. Achieving goals, responding flexibly and taking risks became the dominant values. In line with these changes qualitatively different skills became called for. As a result research was undertaken to develop a revised skills assessment process. A new competency-based system was developed, which focussed on observed behaviours that discriminated between high and average performance.

A sophisticated research methodology was pursued, involving repertory grid analysis, factor analysis and item scaling techniques. The seven scales (or competencies) identified were:

- Task orientation
- People orientation
- External orientation
- Personal commitment
- Entrepreneurship
- Social presence
- Bureaucratic organisation.

Specific behaviours, from which skills could be identified, were associated with each of these competencies. Unfortunately these could not be reported in the literature as they were 'proprietary information'. Nevertheless, it appears that the competency approach facilitated performance improvement by indicating to managers and their superiors what should be done to help improve job success.

Horton's (1989) approach seeks to make operational the qualities or skills needed and is therefore also very relevant to the present study. He interviewed 16 successful Chief Executives to discuss the inherent characteristics that enabled them to succeed. As with other lists in this review, there is a mix of skills and qualities. They are:

**Perception of Reality**
A sure grasp of what is happening and its significance
Ability to acquire and select relevant information
'Feeling' as important as 'knowing'
'Helicopter' approach — an ability to stand to the side and synthesise
Use more right brain than managers at lower levels
Active objective listening.

**Team Building Skills**
Uncommon ability to judge talent
Positive regard for team members
Capacity to communicate company's mission
Encourage open and honest communication
Willingness to remove deficient team members.

**Decisiveness Informed by Balanced Judgement**
Strategic focus; looking for ways to reach new directions
Creating a vision to guide the organisation
Tenacity; determination to prevail through thick and thin
Integrity; the basis of leadership.

Very little large scale research has been undertaken in these areas in relation to the private sector in Australia. In the study of management development in Australian private enterprises (NBEET 1990), the professional development of CEOs and their 'route to the top' was studied. The primary aim of the study was to assess the current level of management skills and of management education. Two thousand senior managers in 870 Australian business units were included in the survey. Like many other studies reported here, the skills and competencies identified as important were a product of self-evaluation (from a listing provided by the researchers) rather than through observation or depth interviews.

The results showed that irrespective of the type of organisation with which they were associated, the skills and qualities regarded as of most significance by the managers were, first and foremost, the ability to communicate and the ability to motivate. Other areas of importance were:
Leadership and team building  
Developing subordinates  
Setting objectives and priorities  
Managing time  
Interpersonal relationships  
Analysing complex decisions

Delegating work  
Customer orientation  
Planning work flows  
Innovation and continued learning  
Quality output and performance.

This list is not helpful in identifying the specific behaviours or skills likely to lead to effectiveness. It is, rather, primarily a list of qualities or functions. It is important, as Boyatzis (1982) points out, to distinguish skills required in a job from the tasks and functions which are performed. Thus, for example, 'delegating work' or 'developing staff' are aspects of the job, and are not aspects of the individual's capabilities, competencies or skills.

Public Sector Focus

A reasonably large amount of research has been undertaken into competencies and skills of senior managers in the Public Service. In Canada a review of public service-wide training needs of managers was conducted involving the development of a 'profile' of the generic knowledge, skills and abilities required by all levels of managers (Hickling 1989). Focus groups were used to gather data from 109 managers, leading to the modification of a pre-determined analytical matrix.

The skills most frequently identified, in order, were:

People management skills  
Human relations skills  
Leadership and vision  
Management art and science  
Communication skills.

Each of these skills is elaborated in Hickling's report. However, the research is descriptive only and fails to explore inter-relationships such as between the type of skills seen as important and work effectiveness.
This approach, using self-described traits, was utilised in the Australian Public Service, in the development of the Senior Executive Service (SES) core competencies. The level of analysis and sophistication of the research methodology appears to be of a higher standard than the Canadian study.

The 1989 Survey of Australian Senior Executive Service Officers (Public Service Commission 1990) was undertaken to determine accurate and up to date criteria that represent the skills required of senior managers. The skills were defined in behavioural terms, so they were presented as unambiguous descriptions of work behaviours. Seventeen skill groupings were listed and linked with a total of 64 behavioural descriptions. Questionnaires were completed by 785 Senior Executives throughout Australia. By subjecting the data to factor analysis, ten criteria were identified from the 64 items. These were further clustered into five major core groupings which have become the basic criteria for the selection and training of senior executives in the Australian Public Service.

The five major criteria which emerged from the study are:

**Corporate Management Skills**
Management/business acumen
Strategic skills
Achievement orientation.

**Representation and Interpersonal Skills**
Communication
Representation
Interpersonal/conflict resolution
Leadership
Vision
People management
Self-knowledge/self-management.

**Conceptual and Analytical Skills**

**Judgement**
Further analysis showed how the perception of the importance of certain skills is dependent on the level at which one is working. At different levels, different skills are seen as important. Further, consistent with the notions of situational or contingency theory, various skills apply to different job families. For example, entrepreneurship and interpersonal skills are most important for the Commercial Manager, but not as critical for others. No differences were identified between males and females in their perception of the skills needed to be effective in their jobs.

2.4 Developing Executive Skills

One of the key aims of this study is to determine how the key skills of executives are acquired or developed, and then to draw out the implications for management development programs at industry and enterprise level.

To do this it is important to review the research relating to management skill development, as well as the principles of adult learning. This will enable the linkage to be made between the identification of key skills and the exploration and understanding of the most appropriate developmental pathways.

Principles of Adult Learning

Irrespective of which taxonomy is selected, it is clear that all management jobs require the manager to perform a complex set of roles and to apply a wide range of skills. Surprisingly little, however, is known about how these skills are acquired. Indeed, despite many attempts (e.g. Knox 1977, Brundage & Mackeracher 1980, Smith 1982) there has been no success in the search for a general theory of adult learning.

Following an extensive review of the literature — and a lifetime of experience — in this area, Brookfield (1986, p. 25) asserted, "... there can be few intellectual quests that, for educators and trainers of adults, assume so much significance and yet contain so little promise of successful completion as the search for a general theory of adult learning". He found that learning activities and learning styles vary so much with physiology,
culture and personality that generalised statements about the nature of adult learning have very low predictive power. "Adults", he concluded, "like their learning activities to be problem centred and to be meaningful to their life situation, and they want the learning outcomes to have some immediacy of application" (ibid., p. 31). In this way they are motivated to change behaviour. Brookfield also reported that his literature review showed that the past experiences of adults influence their current learning (sometimes positively and sometimes negatively) and that effective learning is also linked to self-concept. Those with a positive self-concept are thought to be more responsive to learning. Finally, adults exhibit a tendency towards self-directedness in their learning.

While the experiential dimension and self-directedness are typically stressed in the principles of adult learning, Brookfield notes that these generalisations are based on research which is culturally specific (typically Caucasian American) and this should not be used too readily in the development of an adult learning theory.

The concept of a learning cycle has played an important part in the theory and practice of adult learning. Kurt Lewin (1951) provided an important foundation for subsequent developments with his four stage experiential learning model, encompassing concrete experience, observation and reflection, formation of abstract concepts and generalisations, leading to testing implications of concepts in new situations and on, once again, to concrete experience.

This learning model is particularly important as it emphasised the place of immediate concrete experience. Lewin also highlighted the importance of feedback processes. He borrowed this term from electrical engineering, to describe a social learning and problem solving process that generates information to assess deviations from desired goals.

Drawing on the work of Lewin, together with the work of Dewey (1963) and Piaget (1970), Kolb (1984) developed a refined model of adult learning. It has stimulated considerable debate and research. Kolb theorised that there are two distinct learning dimensions, each representing two dialectically opposed adaptive orientations. One is 'prehension', representing two
different and opposed processes of grasping experience — either through reliance on conceptual interpretation and symbolic representation (abstract conceptualisation) or through reliance on the tangible, felt qualities of immediate experience (concrete experience). The other is one of 'transformation', representing two ways of transforming that grasp — either through internal reflection (reflective observation) or active external manipulation of the external world (active experimentation).

Knowledge comes from the combination of grasping experience and transforming it. This results in four different learning styles — divergent, assimilative, convergent and accommodative — which are the four quadrants formed by the intersection of the two dimensions of prehension and transformation. To assess individual orientations to learning, Kolb designed the Learning Style Inventory (LSI). This instrument provides scores on the concrete/abstract prehension dimension and the active/reflective transformation dimension. From these scores an orientation towards one of the four learning styles can be assessed.

Drawing from Kolb's model, Honey & Mumford (1986) subsequently adapted the models developed by Lewin and Kolb in a way they claim to be more useful for management training. The cycle embraces concrete experiences (having the experience), reflective observation (reviewing the experience), abstract conceptualisation (drawing conclusions) and active experimentation (planning the next steps). The significance of the cycle is that it highlights the way that people respond differently to the same kind of learning experiences, dependent on their preferred learning style.

Flowing from this model, Honey and Mumford's research has led them to the view that just as some people have a preference for one learning style (Activist, Reflector, Theorist, and Pragmatist) various learning activities are strongly geared to particular styles of learning. Learning is more likely where there is a match between the individual's preference and the activity. To measure the learning style preferences they developed the Learning Style Questionnaire (LSQ) which was validated with a large number of managers and others in the UK. As is often the case with the validation of psychological and educational instruments, differences of view as to their validity emerges. One recent study (Delahaye &
Thompson, 1991) suggests that caution should be taken when using the questionnaire. In their view, the instrument appears to measure two basic dimensions of learning preference, not four as suggested by Honey and Mumford. In addition, they consider the factorial structure of the LSQ does not reflect the dimensions proposed by Honey and Mumford. On the other hand, Allison & Hayes (1990) confirmed the dual factor structure of the LSQ which, they claim, provides further evidence of its construct validity.

The theme of adult education and personal learning ability is developed in a recent study by Dechant (1990). She argues that "... in today's frenetically paced business environment where initiating and responding to change has become a demand of everyday life, the ability to learn may be the most salient management competency of all" (ibid., p. 40). This is, in fact, consistent with the findings of Bennis & Nanus (1985), who found that personal learning ability was cited by the leaders they studied as the characteristic most needed to run organisations.

As well as the situation and type of skills needed, developmental approaches also need to reflect the 'life stage' of the individual. Research has shown that a person's stage in the life and career cycle can strongly influence their management capacity and development potential. A longitudinal study by Vaillant (1977), which tracked the life patterns of 268 male members of Harvard classes over 30 years, indicated that success at later stages was dependent on adequate earlier life-span development.

Management Development Principles and Processes

It has been shown earlier that researchers such as Foy (1979) and Margerison (1980), in discussing the factors of importance to effective executives, regard formal management education as having a relatively minor role. They argue, in part, for the need to move learning out of the classroom.

This view is not new, of course. Mant (1969), looked at the ways and extent to which management education programs met the needs of experienced managers. Managers were developed more successfully, he found, through 'on the job' training, projects and collaborative consultancy work than
through external programs.

Management skills, according to Mintzberg (1989), are not typically gained through formal training; that is why the case study method was developed — to simulate the actual experience of management, and accelerate the learning that might otherwise take place on the job. Formal training is concerned with learning about management; about the underlying theories (economics, psychology, etc.). Rarely are the theories concerned directly with the tasks a manager is called upon to do.

Following a review of the literature of management education, Bennett (1984) concluded that management educators and the courses they design have to get closer to the real world of managerial work. He sees activities based on managerial or organisational problems as a crucial phase in a design framework for management development. He also feels that action learning is most relevant.

Kotter (1982) concluded from his research that it takes ten to twenty years to 'grow' a general manager. Investigations by McCall and his colleagues (1988) showed that development depends not just on raw talent, but also on the experiences the manager has and what he/she does with them. This is a key element of the present research.

Similar trends and directions were identified by Margerison (1984). The major development he identified was a shift from the emphasis on the teacher to emphasis on the learner. He also identified the impact of experiential learning, based on 'real life' situations. This involves a move from external inputs to internal reflection. The implications of this are:

a) More flexibility from teachers, as the learners will be more significant in determining issues for exploration.

b) Managers will focus more on their own work situations rather than another person's way of operating.

c) Greater use of personal audits and questionnaires.
d) Far more learning by interpersonal consultation and practice rather than didactic exposition.

e) Management programs will be modular and spread out, so managers can learn, then implement, then learn again — i.e. using reinforcement; the most effective learning force.

In short, Margerison believes there will be greater attention to the interface between the organisational work that goes on in business and commerce and the contribution that business schools and similar organisations can make. Continuing education and a coordinated approach to management education within companies will be more common.

A relatively recent review of management education and training in the UK indicated there is widespread recognition that effective management is a key factor in economic growth (Constable & McCormick 1987). The report recognised that Britain's managers lack the development, education and training opportunities of their competitors. It also found, from a series of surveys, that innate ability and job experience were seen as the most important determinants of effective managers. Given that innate ability cannot be changed (and hence selection becomes critical) it might have been expected that the report's recommendations would have focussed on enhancing job experiences as a learning mode. However, the focus of the recommendations was on improving various elements of undergraduate and postgraduate training. The place of management development in strategic planning was mentioned, but no other recommendations related to the great significance of work-related experience, as identified by its own (and other) research.

In practice, management education is an intervention which takes place outside the organisation and outside immediate job boundaries (Marsick 1990). Notwithstanding this, there are many references in the data to 'experience' being the 'best' form of training for managers.

Pye (1988, p. 78) draws on the work of researchers such as Kotter (1982) and Mintzberg (1973) to show that "... there is a burgeoning area of literature which seeks to dispel the more traditional 'myths of management', by
illustrating that 'good' management performance is not about rational decision-making or the exercise of control etc., but is demonstrated through much more informal and seemingly irrational behaviour". However, she makes an important point in stating that "... the link has yet to be made between these kinds of observations of 'good' managerial performance and potential development interventions, designed to enhance such performance".

In a discussion of the 'knowledge creating company' (another term for the learning organisation) Nonaka (1991) asserts that the key to knowledge creation is the transfer of 'tacit' knowledge to 'explicit' knowledge. Tacit knowledge comprises technical skills and 'know-how', often informal and hard to pin down. It consists of mental models, beliefs and perspectives that become taken for granted and are hard to articulate and define. When this tacit knowledge is, however, articulated and internalised by another person, a critical step in learning the particular skill has occurred. Nonaka argues that moving from the tacit to the explicit is a process of articulating a vision of the world. Purposeful knowledge creation (an explicit learning process) is seen, therefore, as a fundamental task of managers. To carry out this, metaphors, analogies and models are the tools of trade.

Mumford (1986b) adopts a highly contingent view, and asserts that effectiveness in management development will only arrive when three sets of conditions are present:

1. The assessment of effective managerial behaviour is based on a proper understanding of the specific kind of job done by the manager, and by the specific results secured.

2. A developmental process which emphasises activities in which managers are required to be effective, rather than emphasising the knowledge necessary for action. This starts from the reality of where managers are, rather than imposing views about what they need or ought to do. The focus should be on a desired managerial result, rather than the knowledge or skills required for managerial action.

3. An effective learning process. Mumford (1986c) argues that the
process must always deal with the reality of the manager's job and always involves the manager in direct action. However, simply taking action is insufficient — there must be some discussion of the learning process. He argues that as there are differences in the way people learn, the learning process needs to be appropriate to the style of the individual. In short, he takes work-linked learning to the ultimate.

This approach has some overt appeal, but ignores the role of higher order skills, which may be developed and applied to different jobs at different times. Nevertheless, strong support for some aspects of Mumford's findings is found in research undertaken by McCall et al. (1988). It involved 191 successful executives from six major corporations, and sought to identify the 'events' or developmental experiences of most significance.

McCall's research found that training experiences that made the most difference frequently hinged on timing, so that whatever was being learned had a direct bearing on something the executive wanted to accomplish. It also became clear from his research that job rotation, for its own sake, could be a wasteful process. It was found to be only justified when certain new skills or specific managerial challenges were called for across a boundary. Equally, adding to the scope of a job was found to be only one of several developmental options.

Mentoring (i.e. a long-term apprentice/teacher relationship) was rare among the successful senior executives studied; they were seldom with the same person for as long as three years. Almost the opposite seemed to apply; experience of a variety of bosses (good and bad) who possessed exceptional qualities of various kinds was of particular significance.

In research in the Canadian Public Service, (Hickling 1989), mentoring was seen as a developmental rather than a training technique in the conventional sense; i.e. mentoring was found to focus more on attitudes and approaches rather than the transfer of specific technical or other skills.

While developmental feedback is seen as of value, McCall's research indicated that executives found insight into themselves and their strengths
and weaknesses not from counselling sessions, but from mistakes, confrontation with problem subordinates, traumatic events and career setbacks.

The apparent random nature of these experiences can, in McCall's view, be harnessed in ways that enhance developmental opportunities. Perhaps inevitably, however, this is only done in a general way. From a scientific point of view, it is unlikely that his 'theory' or generalisation would stand up to traditional tests of predictability and reliability.

The same general comment applies to most of the research conclusions in this field. Kotter (1982), for example, described the varied developmental activities undertaken by firms with reputations for having superior management. First, they focused their limited development resources on those who had the most potential. To meet developmental needs, among other things, responsibility was added to jobs, special jobs were created, inside and outside training was used, people were transferred between functions and divisions, mentoring and coaching opportunities were provided and people were given feedback on developmental programs. Some of these developmental activities seem to be at variance with McCall's findings; or are expressed in such a general way that they fail to have predictive capacity.

Mumford (1988) studied 144 directors in 41 organisations to look at the factors of influence and the processes of development as they moved towards top positions. As for McCall's study, a sense of randomness was evident, involving being in the 'right place at the right time' — although clearly the ability was needed to take advantage of the accidental opportunity. Also, as for McCall, significant learning was associated with work related experiences — frequently unsuccessful experiences (working with a failed product or in a poor management environment) were of more learning significance than others. Again, there was little evidence (and few 'lessons') of either personal or organisational efforts to promote management development, either formally or informally.

As a result of the survey, Mumford developed a useful descriptive model of three types of management development. These are, in summary:
Type 1. 'Informal Managerial' – Accidental Process
These activities occur within managerial activities. The explicit intention is task performance and there are no development objectives. Learning is direct, unconscious and said to be insufficient.

Type 2. 'Integrated Managerial' – Opportunistic Process
These activities also occur within managerial activities but the explicit intention is both task performance and development. There are clear development objectives. The learning is planned beforehand or reviewed subsequently. Learning is said to be real, direct, conscious and more substantial.

Type 3. "Formal Management Development" – Planned Process
This is often separate from normal managerial activities and the explicit intention is development, which has clear objectives. It is planned beforehand and reviewed subsequently as a learning experience. It is more likely to be conscious and is relatively infrequent.

Following a survey of various approaches to leadership development, including direct personal experience of each type, Conger (1992) concluded that to be effective, leadership training must incorporate elements of the four approaches he identified: personal growth experiences, conceptual development, feedback and skill building. To be effective, he argued, training must be designed to:

a) Develop and refine certain of the teachable skills.

b) Improve the conceptual abilities of managers.

c) Tap individual personal needs, interests and self esteem.

d) Help managers see and move beyond their interpersonal blocks.

The Place of On-The-Job Experience
In an unusually long term and thorough piece of research involving the tracking and extensive assessments of a large group of managers over a 20 year period, Howard & Bray (1988) conclude that developmental programs, whether aimed at change or merely at enhancement of management skills, need to build on the motivations that are salient for the particular subgroup addressed. Middle-aged and middle managers, for example, are more motivated by autonomy and achievement than by advancement motivation.

The study concludes that there are three main areas of ability of critical importance to successful management; general mental ability, interpersonal skills and administrative skills. The first, general mental ability, is not likely to change with developmental opportunities. Howard and Bray find that interpersonal skills do not increase with years of management experience, "... even for those on their way to high places" (ibid., p. 423). In fact, such abilities are highly likely to decline among those who remain in lower management ranks. This suggests that "... many who will be employed could profit from specific training. It will also be important to have a reward system ... that encourages skilful interpersonal behaviour, lest declining motivation inhibits its demonstration" (ibid., p. 423). Administrative skills, similarly, are not generally improved with on-the-job experience, but are strengthened by direct (training) intervention.

The conclusions of Howard and Bray's study are rather different to those found in much of the other literature. The findings are that on-the-job experiences, in themselves, fail to offer sufficient developmental opportunities. There needs to be a structured approach to learning to enable experiences to be meaningful in developmental terms.

There is recognition of the need to examine work-linked learning processes. Such an approach is reflected in what is described as 'experientially based learning' (EBL). This is a methodology that seeks to accelerate the type of learning that accrues through a lifetime of experience (Raskin 1986). Other recent research (McCall et al. 1988) supports the view that nearly all
management development takes place on the job. Yet the actual impact of on the job management development is virtually unexplored. As McCall et al. state, "... our knowledge of what experiences matter, why they matter and what people get out of them is skimpy at best" (ibid., p. 2). In a review of the empirical literature on this topic, it was found that "... no systematic body of research focussed on what experiences or events may be important in managers' careers" (McCauley 1986 cited in McCall et al. 1988, p. 2).

All of the groups studied in the Canadian Public Service research (Hickling 1989) placed heavy emphasis on personal experience as being the optimal means for skill acquisition in the Public Service. However the lack of precision in this research is evident here; 'personal experience' embraced formal training, discussion, mentoring, exchanges and experience.

The difficulty of precise formulations in this area is highlighted by such statements as "... the question as to how these skills, knowledge, attributes/attitudes are acquired was discussed at length, but seldom were skills and knowledge connected directly to specific acquisition methods" (ibid., p. 13). Nevertheless, clearly experience was seen as the most desirable way of learning management skills. Experience gained through lateral transfer is often underrated for its developmental value.

Marsick (1991) highlights the continuity of the development process, in which experience may be 'planned'. While asserting that it is difficult to make a theoretical case for 'planned experience' she believes that "... learning from experience can lead to repetition of mistakes" (ibid., p. 24). She focusses on action learning as a strategy which "... reduces errors by coupling experience with reflection" (ibid.).

**Competency Identification and Development**

The emerging focus on competency identification and development provides an opportunity to look at the linkages between structured off the job management development and work linked experiential learning. The competency model developed by Boyatzis (1982) referred to in Section 2.3, has direct implications for this linkage. Far more is involved than teaching about the functions of management.
Drawing on a number of other researchers, Boyatzis highlights the competency acquisition process, which has six stages:

a) Recognition of the competency.

b) Understanding of the competency and how it relates to managerial effectiveness.

c) Self-assessment and instrumented feedback on the competency.

d) Experimentation with demonstrating the competency.

e) Practice using the competency.

f) Application in job situations.

To develop competencies in managers, experiential learning and self-directed change, as part of an adult education experience, is stressed by Boyatzis. The process of self-directed change has been shown to result effectively in behaviour change (Kolb & Boyatzis 1970).

The application of high-performance managerial competencies in NatWest (Cockerill 1989) has been referred to earlier. In using the competencies for development purposes, an elaborate assessment process was used to develop self awareness. This, in turn, led to managers devising plans to enhance their strengths and compensate for their limitations.

The NatWest experience, Cockerill maintains, supports Kotter's view (1982) that managers do not have a clear perception of their strengths — or when they do they fail to make the best use of them. It also supports Schroder's research (1989) in the USA and the UK which has found that, on average, managers tend to have three high-performance competencies as strengths. "These results help" Cockerill concludes "to debunk the popular 'macho' belief that managers must be good at everything" (op. cit., p. 55). The degree of accuracy of the managers' perception of their own skill levels will be a matter of relevance in the current research.
Self-Directed Learning

Self-directed learning is an emergent theme from the review of management development skills cited above. So is the significance of experiential learning. These two themes are well brought together by Casey (1983) who states that the conditions for learning (and management development) are precisely present in managerial work. He asserts that the conditions which most managers experience at work are, firstly, that they are emotionally, intellectually, physically and ethically involved as a full person. Secondly, they experience a deep personal ownership of what they want to achieve, heightened by a strong feeling of responsibility and being at risk. As Casey asserts, it is difficult to envisage the creation of conditions more conducive to learning.

The principle of self-directed learning is a central part of BP's use of the competency system, which is the basic building block for individual development, designed to meet changing organisational requirements (Greatrex et al. 1989). Importantly, a contract with the individual is established, so that full counselling and feedback is ensured. The key point is for individuals to maximise opportunities to assess their own competency level, compare against other sources and then develop their own training and development plan in conjunction with their management.

To determine the learning strategies of effective managers, Dechant (1990) surveyed a small group of senior level managers, identified as successful. Consistent with the references above, the primary learning strategy used by the managers was that of self-directed learning. This took two forms:

a) Identifying learning goals and strategies and collecting feedback to evaluate progress. In regard to this last point, it is interesting that a significant number of managers lacked adequate or positive feedback from their supervisors, yet were successful in achieving their goals as they relied on alternative sources of feedback.

b) Changes in perspective. The research found that "... of all the
hundreds of lessons learned by managers ... the ones that held most value and were most frequently mentioned concerned the manager's (sic) assumptions, values and feelings about themselves and about themselves in relation to others" (ibid., p. 46).

The Place of Personal Beliefs and Values

The importance of personal responsibility for the development of managerial skills is a common theme identified in the literature. Different belief systems about the extent to which managers think they can develop their own skills can also impact on the effectiveness of learning. This is illustrated by research undertaken by Wood & Bandura (1988). They studied the behaviour and performance of MBA students and managers working in a complex computer simulation of organisational decision making. Overall effectiveness was strongly determined by the developmental versus non-developmental belief. Those who believed they could improve their performance, through learning from their initial errors, actually did improve. On the other hand those who viewed errors as an indication of their 'inbuilt' limited capacity for the task failed to learn or improve their performance.

Another, broader, illustration is drawn from studies of the adult development cycle (e.g. Rogers, 1984). People who understand the structure and process of adult development, and the opportunities they provide, seem to have greater success in meeting life challenges than those not aware of developmental possibilities.

In a recent book Mezirow (1991) argues that personal belief, values and assumptions are the key determinants to learning and development. The extent to which we understand and can modify our frame of reference, through reflection, is a crucial learning process "... egregiously ignored by learning theorists" (ibid., p. 5). He uses the term 'critical reflection' to refer to challenging the validity of the presuppositions in prior learning. It addresses the question of the justification for the very premises on which problems are posed or defined in the first place.

This notion of 'critical reflectivity' is very close to the concept of double
loop learning, as developed by Argyris and Schon (1978), in which learning is facilitated by employees becoming aware of their own norms and assumptions, and those underlying their organisation's functioning.

In short, the research suggests that the development of the capacities and skills of management is greatly facilitated by the belief that learning is possible from experience, that opportunities for this to occur are grasped and that reflection on prior learning has occurred. Given the apparent significance of these aspects, the current research study will seek to probe the degree to which such attitudes, beliefs and practices are present.

**Action Learning**

Action learning is an extension of these principles. It works from the premise that managers learn best from their work, from and with each other. It also offers the opportunity to pause and reflect – an important component of learning.

The founder of the concept (Revans 1980) pointed out that action learning is an active rather than a passive process which sees action leading to reflection then to understanding and then back to improved or further action in an unending cycle. It involves the study of a strategic problem 'in situ', negotiating a solution and then implementing it. In brief it is a management training methodology centred on the conduct of the project as a training method.

It is a process "... which gives rigour and pace to the cycle of learning through using the positive powers of small groups. ... It is underpinned by the proven assumption that people learn most effectively with and from colleagues in the same position" (Garratt 1991, p. 45).

The essence of action learning, according to Lawrence (1986), involves 'extending by doing', by making arrangements to enhance the opportunities to learn from experience and thereby speeding up the process of learning. Action learning techniques normally involve small groups - (sets) coming together to focus on 'real' work problems (not exercises or cases); who learn from each other by a questioning process (i.e. not teachers)
and who carry through the work to implementation.

It is asserted (e.g. by Lawrence 1986) that its most valuable contribution is to increase general management skills at all levels. However, while there is a great deal of anecdotal 'evidence', there does not appear to be any research or empirical basis for this claim, nor for other assertions with respect to action learning.

According to Marsick (1990) the strategy of action learning is widely used in Europe to help executives learn more effectively from their experience. The primary focus is on longer-term development through experience and feedback from peers. Project teams, which focus on real problems in real companies, are learning groups in which executives learn to work in a team, learn to influence others and learn to better define and solve problems.

Research undertaken by Marsick (ibid.) suggests that there are six ways executives are helped to learn from experience:

a) Finding the right problem to be addressed (many top executive development programs put more emphasis on rational decision making than on problem finding, yet finding the problem takes up almost half the time).

b) Examining a problem from multiple perspectives.

c) Learning to challenge taken-for-granted norms.

d) Learning a process of consultation.

e) Gaining insights into the dynamics of groups in which they work.

f) Gaining insight into oneself as a manager.

Marsick asserts that the long term result of action learning is that executives learn to manage better their own time; they prioritise, strategise and delegate. Again, no actual research evidence is presented, although a
report of her research is forthcoming.

Evidently the action learning strategy utilised at General Electric, USA, has achieved positive results through an approach in which multi-functional groups study and resolve actual business problems (Conger 1992). However, the reflection phase may well have been compromised, according to Noel & Charan (1988) who considered that both formal seminars and project work were packed into four consecutive weeks, with only a two-day follow-up. Again, the formal data and evidence is not identified to verify the validity of this type of program.

While action learning and other forms of behavioural and experiential learning are obviously very relevant, their value in seeking to develop specific skills and competencies has not been demonstrated by the research.

### 2.5 Implications of Previous Research

Carl Rogers once said that "... the only learning which significantly influences behaviour is self-discovered, self-appropriated learning" (quoted in Dechant 1990, p. 49). Managers are — whether they value it or not — the ultimate architects of their own development. They, for the most part, choose the strategies and methods by which they will learn. They decide when and how to apply what they learn. To remain effective in changing times requires the improvement of a critical skill — to learn how to learn (Dechant 1990).

As with the subject of management competencies, the area of management development is complex, fraught with ambiguity, and has a relatively scant research base against which to draw firm conclusions.

However, as Bottger et al. (1988) have shown, the development of managerial skills and competencies is influenced by four major types of factors:

- formal education and training
- the individual's learning style
- specific work experiences
- career transitions and life stage.
In addition, the following general findings seem to emerge from the literature as to the important determinants of adult and managerial skill learning:

- learning needs to build on the salient motivations of the learner. That is why timing can be so important. If a learning experience has a direct bearing on something the executive wants to accomplish, it can be significant.

- learning activities need to have immediacy of application (i.e. deal with the reality of the manager's job)

- people learn more when they are in a risk situation

- learning should be problem centred and experiential

- there is more chance of a behaviour shift if emotions as well as knowledge are involved

- sufficient theory --- relevant to the solving of a particular problem --- is needed in the learning situation and not more

- effective learning is linked to a positive self concept

- different people have different learning styles, which basically relate to an abstract versus a concrete approach

- simply taking action is not enough for learning --- there needs to be a process of reflection/discussion

- the use of external standards (behavioural indicators) can add to the value of experiential learning

- learning is more likely to be effective when there is a positive belief and understanding of the value of learning

- self-directed learning is an important principle of management
learning

- learning how to learn is a most important skill.

This review of literature illustrates the wide breadth of coverage of the research into the role, skill and development of managers. Nevertheless it would seem that some significant gaps exist which will form the central basis of the present research.

While the literature in relation to management skills is extensive, and many varying attempts have been made to develop a classification system, there seem to be at least three gaps. Firstly, there has been limited research of this type in Australia, particularly with respect to the private sector. Secondly, little of the research deals specifically with managers at the top of their organisations. Given the findings of much of the research which emphasises the contingent nature of the key skills, it could well be argued that the core skills needed by Chief Executives are not necessarily the same as those required by, say, mid-level managers. Thirdly, the literature related to management skills reflects to only a limited extent the increasingly turbulent, uncertain and discontinuous environment within which most managers are currently operating. Drawing on research which avoids such circumstances runs the risk of verifying and elaborating established skills, rather than identifying newly emerging ones which might be more appropriate in today's more dynamic and aggressive environment. These three issues will, therefore, play a significant part in the research for this study.

The literature review enables a focussing of the relevant research to be undertaken in order to seek to develop an appropriate skill typology for use in this study. To achieve this, the following criteria will be applied to the preceding research studies in order to draw on those with most relevance and validity:

- they should be grounded in empirical research

- they should identify key skills or skill families (i.e. concrete behaviours) which are capable of definition and assessment
• they should be generalisable (i.e. not specific to one organisation)

• they should have a high degree of face validity

• senior managers should be able to accept and agree with the broad thrust of the skills identified

• they should have the potential to differentiate the key skills needed between very senior managers and other managers.

It is evident, as graphically described by Ruderman (1987, p. 2), that "Finding a profile of the successful executive is like eating an artichoke — [you] have to peel through many layers to reach the heart". The process of seeking to do this in the Australian context and the outcome — a composite listing of managerial skills as a basis for subsequent validation in the research study — will be described in the next chapter.

In relation to the research dealing with adult and managerial skill learning, it is considered that while some of the general findings are of significance as a point of departure, they do not go far enough. The link needs to be made, if possible, between learning principles such as these and the specific developmental pathways used to acquire/develop the key skills of successful executives.

The literature indicates there are supporting and opposing views regarding the question of the innate nature of management capacities. However, there is a great deal of evidence indicating that planned interventions and appropriate development opportunities can be effective in facilitating the development of key executive skills. This, therefore, would seem to justify the value of seeking to identify critical development pathways; a key point of this research.

It is apparent that leaders or top managers are responsible for the learning of others. It is also evident that the capacity to learn from others and from the environment is a marked characteristic of self-actualisers as potential leaders (Burns 1978). Given these two characteristics, effective leaders
would seem to be required to be responsible for and knowledgeable about their own learning. However, while there are a number of references in the literature to 'learning to learn' there is little insight into the specific skills or methodologies for doing this. The present study will, therefore, also seek to examine this issue.
CHAPTER 3

METHODOLOGY 1: DEVELOPING A SKILL TAXONOMY

3.1 Research Objectives, Parameters and Definitions

The first of the four research objectives of the present study, described in this chapter, is the development of a taxonomy of core skills relevant and appropriate to senior executives in the current Australian environment.

The methodology for the second and third objectives (to seek to verify and validate the taxonomy and to determine the methods used by Chief Executives in developing or acquiring the core skills) will be described in the next chapter. The fourth objective (to identify the practical and theoretical implications for management development) will be the subject of Chapter 9.

It is recognised that management knowledge, attitudes, abilities and values all play an important part in the way a manager does his/her job and, together with skills, form the attributes which are jointly referred to as competencies (Gonczy et al. 1990). However, this study will primarily focus on skills and skill development, and not on the other aspects referred to above. Skill has been defined as "... the ability to demonstrate a system and sequence of behaviour that is functionally related to attaining a performance goal" (Boyatzis 1982, p. 33). Put more simply, "... skill is simply a specific behaviour that results in effective performance" (Mintzberg 1973, p. 194). The latter definition will be used in this study.

3.2 Selecting an Appropriate Research Paradigm

In determining an appropriate methodology for this research, the primary requirements were seen as ensuring that the data were reliable, uncontaminated by research bias (objectivity) and which facilitated the development, modification or verification of a satisfactory theory. Accordingly, consideration was given to the range of research paradigms
relevant to collecting and interpreting information in ways which met these central requirements.

There are at least two paradigms available which are quite distinct in nature and which can influence the procedures adopted in data acquisition, interpretation and theory development. The first, the 'older' paradigm of positivism, empiricism, statistical analysis, hypothesis testing and experimental research, originated in the physical sciences. In utilising this paradigm, the researcher's principal focus is to ensure the data are reliable and valid through the measurement of variables and the testing of hypotheses and that the conclusions are not influenced by the researcher's biases or assumptions (Brewer & Hunter 1989). This is the classic deductive approach, in which an explanation developed a priori to the research study is tested, typically utilising statistical tests of significance, control groups etc.

A fundamental assumption of this paradigm is that it is possible to gather facts that reveal the principles or laws of behaviour by using objective empirical methods (Rosenthal & Rosnow 1984). However, that assumption must be qualified in the social sciences as there are aspects of human reality that are important and theoretically meaningful yet are a product of more subjective interpretation and involvement on the part of researchers (ibid.).

The newer paradigm of research methodology variously called 'endogenous research' or 'new paradigm' research (Raimond 1993) embraces techniques such as action research, participative research and grounded theory. It is based on the investigation of subjective reality through inductive approaches, which develop explanations and interpretations from the research data directly, leading towards a theoretical explanation of the material (Beard & Easingwood 1989).

Some theoreticians argue that only knowledge which is objective, measurable and verifiable by independent observers is valid knowledge. Recently, however, social scientists have expressed contrary views. For example, Raimond (1993, p. 86) states:

"If in our inquisitiveness we would like to understand better how people live in the world, if we want to understand people's subjective
reality, happiness, joy, anger, and suchlike internal experiences, then we need ways of inquiring which can also yield reliable evidence and conclusions. Much of the recent developments in research methods in the social sciences have been concerned with creating such methods for discovering valid knowledge about subjective experience”.

In this research the decision was taken to combine various research methods, calling for the integration of different theoretical perspectives, rather than being wedded to a particular theoretical style or paradigm with its particular features and limitations. As pointed out by Brewer and Hunter (1989), there are distinct advantages for theoretically oriented research in adopting what they describe as a ‘multimethod approach’. They also use the phrase ‘paradigmatic pragmatism’ to describe the process of synthetic problem formulation and theory generation.

In more specific terms, the research methodology in the present study bridged both deductive and inductive approaches, although heavily weighted towards the latter. The approach used was largely dependent on the extent to which prior research-based knowledge was available. Thus, it was established through the literature review that considerable empirical research had been undertaken in the area of management skill classification systems. Hence, it became possible, and was regarded as desirable, to undertake a detailed analysis of the empirical research of others to provide a foundation for the development of a composite and coherent skill taxonomy and to use this as a basis for testing out its relevance in current Australian circumstances. In selecting the particular skills to be included, it is recognised that subjective judgements were made. However, as will be shown, the process was strongly influenced by the application of specific and pre-determined criteria, in an endeavour to objectify it.

A written questionnaire was developed, primarily to probe issues associated with the identification of the critical skills. This approach is also consistent with a positivist research approach, as it inevitably predetermines the range of responses. Again, the reason for this decision was to ensure that the findings of other relevant research were taken into account and tested, as well as ensuring the apparent face validity of the approach as far as the
respondents were concerned.

The initial analysis of responses to the composite skill taxonomy and to the written questionnaire was quantitative, to enable relative weightings to be determined and meaningful comparisons to be drawn.

It is recognised that presenting a draft taxonomy and a structured written questionnaire to respondents in this way could have the effect of limiting their thinking to the options presented. However, the point needs to be made that the subsequent face to face interviews gave respondents the opportunity to comment on the taxonomy, to elaborate or vary their initial views and to help set a situational context within which the skill taxonomy could subsequently be placed. This was considered necessary given that the literature review highlighted the multi-faceted nature of the management task and the extent to which the skills demonstrated by managers are highly situational in nature, interactive and are grounded in concrete experience.

Given the nature of the sample (i.e. high level, intelligent and experienced executives) and the limited time they had available, it was considered that the respondents would have quickly indicated if the taxonomy was not relevant or was incomplete. As will be seen, in the event it became clear that the initial taxonomy was modified by the subsequent processes of interview, and it was not, therefore, seen as leading the respondents to a predetermined result.

From a practical viewpoint — which is critical in a study of this kind — the amount of time Chief Executives are willing to spend as respondents to a research project is limited, and the credibility and utility of the process needs to be quickly and clearly established. Unless some parameters were provided to guide the initial reactions of the respondents, it is quite likely that they would not have been willing to be involved, or would have lost interest and presented unreliable or irrelevant information.

For these reasons, therefore, it was considered that the initial stage of the research would tend towards the positivist-empiricist paradigm. Quantitative analysis of the written questionnaire was regarded as the most appropriate way to make meaningful comparisons between the
respondents and to determine relative weightings of respondents' perceptions of the key skills.

However, the major part of the the research design for this study is qualitative in nature, employing techniques to allow open ended responses such as interviews and the collection of critical incidents. It is, in short, fully in line with the views of Collin (1989) referred to in Chapter 1.

The literature review demonstrated that relatively little research has been undertaken into the area of executive skill development. It therefore was judged as most desirable to approach this area with a minimum of preconceptions, thus seeking to understand the subject matter "... without having had to impose a theoretical framework in the early stages of the research" (Beard & Easingwood 1989, p. 3). With this approach in mind, the exploration of skill development issues at the face-to-face interviews was loosely structured, but open-ended. The specific intention was to allow and encourage the respondents' personal priorities and subjective reality to emerge, and permit that direction to determine the progress of the interviews, rather than allowing any prior conceptions on the part of the researcher to be influential. This is, of course, a significant shift away from the traditional positivist position.

The process of analysing the interview outcomes was based on grounded theory development, enabling interpretations based accurately on the data, and not on an a priori view of the field. It is recognised, as Beard & Easingwood point out, that the process of grounded theory development is "... a potential quagmire of subjectivity and intuition" (ibid., p. 3). With this in mind, and to enhance the epistemological value of the results of the qualitative analysis, deliberate efforts were made to ensure the maintenance of an acceptable level of objectivity during the course of the data analysis. This process, which is described in Chapter 4, essentially involved careful cataloguing of the data, and movement from data to concepts and theoretical explanations, thus enabling a high degree of utility from the data and the avoidance of excessive subjectivity. As will be seen in the discussion of the results, the grounded theories arising from the interview analysis served to complement — and in some cases elaborate — the data arising from the quantitative analysis.
In short, to ensure the final research outcome was reflective of the data provided by respondents, the information arising from the various research phases was analysed in ways consistent with the manner in which it was gathered; an essentially quantitative and deductive approach for the written questionnaire, and a qualitative and inductive approach for the depth interviews and their analysis; the major phases of the research.

It is argued that the validity of the results was not compromised by the 'paradigmatic pragmatism' utilised in this study. Indeed, such an approach facilitated an outcome in which there was a high level of accuracy and objectivity in the data collection and analysis. As will be discussed (see Chapter 4) there was in fact a high level of internal consistency in the data, and a satisfactory level of theoretical congruence with other relevant research; both important indicators of the validity of the approaches pursued.

3.3 Reference to Selected Research

The variety of classification systems that have been developed and the diversity and complexity of the research relating to the roles, responsibilities and skills of managers were explored in the review of the literature (Chapter 2). The review also demonstrated that while a number of previous studies in this field have produced results of relevance and significance, there is no single classification system or taxonomy which can be utilised directly in this study. The principle reasons for this conclusion were outlined in Chapter 2. In summary, none of the classification systems developed appear to meet the three criteria judged as being of fundamental importance; relevant to both the private and public sector in Australia, directly relevant to managers at the most senior levels, and relevant to the prevailing economic, industrial and social environment.

These criteria reflect, to some extent, two of the 'schools of thought' referred to in the review of literature. To be of relevance to managers at the most senior levels implies that a distinction exists between the responsibilities, roles and skills of managers at this level as compared to lower level managers. This is one of the central themes of the 'Leadership' school in which the core roles and skills of leaders are defined. The
criterion relating to 'current relevance' is reflective of the notion of 'situational leadership' (Hersey & Blanchard 1982) which was also discussed in the context of the 'Leadership' school. It is consistent also with the 'Work Activity' school, in which a contingent view of management is central to the research and theory development.

3.4 Developing the Taxonomy

Given that no existing classification systems were regarded as appropriate for use in this study in their entirety, a decision was made to draw on the existing systems, where they were relevant, to identify skills or skill families that could be used as a basis of a preliminary taxonomy, for subsequent verification and elaboration at interview. While a mix of research approaches was therefore utilised, ultimately grounded theory, using the endogenous research paradigm, was considered necessary to produce a relevant model. In short, the preliminary taxonomy and questionnaire provided the 'bones' of a relevant model while the interviews, which constituted the ethnographic component, provided the 'flesh' for the model.

To determine which systems were relevant and usable, the first step was to identify those which best met the criteria referred to in Chapter 2:

- grounded in empirical research
- key skills or skill families identified in terms of concrete behaviours which are capable of definition and assessment (i.e. not qualities, traits or functions to be performed)
- capable of being generalised (i.e. not specific to one organisation)
- have a high degree of face validity in the eyes of practicing managers (i.e. are perceived to be of relevance)
- likely to assist in differentiating between the key skills needed by very senior managers and other managers.
Six of the systems met the criteria to a greater degree than the others. These were the skill classification systems developed by:

Mintzberg (1973)
Public Service Commission (1990)
Horton (1989)
Margerison (1980)
Boyatzis (1982)
Pedlar, Burgoyne and Boydell (1978)

Details of these systems will not be presented here, as they were elaborated in the review of literature (Chapter 2). The reasons for selecting each of the six are as follows:

1. Mintzberg's approach is noteworthy for his use of 'structured observation' as a technique to focus on actual job and skill requirements, leading to an identification of skills well grounded in empirical research, and not predetermined or limited by the application of pre-existing theory. As was seen in the review of literature, this was a key characteristic of the 'Work Activity' school. While the sample size was very small in Mintzberg's research (five Chief Executives), this was a deliberate trade-off to allow "... for more powerful data on activity content" (ibid., p. 231). Mintzberg emphasises the contingent nature of the manager's work, but also recognises the value of identifying specific skills which, because they derive from actual observation, lend themselves to definition, assessment and generalisation, and are judged as having a high degree of face validity. This approach, in short, meets most of the criteria referred to above.

2. The listing of skills identified in the research undertaken by the Public Service Commission resulted from a rigorous empirical study involving 785 senior executives in the public sector in Australia. Thus, it is large scale, methodologically sound and relevant to a significant segment of the Australian work force. Each skill identified by the research is defined in behavioural terms, enabling unambiguous descriptions of work behaviours. As the skills are descriptive of senior executives, they are likely to also meet the criterion of differentiation between senior and
other managers. Thus, again, most of the critical criteria are met.

3. The primary relevant feature of Horton's approach, which is based on empirical research, is that he focussed his research on Chief Executives and, of relevance to the criteria, sought to make operational the qualities and skills needed by them. While his listing includes both skills and qualities, it is possible to identify and isolate the former, thus enabling application to the present study.

4. Margerison's study was also based on the behaviour of Chief Executives and therefore has direct relevance here. Margerison examined the career paths and patterns of over 200 Chief Executives in the UK. The skills were identified by empirical means, and enable the identification or development of appropriate learning opportunities.

5. Boyatzis' research is among the most extensive in the field of competency and skill identification, based as it is on 2000 managers in the USA. Although the skills he identified were not derived from field research they were, nevertheless, validated by empirical means. His skill categorisation is, in part, capable of being linked with behaviourally based indicators and has a high degree of face validity.

6. While the categorisation developed by Pedlar, Burgoyne and Boydell is based purely on theoretical rather than empirical research, unlike those referred to above, the classification system they have developed is of value as it introduces the concept of meta-qualities. These are so called as they represent the capacity to develop new skills and approaches for dealing with new situations. In terms of the criteria of face validity and relevance, the meta-qualities are seen as particularly relevant to managing in turbulent conditions.

3.5 Identifying Specific Skills

It was considered that the classification systems developed by these six researchers best met the criteria, and therefore provided a sound basis for the development of the composite taxonomy.

It would not have been either practical or appropriate to have simply
consolidated all the characteristics in these various systems and presented these to the respondents in this study. Apart from such a consolidated listing being quite unwieldy, the fact is that a number of the specific characteristics included in these systems do not conform to the definition of skill being utilised in this study, i.e. 'specific behaviour that results in specific performance'.

Accordingly, the skills in each of the six systems were assessed to determine the extent to which they met the following three criteria:

a) Behaviour based skills.

b) Skills which could be operationally defined.

c) Skills which enabled the identification of development pathways.

The application of these criteria ensured the exclusion of traits, qualities, roles and functions. In addition, composite skills or skill families (e.g. 'leadership', 'managing group process') were excluded from the final listing, given the difficulty of identifying unitary development pathways for such composite characteristics.

In developing the consolidated taxonomy it was considered appropriate to group the various skills in clusters, for ease of classification and communication. For this purpose a content analysis was undertaken of the skills identified for inclusion in the taxonomy. This analysis led to the identification of four broad skill clusters, used as a conceptual basis for the taxonomy. The four clusters, which are comparable to some of the role categories suggested by Mintzberg (1973), are as follows:

Decision making skills
Interpersonal skills
Leadership skills
Self-management skills.

Table 3.1 presents, in tabular form, this process and its outcomes. The consolidated listing of skills, derived as a result of this process, can be seen
in the right hand column of the matrix.
<table>
<thead>
<tr>
<th>SKILL CLUSTER</th>
<th>MINTZBERG</th>
<th>AUSTRALIAN PUBLIC SERVICE</th>
<th>BORSTON</th>
<th>BOVATZIS</th>
<th>MARGERISON</th>
<th>PEARL AND ETC</th>
<th>INDIATIVE SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision making</td>
<td>Resource allocation</td>
<td>Analytical/Conceptual</td>
<td>Strategic</td>
<td>Logical thinking</td>
<td>Conceptual</td>
<td></td>
<td>Analytical thinking</td>
</tr>
<tr>
<td></td>
<td>Information processing</td>
<td></td>
<td>&quot;Helicopter&quot;</td>
<td>Conceptual</td>
<td></td>
<td></td>
<td>Conceptual thinking</td>
</tr>
<tr>
<td></td>
<td>Decision making under ambiguity</td>
<td></td>
<td>Perception of reality</td>
<td>Diagnostic use of concepts</td>
<td></td>
<td></td>
<td>Strategic global thinking</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Acquire &amp; select relevant information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Decisiveness influenced by judgement</td>
<td></td>
<td></td>
<td></td>
<td>&quot;Helicopter&quot;</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>People management</td>
<td>Positive regard</td>
<td>Focus on others</td>
<td>Work with variety of people</td>
<td>Social (Interpersonal)</td>
<td>Interpersonal skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>Open communication</td>
<td></td>
<td></td>
<td>Conflict resolution</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Active listening</td>
<td></td>
<td></td>
<td>Group/Peer skills</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Conflict resolution</td>
<td>Judge select</td>
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<tr>
<td></td>
<td>Poor skills</td>
<td>Team building</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Managing group process</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Leadership skills</td>
<td>Leadership</td>
<td>Vision</td>
<td>Proactivity</td>
<td></td>
<td>Proactivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vision</td>
<td></td>
<td>Developing others</td>
<td></td>
<td>Motivating/Inspiring</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Create, communicate &amp; implement a vision</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Developing others</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Design, learning process</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Monitoring/Assessing</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self management</td>
<td>Self-knowledge</td>
<td>Balanced judgement</td>
<td>Self regard</td>
<td></td>
<td>Self-knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>skills</td>
<td></td>
<td>Tactility</td>
<td>Self-confidence</td>
<td></td>
<td>Sensitivity to events</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Accurate self-assessment</td>
<td></td>
<td>Adaptiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Objective</td>
<td></td>
<td>Balanced learning habits &amp; skills</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Spontaneity</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Efficiency assessment</td>
<td></td>
<td>Balanced learning habits &amp; skills</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Integrity humiliation</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Do deals/negotiate</td>
<td></td>
<td>Creativity</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Emotional resilience</td>
<td></td>
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</tr>
</tbody>
</table>

**TABLE 3.1 DEVELOPING THE TAXONOMY: REFERENCE TO SELECTED RESEARCH**
3.6 Behavioural Indicators

To ensure, as far as possible, there would be no ambiguity about the meaning of the final listing, and to enable the identification of possible development pathways, behavioural indicators were developed to help define each of the identified skills. These indicators were drawn from a number of sources; the competency framework utilised by Hewlett-Packard (1990); a number of the key questions used by Collins & Saul (1991) in their competency development program and the researcher's judgement and knowledge of the area. This process led, in a few cases, to a re-alignment of the skills or an adjustment of the descriptive terms used.

3.7 Consolidated Skill Taxonomy

As a result of this process, the final taxonomy which was designed to accompany the questionnaires forwarded to the respondents in this study, is shown in Table 3.2.
<table>
<thead>
<tr>
<th>SKILL CLUSTER</th>
<th>CRITICAL SKILLS</th>
<th>BEHAVIOURAL INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decision Making</td>
<td>1.1 Analytical/Systematic</td>
<td>Uses methodical, thorough and systematic thinking to gather information, identify and</td>
</tr>
<tr>
<td>(Thinking)</td>
<td>Thinking Skills</td>
<td>analyse problems and make decisions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breaks problems into component elements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifies alternate courses of action and evaluates pros and cons.</td>
</tr>
<tr>
<td></td>
<td>1.2 Conceptual/Global</td>
<td>Develops strategies to attain goals.</td>
</tr>
<tr>
<td></td>
<td>Thinking Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recognises opportunities, problems or underlying patterns/relationships that others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tend to miss.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lateral thinking - recognises relationships between different problems or needs; breaks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from the pre-existing frame.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develops models or frameworks to describe complex concepts or processes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focusses not only on current events and realities, but on systemic structures.</td>
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<tr>
<td></td>
<td></td>
<td>Helicopter view - able to rise above the detail and see the overall pattern.</td>
</tr>
</tbody>
</table>
1.3 Information Processing Skills under Ambiguity
Assembles and evaluates information and reaches decisions under pressure despite a high degree of uncertainty and ambiguity.
Readily identifies priorities in complex situations.

1.4 Resource Allocation Skills
Allocates resources on the basis of perceived priorities and goals in the face of competing interests.
Identifies critical success factors.

1.5 Informed Decisiveness
Displays a 'bias for action'; calculated risks and quick decisions.
Knowledge and understanding of the internal and external environment.

2. Interpersonal Skills (Linking)

2.1 Interpersonal/Group Skills
Possesses an awareness of, a consideration for the feelings and concerns of others and promotes effective interpersonal and group relationships.
Seeks to maximise trust and commitment.
Identifies differences and responds accordingly.
Willingness to remove deficient team members.

2.2 Conflict Resolution Skills
Intervenes in conflict situations with others to identify mutually agreeable situations, protecting the rights of less powerful individuals or groups.
2.3 Communication Skills (Listening, Writing, Speaking)

Gives and receives oral and written information clearly and accurately

Active objective listening.

Encourages fair and honest communication.

There is usually consistency between words and deeds.

Explains the reasons behind important decisions that affect subordinates.

2.4 Peer Skills

Effectively works with peers to get suitable results for self and organisation.

Understands and utilises networks (internal and external).

3. Leadership Skills (Leading)

3.1 Motivating & Inspiring Others

Recognises role is to motivate and work through others to achieve key objectives.

Uses a variety of approaches (persuasion, political and collaborative influence, negotiation) to build support/commitment to a course of action or to modify the thinking or behaviour of others.

Creates and effectively communicates (and dramatises) a vision (practical, realistic, attainable).

Demonstrates personal commitment to the vision.

Actively seeks to understand what motivates his/her subordinates and uses these insights to manage them so they perform at their best.
3.2 Designing/Facilitating Learning Processes

Creates a positive learning environment
Gives high priority to coaching/mentoring of staff.

Encourages people to take risks, by setting examples and providing challenge and opportunity.

Delegates effectively, helping others to learn.

Selects and develops champions - uncommon ability to judge talent.

3.3 Monitoring & Directing

Situational flexibility: Applies appropriate supervision skills (directing, coaching, supportive) depending on the situation.

Delegation skills: Assigns tasks & responsibilities to others.

3.4 Visioning Skills

Develops/translations ideas and goals into imaginative visual images.

Farsightedness - gives the future a tangible target or purpose.

The vision is placed in a broader context of "Where we've come from & where we're headed" (Senge).
<table>
<thead>
<tr>
<th>4. Self Management Skills (Being)</th>
<th>4.1 Self Awareness/Introspection Skills</th>
<th>Recognises and assesses own strengths &amp; limitations how others can complement own learning.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive self regard.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regularly seeks feedback from others on his/her performance and acts on constructive criticism.</td>
</tr>
<tr>
<td>4.2 Adaptation Skills</td>
<td></td>
<td>Adjusts rapidly and effectively to changes in work demands, situations or requirements.</td>
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<tr>
<td></td>
<td></td>
<td>Ability to deal with pressure, ambiguity and change.</td>
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<tr>
<td></td>
<td></td>
<td>Thinking and behaving with flexibility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mastery of change: demonstrates flexibility of responsiveness and ability to influence external</td>
</tr>
<tr>
<td></td>
<td></td>
<td>environment and ability to control uncertainty.</td>
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<tr>
<td></td>
<td></td>
<td>Fulfills the change agent role - identify and react to opportunities and pressures in creative</td>
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<tr>
<td></td>
<td></td>
<td>ways.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learns quickly in new situations by identifying critical information and issues and relating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>effectively to key people.</td>
</tr>
<tr>
<td>4.3 Learning Skills</td>
<td></td>
<td>Ability to learn and apply new or unfamiliar material, and to reflect on (and learn from)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>positive and negative experiences.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to learn not only from actual experiences but, particularly, from anticipating the future.</td>
</tr>
<tr>
<td>4.4 Innovation/Entrepreneurial Skills</td>
<td></td>
<td>Generates original &amp; imaginative ideas, products or solutions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Actively identifies and pursues new opportunities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to take calculated risks.</td>
</tr>
</tbody>
</table>
CHAPTER 4

METHODOLOGY 2: THE FIELD RESEARCH

4.1 Field Research Design Principles

As indicated in the previous chapter, there are four principal research objectives in this study:

a) To develop a skills inventory or taxonomy, following a review of relevant research.

b) To validate or modify this taxonomy following field research with a sample of successful senior executives.

c) To determine the methods used by the executives to develop/acquire those skills they regard as most significant. To facilitate meeting this objective, the research also sought to identify the dominant learning styles of the respondents.

d) To identify the practical and theoretical implications for management development.

The previous chapter described the methodology for a) above. This chapter discusses the approach followed in pursuing the field research i.e. b) and c) above.

The field research was designed to obtain detailed and comprehensive information from the respondents, in an open and non-defensive fashion, thus allowing for a rigorous analysis of textually rich material, leading to relevant, appropriate and usable conclusions of a theoretical and practical nature. With this principle in mind, a combination of written questionnaires and depth interviews was utilised, to enable full information to be obtained in ways that could be seen as credible, non-threatening, non-intrusive, but comprehensive.
One of the major criticisms of many studies of management behaviour is that they typically focus on managers' espoused theory. They do not provide the data needed to understand the 'theory in use' (Argyris 1990). An understanding of the distinction between these two sets of behaviours is a most critical one for studies of this kind, as many managers actually operate on one base (their usual behaviour or 'theory in use') while proclaiming their beliefs and support for another set of behaviours (the espoused theory). The dissonance between the two can be a source of tension (often not only for the manager but their subordinates) but is normally not a matter open to personal insight.

If simple questionnaires are utilised to ask managers how they would behave in certain situations, or what skills they regard as of importance, they would most likely respond with their espoused theory; not necessarily how they would actually behave.

Accordingly the instruments for this study were designed, as far as possible, to provide 'check points'; to link the responses with actual behaviour rather than the expression of principles. Thus, as well as asking respondents to rate the significance of various skills and competencies, a number of other questions were included to see to what extent a consistent (or otherwise) approach was adopted. For example, respondents were asked to indicate their major challenges, the skills they would look for in a replacement and the advice they would give to a younger manager. Responses to these three questions were cross checked for consistency. In addition, during the interviews, specific descriptions were sought of actual incidents in which the respondents' identified skills were utilised. They were asked to clarify how this occurred. This critical incidents approach was, again, aimed at identifying as far as possible the actual behaviours demonstrated on the job rather than those espoused. The analysis of responses sought to identify common and consistent patterns aimed at more accurately reflecting theory in use.

If written questionnaires had not been used, it is likely that the respondents would not have had the motivation, nor the opportunity, to reflect and focus on the issues to the extent that they did. Further, the questionnaires provided an initial structure which gave a necessary level of reassurance to
the respondents about the intent and nature of the research. As indicated in the previous chapter, constraints such as these are faced when undertaking field research with CEOs, and to some extent impact on the methodology used (i.e. linking an empiricist with an interpretivist paradigm).

4.2. Selecting the Respondents

The criteria for inclusion in the sample were as follows:

a) Chief Executives or equivalent level top managers of an organisation. Clearly, this refers to executives in a leadership position who have overriding responsibility for critical long term strategic decisions of the organisation.

b) Executives generally regarded as successful. The most obvious performance indicator of success is the fact of having risen to the top of their organisations — or been appointed from other very senior positions. An additional indicator was that they needed to be regarded as successful by others in their community and that they needed to have been operating effectively at their level for at least 12 months. Judgements on these two indicators were made by the researcher.

c) A balance of male and female Chief Executives, drawn from both the private and public sectors and large and small organisations.

d) A preparedness to commit themselves to a reasonably intensive process, involving the completion of written questionnaires and participation in depth interviews. The total process to extend over a period of some weeks.

The sample was built up progressively, based on the personal knowledge (and contacts) of the researcher, background discussions with others, and scanning of the media to identify CEOs regarded as successful. In this way, for example, those who received awards such as 'Small Business of the Year' or 'Businesswoman of the Year' could be identified.
4.3 Approaching the Respondents: The Field Research

Identification of possible respondents for this study, and approaches to them, were done on a phased basis over a period of 15 months. Typically, at any one time, negotiations or administration of the research instruments were proceeding with three to four respondents.

It is to be expected that researchers face particular difficulties in gaining access to and the collaboration of successful Chief Executives. Apart from the considerable pressures on their time, they are typically a little suspicious of academic research studies, and resistant to the notion of completing questionnaires. The challenge is not only to gain access to people at this level, but to ensure they are prepared to participate in a positive and non-defensive fashion. In this study, in order to obtain the agreement of the CEOs to participate in the study, and to ensure their commitment to participate, it was considered important that the research process was seen to be very well planned and executed and that the researcher was seen in a highly credible light. To help ensure the participants were motivated in these directions, a number of conscious steps were taken.

The researcher sought to attain a high level of credibility, typically by utilising the principle of third party sponsorship. In those few cases where the researcher was directly known to the respondent, a direct approach was made by the researcher. In the majority of cases a third party, known to both the researcher and the potential respondent, was approached to seek his or her agreement to be identified as a sponsor or reference point. The third party sponsors were varied. Some were CEOs themselves, included in the sample. Some were senior consultants, senior academics, employer association leaders and the like.

After the possible respondent and the sponsor had been identified, a telephone call was made to the CEO by the researcher to give a broad outline of the research and to seek cooperation. Confidentiality was guaranteed. The relevance of the study to them and to other senior colleagues was stressed, as was the possible value to them in thinking through some of the issues. It became apparent at that point that being able to cite a credible third party, known to the CEO, facilitated direct access and
receptivity.

If there was agreement at this stage (which occurred in most cases) a letter (see Appendix A) was sent quickly, confirming the initial discussion outcome, explaining the research project in more detail, and enclosing the research questionnaires and skills inventory (Appendices B & C). Extensive delays tended to occur at this point as many of the CEOs were overseas for varying periods, or otherwise unable to respond, requiring a number of follow up calls.

When the completed questionnaires were returned to the researcher (a private post box number was utilised for the purpose) the researcher made telephone contact with the respondents to arrange for personal interviews. When this was done a letter of confirmation was despatched to the respondents, together with the interview guide, described above.

As the respondents were located in various States, and as interviews were normally conducted at their workplaces, final confirmation (over the telephone) was always made the day before the planned interviews. The respondent was reminded at this time that a suitable period (up to two hours) needed to be set aside without interruptions.

At the time of interview, a period was spent before the actual discussion of issues to ensure the respondent was in a relaxed state. The interview was conducted in a non-threatening, non-judgemental fashion — a product of the professional training and experience of the researcher in non-directive interviewing and counselling.

It is considered that the information received as a result of this process was accurate, honest and reliable, which may not have been the case if attention had not been paid to these details. Many of the respondents stated that they had never openly discussed these matters with another person, and that they appreciated the opportunity to reflect on the issues and to verbalise their views.

With the permission of the respondents, each interview was tape recorded to enable subsequent transcription and analysis.
Full details of all potential respondents approached, and a record of the ongoing contacts, was maintained on a cumulative basis, using a computer-based information retrieval system known as 'Hypercard'.

4.4 Sample Composition

The study sample comprised 17 male and female Chief Executives drawn from both private and public sector organisations, ranging in size from a workforce of 30 to 18,000 employees. A total of six of the potential sample dropped out after their initial agreement to participate for health reasons, transfers overseas, or excessive pressures on their time. They were replaced by others. One of the CEOs was unable to complete the questionnaires for health reasons. He was, however, able to participate in an extensive interview.

While, superficially, the sample size may be regarded as excessively limited, the study was not designed to be a representative nor a quantitative survey. Sample size was regarded as of less importance than ensuring an appropriate mix of Chief Executives, and ensuring their perceptions, attitudes and behaviours were probed in depth. The view was taken that greater understanding of the subject would flow from a detailed analysis of a small number of respondents rather than a study involving a larger number of respondents which would, necessarily, be of a shallower nature unless considerably greater time, or a greater number of researchers, were utilised. Nevertheless, the sample profile — in terms of age, length of time in senior management and employment background — was similar to the profile of the Australian Chief Executives who participated in a relatively large scale survey undertaken by Mukhi (1982).

The study does not seek to make comparisons between various groups of managers; the sample is too small for that to occur. Nevertheless, it was regarded as important to have representation from diverse sub-populations. As will be seen, therefore, the sample includes approximately equal representation of men and women, respondents from public and private sectors and large and small organisations.

Small sample sizes are not unusual in studies of management attitudes,
values and behaviour. One of the landmark empirical studies of managerial work was undertaken by Carlson (1951) in his analysis of nine Swedish Managing Directors. In Mintzberg's 'classic' study (1973) identifying the content of managerial work five chief executives were studied. Horton (1989) interviewed 16 Chief Executives to determine the inherent characteristics that enabled them to succeed.

Details of the sample are shown in Tables 4.1 and 4.2.

**TABLE 4.1**

<table>
<thead>
<tr>
<th>INDUSTRY SECTOR</th>
<th>QUALIFICATION</th>
</tr>
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<tbody>
<tr>
<td>Private Sector -</td>
<td>Postgraduate</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Honours Degree</td>
</tr>
<tr>
<td>Non-manufacturing</td>
<td>Pass Degree</td>
</tr>
<tr>
<td>Public Sector -</td>
<td>Management Training</td>
</tr>
<tr>
<td>Commonwealth</td>
<td>No Training</td>
</tr>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Local Government</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>SEX</th>
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<tr>
<td>30</td>
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<td>40-49</td>
<td>Male</td>
</tr>
<tr>
<td>50-59</td>
<td>Male</td>
</tr>
<tr>
<td>60+</td>
<td>Male</td>
</tr>
</tbody>
</table>

(Average age: 49 years)
TABLE 4.2
Listing of Sample by Industry Group, No of Employees, Age & Sex

<table>
<thead>
<tr>
<th>Identification</th>
<th>Organisation</th>
<th>No. of Employees</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>2120716 HS</td>
<td>Retail</td>
<td>28</td>
<td>F</td>
</tr>
<tr>
<td>1121019 KV</td>
<td>Project Management</td>
<td>30</td>
<td>M</td>
</tr>
<tr>
<td>1121223 MZ</td>
<td>Office Furniture</td>
<td>32</td>
<td>M</td>
</tr>
<tr>
<td>1120407 EJ</td>
<td>Electronics</td>
<td>34</td>
<td>M</td>
</tr>
<tr>
<td>2220106 BI</td>
<td>Public Administration</td>
<td>50</td>
<td>F</td>
</tr>
<tr>
<td>1210404 EG</td>
<td>Airline</td>
<td>120</td>
<td>M</td>
</tr>
<tr>
<td>1220303 DF</td>
<td>Local Govt</td>
<td>300</td>
<td>M</td>
</tr>
<tr>
<td>1220203 CF</td>
<td>Local Govt</td>
<td>387</td>
<td>M</td>
</tr>
<tr>
<td>1110219 CV</td>
<td>Cement</td>
<td>400</td>
<td>M</td>
</tr>
<tr>
<td>2210103 BF</td>
<td>Communications</td>
<td>445</td>
<td>F</td>
</tr>
<tr>
<td>2221014 KQ</td>
<td>Insurance (Public)</td>
<td>450</td>
<td>F</td>
</tr>
<tr>
<td>1210208 CK</td>
<td>Public Service</td>
<td>450</td>
<td>M</td>
</tr>
<tr>
<td>1110411 EN</td>
<td>Mining</td>
<td>950</td>
<td>M</td>
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<tr>
<td>2210119 BV</td>
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<td>F</td>
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<td>F</td>
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<td>1111603 QF</td>
<td>Engineering</td>
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<td>M</td>
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<tr>
<td>1212004 UE</td>
<td>Public Service</td>
<td>18000</td>
<td>M</td>
</tr>
</tbody>
</table>

Included in the sample were CEOs who, in the preceding two years, had received prestigious National Business awards (in 2 cases), 'Small Business of the Year' (2 cases) and those heading organisations that were reported as setting benchmarks of excellence in their respective fields (5 cases). Further information than this could serve to identify the organisations and, therefore, the CEOs. This would breach undertakings given to them in relation to confidentially (see 4.8 'Ethical Issues').

4.5 The Research Instruments

Four principal research instruments were used in this study for the purpose of gathering relevant data. Three of these were developed by the researcher.
The four instruments are:

- survey questionnaire

- skills inventory  (The development of this inventory was described in the previous chapter)

- Learning Styles Questionnaire of Honey and Mumford

- interview guide.

The first three of these instruments were sent to the respondents, with a covering letter, after they had agreed to be included in the sample. A copy of the letter is presented in Appendix A. The four research instruments are described below.

4.5.1 Survey Questionnaire  [See Appendix B]

The detailed questionnaire was developed in order to:

- obtain background biographical information prior to the interviews

- seek ratings on the perceived relative significance of the 17 skills in the skills inventory

- seek views as to whether different skills are needed under different conditions

- seek to identify the respondents' perceptions of their 'real strengths', as a basis for linking with other information

- seek respondents' perceptions of the relative significance of various learning pathways

- use both direct and indirect means of identifying key skills to verify internal consistency.
The questionnaire was regarded as of importance from three points of view. First, it was intended to provide data (e.g. ratings and differential responses) which would enable a degree of quantification. This information could not be obtained through an open-ended, qualitative style interview. Second — and of equal importance — was the intention that the questionnaire would encourage a certain amount of introspection/reflection on the subject of key skill needs. It would, it was hoped, lead to a more productive interview. Third, it was expected that the questionnaire responses could be utilised to provide data for exploration during the subsequent interview.

The rationale for the questions was as follows:

**Q 1 Biographical Information.**

The reason for this question is self evident. To preserve confidentiality, and to reinforce assurances that were given to respondents on this matter, a code number was allotted to each respondent. The researcher entered the code on the questionnaire (at 1.1 'identification') before despatch.

**Q 2 Managerial Experiences and Challenges.**

At what age did you:

a) take on responsibility for important management tasks

b) commence leadership activities (if different to above)

c) become a ‘general’ manager?

There were two purposes in asking these questions. First, to seek to confirm (or otherwise) the findings of two relevant research studies. Margerison (1980) found that the age at which effective executives commenced leadership and general management activities was very important in their development, and that commencing under 35 years of age was of critical importance. Kotter (1982) found in his research that it takes 10-20 years to 'grow' a general manager. As both of these issues have a direct bearing on developmental influences on management skills, it was seen as relevant to ask the question.

The other reason for posing the question was to use it as a relatively threat
free lead-in, which would, it was hoped, encourage the respondents to think back to their early experiences, facilitating the reflective mode which would be necessary for subsequent questions.

Q 2.2 "What are the three most significant challenges you face as a manager?"

Q 2.3 "What skills would you look for in a person to replace you?"

As seen in the review of literature, situational factors can have a major influence on the required roles, responsibilities and skills of managers. In order to place into context the skills identified as significant by respondents, it was considered necessary, therefore, to identify actual contingencies facing them at that time.

These two questions were also designed to allow for an indication of internal consistency. For example, if the skills identified as of importance in a replacement were different from those skills rated by the respondent as being of very great significance, this would indicate further probing would be warranted.

Q 3.1 For each of the skills identified in the skills inventory, indicate (on a five point scale) its relative significance in terms of your job?

Q 3.2 What additional skills are needed for effective performance?

These questions were central to the study, as they were aimed at seeking to confirm (or otherwise) the perceived relative significance of the skills in the inventory, and whether additional skills were needed. While it was recognised that responses were likely to be skewed to the upper end of the scale — i.e. that most skills were likely to be regarded as of 'considerable significance' — it was expected that it would be possible to distinguish and report on degrees of significance. This proved to be the case.
Q 3.3 / 3.4 Which skills are most needed for effective leadership under conditions of:
  - environmental uncertainty/organisational transformation
  - organisational/environmental stability?

These questions also related to the contingency approach. They sought to determine whether, in the view of respondents, differing environmental circumstances (in particular a stable or unstable environment) lead to a requirement for similar or different skills. It was expected that responses to this question would facilitate an understanding of critical skills.

Q 3.5 Of all skills identified as most important, which would you describe as your real strengths?

This question was designed to provide some base data for use in the interview and subsequent analysis. In pursuing questions about learning pathways, it was decided that it would be most fruitful to focus on skills which respondents regarded as both important and personal strengths.

A secondary purpose of this question was to seek to test out the findings of Schroder (1989) that, on average, managers tend to have no more than three high performance competencies.

Q 3.6 In gaining the skills how significant have you found (on a 5 point scale):
  - formal tertiary education
  - formal short management training
  - successful work experiences
  - unsuccessful work experiences
  - having a mentor
  - job rotation
  - other?

The literature on management development indicates that the above six 'pathways' are most commonly cited as contributing to skill development.
The question, derived from this, is aimed at seeing whether any particular pathways are consistently seen as being of more — or less — significance than others. In short, it is designed to enhance understanding of the skill attainment pathways. It was also regarded as providing valuable background for the interviews.

4.5.2 Skills Inventory [See Appendix C]

The development of the skills inventory was described in the previous chapter. Its purpose was to provide a basis against which respondents could make judgements about the skills they regarded as of most significance in their work situations and also to provide clear operational definitions to facilitate their responses relating to learning pathways. In developing the inventory, considerable attention was placed on ensuring the wording was clear and unambiguous, so that there was, as far as possible, consistency of understanding by respondents.

4.5.3 Learning Style Questionnaire [Appendix D]

As the review of literature showed, a number of theorists and researchers have demonstrated the variability of adult learning styles. It was considered that this investigation of learning pathways, therefore, should take account of the preferred learning style of individual respondents and seek to relate the preferred styles with actual learning experiences. This data, it was expected, would provide a basis for determining whether efficiencies in learning can be identified.

Consequently, the Honey and Mumford Learning Styles Questionnaire (1986) was used to identify the most effective learning styles of the respondent. The resultant score, indicating the preferred learning style of the respondent, was related to the dominant learning methods used, to seek to confirm (or otherwise) the view that learning processes need to be appropriate to the style of the individual (Mumford 1986c; Honey & Mumford 1986). Determining the dominant learning style was included as a means of avoiding the tendency to make unwarranted generalisations about the nature of particular learning experiences and to link the specific learning experiences of respondents with their preferred style.
Another reason for the administration of this instrument was to seek to identify the level of insight and understanding demonstrated by the respondents into their own learning styles. During the interviews, respondents were asked to describe their preferred learning style. Comparing the responses with their LSQ scores was seen as a potentially useful area for investigation.

4.5.4 Interview Guide [Appendix E]

In planning the interview structure and process, a balance had to be achieved between structure and flexibility. A certain amount of structure was regarded as necessary, in order to determine whether any consistent themes emerged from various respondents in response to similar questions. A standard interview guide also ensured that the central issues were covered in all cases.

In recognition of the likelihood that the respondents, as very senior executives, might be more guarded than most in disclosing their personal experiences, values, successes and failures, it was judged as important that particular efforts were made to prepare for and conduct the interviews in a way that elicited full and open information.

The interview guide was forwarded to respondents a few days before the actual interview. This enabled respondents to reflect on critical issues beforehand, thus enabling them to be better prepared.

The interview itself was loosely structured around the guide, but the essence of the process was to encourage a free flow of authentic information, not constrained by a series of questions in a set order. In all cases all questions were covered, but additional information was also encouraged.

The rationale for the interview questions was as follows:

\textbf{Q1} Clarify any issues arising from the questionnaire.
This was included as a relatively 'comfortable' opening to the interview, and an opportunity to clarify any obvious omissions, inconsistencies etc.

**Q 2** *How important to a manager, in your view, is the ability to learn? How can it be fostered?*

This relates to research by Wood & Bandura (1988) which shows effectiveness in learning is linked to a positive belief in the possibility of personal development. In addition, Bennis & Nanus (1985) found in their study that personal learning ability was cited as the characteristic most needed to run organisations. The question is, therefore, included so these findings can be tested in the Australian context.

**Q 3** *What was the most significant 'learning environment' in which you have worked? Why?*

**Q 4** *To what extent did you receive assistance from your supervisors/mentors in your career development?*

Two specific findings will be tested by these questions. Firstly, Jans & Frazer-Jans (1989) found a very strong association between career satisfaction of senior executives in the Australian Public Service and the extent of supervisor assistance in career development. Secondly, mentoring was rare among the successful executives in the study by McCall et al. (1988).

**Q 5** *What specific skills have you developed through formal management training?*

This was included to enable a specific focus on the perceived value of formal management training, particularly in the light of the research by Howard and Bray (1988) who concluded that there needed to be a structured approach to learning to enable experiences to be meaningful.

**Q 6.** For each skill (identified as a real strength) identify a learning experience that was crucial in helping you understand and
develop the skill.

Q 6.2 For each skill, what was the most significant way you acquired the skill? (Six options were presented)

In addition to the obvious general utility of these questions, they were included to confirm (or otherwise) research by McCall et al. (1988), and Howard & Bray (1988), which found that training (learning) experiences that made the most difference frequently hinged on timing — i.e. what was being learned had a direct bearing on something the executive wanted to accomplish and was related to the needs (motivation and values) of the individual at the time. Mumford’s study (1988), however, highlighted a sense of randomness. Significant learning was also associated with work-related experiences — frequently unsuccessful ones.

Additionally, responses to these questions were related to Mumford’s descriptive model of three types of management development (Accidental Process, Opportunistic Process, Planned Process) to see if a general trend is evident. These questions also related to the work of Nonaka (1991) who stressed the importance, in skill formation, of converting tacit into explicit knowledge through metaphors, analogies and models.

Q 7 Identify your biggest management challenge.
Identify your most significant near miss.

The learning potential of significant management challenges is highlighted in the literature (McCall et al. 1988) and was judged as an area of potential significance. This is confirmed by McCauley (1986) whose own review of the literature found a paucity of research on the experiences or events of importance in a manager’s career.

Q 8 How would you describe your preferred learning style?

This provided an opportunity to determine the level of insight that respondents demonstrate into their own preferred styles of learning. This was done by comparing responses to this question with the score on the Learning Style Questionnaire. The relationship between the degree of
insight and actual learning processes and outcomes was seen as an area of fruitful research potential.

Q 9  When are you more open to learning? More closed?

Q 10  Has there been a particular stage in your life when you have been more open to learning? More closed?

A number of researchers have shown that career transitions and life stages are significant to the development of management skills (Vaillant 1977). These questions were designed to probe that issue, as well as the more direct question as to when, on a day-to-day basis, greater or less learning receptivity exists.

Q 11  To what extent do you seek to learn from or reflect on experience? How do you go about doing this?

Q 12  To what extent do you set your own specific learning goals and strategies?

These questions were designed to pursue the issue of the respondents' actual learning styles. They also relate to one of the key dimensions of adult learning, as described by Kolb (1984) and Honey and Mumford (1986); the importance of 'reflective observation'. In seeking to understand the actual measures taken by respondents in their learning processes it was seen as of obvious importance to pursue these matters.

Q 13  Do you assess your own skills? Do you get feedback on your personal management style and your strengths and weaknesses?

Kaplan et al. (1985) indicate that for most senior executives the exercise of power severely restricts feedback on executive behaviour. Yet the more successful executives are prepared to acknowledge their faults and take appropriate action.

Q 14  What is the most significant thing you’ve learned as an adult — the one thing you’d pass on to someone else if you could?
Q 15 What advice would you give to a younger manager about managing his or her career? What are the key things to learn? How can they best be learnt?

Broad, open ended questions of this type were used by McCall et al. (1988) in their study of the learning patterns of managers in the USA. The questions led to responses which facilitated a greater understanding of the values of the respondent, and the relative personal significance of key skills and the place of learning.

Q 16 Would you describe yourself as a manager or leader? Why?

Responses to this question were intended to clarify the self-perception of respondents, and were to be related to the identification of key skills areas. It was also designed to confirm (or otherwise) the prevailing view that different skills, values and orientations are found between 'leaders' and 'managers'.

Q 17 What strategies are needed at enterprise and industry level to enhance management skill development?

The reason for this question is self evident.

4.6 Testing the Research Instruments: The Pilot Study

To ensure the objectives of each instrument and of each specific question were achieved, the research instruments were pilot tested. It was seen as particularly important that the questions and the descriptions in the skills inventory were assessed as unambiguous, precise and readily understood.

After the instruments had been developed in draft form, they were assessed by three senior managers (not part of the final sample) who were asked to examine and comment on the ease (or otherwise) of comprehension and the clarity of expression. This process led to some 'fine-tuning' of the wording used, but no fundamental changes were necessary.
To assess the instruments more thoroughly, under the conditions in which they were to be utilised in the field, two Chief Executives — one from the private sector and the other from the public sector — agreed to participate in the study and, in addition, to spend additional time to give feedback on the process. The written questionnaires were sent to these two respondents. After they were returned to the researcher, a further letter was sent, together with the interview guide, and the depth interview subsequently conducted. In short, the full process of the planned field research was followed systematically. These two respondents were included in the final sample.

The responses of the two Chief Executives were analysed in detail with a view to determining whether the instruments provided the intended information. Overall, this proved to be the case. The only significant changes were made to the interview guide. It was found that there was some duplication of questions, and that greater precision was needed in one area. Specifically, three changes were made as follows:

1. The most significant change was to sharpen the focus of the questions relating to learning pathways. Initially, the following question was asked:

“For the skills identified as your real strengths (identified in Q 3.5 of questionnaire) please indicate the most significant way you acquired the skill” (this was followed by a list of alternatives).

The pilot respondents had difficulty recalling what they had recorded as their 'real strengths'. Further, the question led to responses which were too generalised. The question was therefore changed to:

"In your questionnaire you indicated your real strengths were................. (the actual responses were written in before the guide was despatched). For each skill, can you identify a learning experience that was crucial in helping you understand and develop the skill? For each skill what was the most significant way you acquired the skill?” (this was followed by a list of alternatives).
The question was also asked later in the interview (in Question 6) to allow the respondents time to relax, and to be better focussed.

2. It was recognised in the pilot study that there were a number of issues arising from the completed questionnaires which required clarification. Hence, in the revised interview guide, a general, open ended lead-in was used: "Clarify any issues arising from the questionnaire". The actual issues to be followed up were written on the interview guide before it was despatched to the respondents prior to the interviews. This provided the opportunity for the respondents to consider the issues before the interview.

3. The only other changes were to remove three questions which were found to duplicate others already included.

During the review phase of this exercise, both respondents involved in the pilot testing indicated that the questionnaires and written interview guide had forced them to think more deeply about their management skills and their learning approaches than they had previously done.

The pilot testing was a very important part of the process, and served to verify the legitimacy of the general approach adopted, while also assisting in the improvement of one of the crucial instruments.

4.7 Data Analysis Methodology

The final phase of the methodology — the analysis of the research instruments and the interpretation of results — will be briefly described.

4.7.1 Analysing the Questionnaires

To enable cross-comparisons and to gain a picture of any general trends in the data, it was decided to enter responses to the written questionnaires on a computer-based spreadsheet (Excel). Using this method, separate tables were developed for each question, indicating the specific response of each respondent and how they compared with each other.
The Learning Style Questionnaire was scored in line with the instructions in the manual developed by Honey and Mumford (1989). The raw score for each respondent on each of the four dimensions was entered on the spreadsheets, thus allowing ease of analysis, evaluation, and interpretation.

Another set of spreadsheets was developed for the skills inventory, showing the ratings accorded to each skill by each respondent, and also indicating whether the skill was seen of significance under various environmental conditions.

### 4.7.2 Interview Analysis

Recognising the primary significance of the interview in gathering data for subsequent analysis and to enable the development of a grounded theory, considerable attention was placed on the analysis methodology.

Each interview was tape recorded and then fully transcribed. Obvious identifiers were removed at this stage to maintain the confidentiality of the process. The transcribed interview was checked for accuracy (and amended where necessary) by proof-reading and comparing it with the tape of the interview. At this stage, paragraphs were numbered to allow for ease of reference in the subsequent analysis.

A coding index system was developed to enable the transcribed interviews to be coded, in order to allow for subsequent rapid identification and retrieval of relevant textual material. In the process of developing and applying the index system, many modifications were made, categories and sub-categories were combined in some cases and separated in others. The final index, which utilised a total of 119 categories, is shown in Appendix F.

The indexing system was built up using 'NUDIST'. This is a software system for managing, organising and supporting research in projects involving qualitative data analysis. Richards et al. (1992) state that as this system has particular strengths in supporting indexing, searching and theorising as the fundamental parts of quantitative analysis, it was given the name 'NUDIST' which stands for 'Non-numerical Unstructured Data Indexing, Searching and Theorising'. It should be noted here that all
interview transcripts were entered into the NUDIST database, with a view to using this approach in the analysis and theory-building. For technical reasons (which could not be identified even by the program developers) the system 'crashed' on two occasions, losing all the data stored electronically. Fortunately, back-ups and full transcripts of the data were available, hence this was not a major problem. However, all subsequent data retrieval and analysis was done manually.

Using the index system for the category codes, each interview transcript was closely studied and codes were recorded next to the relevant text. Another spreadsheet was then set up (again, on Excel) which recorded on one axis the respondent's identifier and on the other axis the category codes. At the intersecting (coordinate) cells, the appropriate text references, usually in the form of paragraph numbers, were entered. As a result of this process it became possible to subsequently immediately locate the position of text related to a specific subject.

4.7.3 Interpretation of Results: Grounding the Theory

The analysis and interpretation process was undertaken broadly using the procedures and techniques of grounded theory development. This is an inductive, theory discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observation or data (Glaser & Strauss 1967, cited in Martin & Turner 1986).

To improve the quality of the information extracted from the interview transcripts and maintain a suitable degree of objectivity, the methodology proposed by Martin & Turner (1986) was utilised. The transcripts were screened to identify concepts at a level of abstraction higher than the data itself. Concept discovery is a key part of grounded theory, and is facilitated by the use of memos, concept cards and theoretical notes. To build up a picture of themes, trends, divergencies and particular insights, each of the index categories was examined individually and a specific name was applied to the action or behaviour referred to. 'Concept cards' were created which detailed the data associated with each of the descriptive names, such as relevant quotes, summaries, key points and emerging
theoretical/conceptual ideas and questions to be pursued. This approach was designed to help perceive relationships among the data and between more general theoretical statements. This then allowed the relationships to be tested using other portions of the data.

Through these techniques of description, definition and specification of relationships, it was intended to attain a high degree of rigour in the handling and interpretation of data (Martin & Turner 1986). The data was assembled in a manner allowing for ready retrieval, and in a way that enabled the central theoretical questions to be explored.

4.8 Ethical Issues

In many cases, respondents to the survey are well known public figures. To ensure full and open responses and to avoid imposing on personal freedom, an undertaking was given that unless express permission was given to the contrary, no information would be included in any report (written or oral) which could identify the respondent or their organisation in any way which might link them with the research findings. For this reason each respondent was issued with an identifying code. In addition, the interview transcripts had obvious identifiers removed and were treated in a fully confidential manner.
CHAPTER 5

KEY EXECUTIVE SKILLS

5.1 Purpose and Structure of Chapter

One of the two main objectives of this study is to identify those skills which contribute to a high standard of executive practice by CEOs in Australia. One way of doing this was to validate or modify the skills inventory developed in the first phase of this research, with a view to putting forward, if appropriate, a revised taxonomy.

This chapter reports on the analysis of the data relating to the key skills of the respondents. It describes the major challenges facing them, which provides a context against which the key skills can be seen. It then identifies the skills rated as of most significance and discusses the reasons for this. Finally, a derivative skill taxonomy is developed, grounded in the data, which represents the researcher's view of the key executive skills of relevance in the current environment.

5.2 Major Challenges Facing Chief Executives

The review of the literature demonstrated the extent to which management theorists have stressed the importance of the situational factors influencing management behaviour. Fiedler (1967), Mintzberg (1973), Hersey & Blanchard (1982) and others emphasised that the situation in which the manager functions must be understood if meaningful conclusions are to be drawn about effective and ineffective skills or styles. To understand which skills are of most significance, therefore, a knowledge of the broad organisational and environmental context is seen as necessary.

To gain this knowledge, and to obtain insight into the environmental pressures and challenges facing the respondents, information was sought about the most significant challenges they faced as managers. This question was included in the questionnaire survey. Responses were, where
necessary, elaborated and/or clarified during the interview.

Analysis of the frequency of the wide array of responses led to the identification of five groups of major challenges of significance to CEOs in today's environment. On this basis, and in descending order of significance, the five major challenge groups will be briefly discussed.

1. Implementing and responding to change

References to the pressures arising from external and internal change far outweighed any other. It was the major challenge for CEOs from public and private sector organisations and from large and small enterprises.

Two broad dimensions emerged in relation to this issue. On the one hand a number spoke of the 'pace of change' as their major challenge. For example, a female CEO in the Community Services sector, with a staff of nearly 1000, saw her most significant challenges as:

"... managing in a volatile change environment" and "... maintaining direction and morale with a high degree of political uncertainty" (BV).

These respondents saw the primary focus as responding to or dealing with changes being imposed from external sources. On the other hand, some saw the primary challenge as the need to implement change and obtain staff commitment while still meeting day to day goals; "Achieving today while building for tomorrow " (UE) was the way it was defined by the head of one of Australia's largest organisations, who had reached his position by coming up through the professional/technical ranks. Another CEO, in seeking to change the culture and reputation of her organisation, spoke of the central requirement of "Implementing change while doing the work" (BI).

These two dimensions may well relate to the notion of adaptive and generative thinking respectively. Argyris (1982) has termed these single and double-loop learning. Adaptive or single loop learning focusses on dealing with challenges or solving problems without moving outside narrowly defined parameters. Generative or double loop learning
emphasises continuous experimentation and feedback. It is, in many ways, at the heart of the concept of the learning organisation (Senge 1990, McGill et al. 1992).

The managerial practices found in generative learning organisations, which can be equated with the skills involved in implementing change, have been described by McGill et al. (1992) as reflecting five dimensions: openness, systemic thinking, creativity, a sense of efficacy and empathy. These requirements in many ways, run counter to the experience and training of managers accustomed to reward systems and cultures that foster adaptive learning (ibid.). This, therefore, adds another dimension of pressure on many managers who sense how they should behave but have difficulty doing so.

Another challenge emerges when the CEO may see the desirability of generative change, and have the personal commitment to act in ways consistent with this, but the surrounding sources of influence, from managers next in line for example, counsel an adaptive mode. In describing his relatively unsuccessful first year as a CEO, one of the respondents, who had previously had only limited general management experience and was suddenly faced with the Chief Executive role in an organisation of about 18000 people, stated:

"Having not moved on the people front more strongly was a near miss. I guess the near miss was listening too much, too long to those who were the traditional people. From their own background just wanting to go on to traditional management — I nearly got locked into that" (UE).

Another respondent, who was the CEO of a successful project management company, and also the Chairman of a number of Companies and organisations, in describing the significance of change, put it this way:

"Everything really changes all the time and the human instinct, of course, always is the opposite to that. We tend to look at this moment and we tend to think that that's the world and everything that impacts on us is going to keep being the same and the one thing that is true is
that it's not going to be the same. I think people that can accept the reality of change and be prepared for it and be prepared for it to be uncertain — I think they're more successful people, not just managers — I think in the end they probably manage their lives better too. So yes if I had to pick one principle I think it'd be really change that I'd want to get people to think about" (KV).

2. Motivating staff and maintaining morale

This was identified as the second greatest challenge. It, too, was linked with the notion of a turbulent environment. Motivating staff and maintaining morale was seen as even more important in times of uncertainty and change.

It was notable that in describing the difficulties of motivating staff the word 'maintaining' was used frequently — not 'improving' nor 'generating' motivation. Again, this suggests that an adaptive/'survival' approach dominates the thinking of many of the respondents.

3. Developing, communicating and maintaining a strategic direction

Having and communicating a clear strategic direction was also seen as of particular importance in times of turbulence. The CEOs thought that employees need to have a sense of stability and security in periods of uncertainty, and that this was facilitated by well developed and well communicated visions and plans. This 'challenge' is closely related to 'motivating staff and maintaining morale', referred to in 2. above.

4. Understanding and translating the external environment

The influence of change and uncertainty, the data showed, also plays a major part in relation to this fourth group of challenges faced by CEOs. When the environment is relatively unstable and unpredictable, the challenge of keeping abreast of the changes, of interpreting them in meaningful ways for the organisation and of maintaining an appropriate personal and organisational perspective is regarded as particularly important.
5. Resource acquisition and utilisation

The final challenges, broadly grouped under this heading, could be described as 'traditional' management issues, or 'transactional' in terms of the categorisation developed by Burns (1978). Responses included:

"... obtaining and creating adequate resources to allow the organisation to achieve its goals" (BF); "... achieving with inadequate resources" (BI).

While of significance, challenges of this kind were not seen as significant as the previous four, indicating a recognition of the need — and the difficulty — of stepping back from the detail and taking a more strategic view.

In general, there was a strong external focus to the challenges identified by the CEOs. Their responses in most cases related to what they might do to enhance their organisations' capacities to deal with the pressures facing them. There was very little focus on the challenges they faced personally, in terms of their own capacities or skills. There were only two specific references of this type: the CFO who had held his job for over twenty years saw the pace of change as the major factor affecting his work, but considered that "retaining enthusiasm" was one of his most significant challenges (DF). Another respondent, who, at the time of interview was undertaking part-time tertiary studies, considered that one of his most significant challenges was "... to maintain personal effectiveness and development" (EG).

The relative lack of focus by the CEOs on their personal needs may have been a product of a low degree of skill or motivation to be introspective or a high degree of self esteem and self-confidence. The data does not enable a conclusion to be drawn on this question, although there are indications that the latter is most likely.

5.3 Relative Significance of Key Skills

Chapters 3 and 4 described the process of developing and administering the preliminary skill taxonomy. The perceived significance of each of the 17 skills was rated by the respondents on a five point scale.
Respondents were also asked to indicate:

- whether the list effectively encompassed the skills needed by today's managers and leaders
- which skills were most needed under conditions of environmental uncertainty/organisational transformation
- which skills were most needed under conditions of organisational/environmental stability
- which skills were their real strengths.

The results were tabulated on a spreadsheet to indicate, for each respondent, the rating given to each of the 17 skills. In addition, a coding system was used to indicate responses to the four supplementary questions listed above. Using straightforward quantitative analysis it thus became possible to identify the relative perceived significance of each of the skills, both generally and in varying circumstances. This table is shown in Appendix G.

As examination of this table demonstrates, the spread of responses is limited. Most responses are at the top three points of the five point scale. This is not unexpected. Given the way the taxonomy was developed, it would be expected that the skills listed would all be perceived as significant to some degree. Nevertheless, it is clear that some differentiation is possible between the ratings, which will be discussed below.

The data also indicate that in the view of most respondents the inventory effectively encompassed the skills needed by today's managers and leaders. Two additional skills were proposed by a small number of respondents; 'perseverance' (also labelled 'drive'; 'determination'; 'persistence') and 'political' skills.

The former is regarded as more of a personal quality than a behaviour that can be learnt. The latter is a skill which relates to networking and interpersonal skills and will be examined in those contexts below.
Overall skill ratings

While all skills were regarded as significant to some extent, five of the skills were consistently rated as of either 'great' or 'very great' significance, and to that extent were clearly perceived to be of more importance than the others. They were:

- interpersonal/group skills
- motivating and inspiring others
- communication skills
- learning skills
- conceptual skills.

These five all received approximately the same ratings, hence the order of listing has no particular significance. Analysis showed that the five skills can be related quite specifically to one or more of the major challenges facing CEOs (described earlier in this chapter) thus demonstrating a measure of internal consistency.

There is also a high degree of internal consistency with results of another question in the survey. Respondents were asked "What skills would you look for in a person to replace you?" Results of the analysis of this question are shown in Appendix H. Skills associated with people management, interpersonal skills, and communication skills were most often cited. 'Leadership', as a generic term was also used relatively often, as was 'adaptability' which was found to reflect the same underlying characteristics as personal learning skills. These results are consistent with the above listing of the more significant skills. One other skill was cited by a number of respondents as desirable in a replacement. This was the skill of 'visioning'. Subsequent analysis of the interview data confirmed the perceived importance of this skill. It has therefore been added to the above list as one of the key skills.

Six skills in the original taxonomy could be regarded as of a medium level of significance in the view of respondents. They were:
• analytical/systematic thinking
• information processing skills under ambiguity
• resource allocation skills
• informed decisiveness
• innovation/entrepreneurial skills.

The other five of the skills in the taxonomy were consistently rated as of a lower order of significance than the other skills. They were:

• conflict resolution skills
• peer skills
• designing/facilitating learning processes
• monitoring and directing
• self awareness/introspection skills.

Factors affecting skill significance

It will be recalled that respondents were asked to indicate which skills were most needed under conditions of organisational uncertainty, and which under organisational stability.

Examination of the results in Appendix G indicates that, with two exceptions, this question did not serve as a useful source of differentiation. The same skills were generally seen as being of significance under conditions of both turbulence and stability. The exception related to the skills of adaptation and communication. The former was, not surprisingly, seen as more significant under conditions of turbulence. A number of respondents considered the latter skill was more appropriate under conditions of stability than turbulence. When this matter was pursued at interview, the response was that managers have more time to communicate in a stable state, and when the environment is uncertain and changing, quick decisions are needed and there may not be the same time — or need — for communication.

The ratings given to the various skills did not seem to be affected by the size or nature of the respondents' organisations or whether they were from the public or private sector. There was a high degree of communality. The
only variation related to the ratings given to the skills of 'information processing' and 'resource allocation'. Males tended to rate these two as of more significance than did females. The restricted size of this sample makes any generalisation of this data unreliable.

5.4 Exploration of the Key Skills

Analysis was undertaken of the information obtained from the interviews to explore more fully the essential characteristics of the six priority skills (identified through the process described in 5.3 above). The aim was to explore the nature and significance of the skills, in behavioural terms, and to look for any linkages and relationships. This exploration is described below, for each of the six key skills. The ultimate intention of this process was to lead to a modified skill taxonomy, if indicated by the data, and to provide a basis for the subsequent identification of learning pathways.

Interpersonal / group skills

Behavioural Indicator: "Possesses an awareness of, and consideration for, the feelings and concerns of others. Promotes effective interpersonal and group relationships." (This definition was included in the original taxonomy, forwarded to respondents. See Appendix C).

Previous research has shown that interpersonal skills are of central importance to effective management. As seen in the review of literature, the 'Human Relations' and 'Behavioural Science' schools, in particular, emphasised the important place of interpersonal skills and group affiliation. More recent research has also shown this. For example, 'insensitivity to others' was cited as a reason for derailment more often than any other flaw, in a study as to why some apparently successful executives fail to reach the top of their organisation (McCall and Lombardo 1983). More specifically, the ability — or inability — to understand other people's perspectives was the most noticeable difference between the 'arrivers' and those who derailed.

Luthans (1988) verified the significance of this skill with his finding that
human resource management, together with communication skills, contributed most to management effectiveness. Bottger (1989) showed that interpersonal skills (defined as the ability to organise people and deal with conflict) is one of the three general skill types exhibited by high performing managers. The other two were personal productivity and knowledge of the organisations' internal and external workings.

The present study confirms the perceived significance of effective interpersonal behaviour and was regarded by the CEOs as one of the most significant skills.

Data analysis highlighted two characteristics which describe the behaviours regarded as critical to interpersonal skills. Firstly, most CEOs emphasised the need to recognise the potential in people, and to explicitly recognise and value people who do good work. This was seen as an underpinning or foundation characteristic. It was seen more as a fundamental value than a specific skill.

On taking over the role of CEO in a very large public sector organisation, one of the respondents recalled:

"... as I started to move around the organisation, every time I'd come back I'd say 'gee there's some wonderful people in this place; really good people'. Within the organisation it's no different to the family; to get that realisation that there's good in everybody and that something can be done with people" (UE).

Secondly, creating an environment in which the potential of people can be realised was also referred to relatively often. Again, in describing the development of this environment, specific skills were seen as less important than values such as 'openness', 'honesty' and 'commitment to working cooperatively'. This was exemplified by the Managing Director of a large (11000 staff) manufacturing company, who had held the position for a number of years:

"I believe I try to build a team and try not to be an 'I' person. I'm one of those that tries not to use the word 'I' a lot and that's the way I try to
run things. I have always ended up in the end with a very loyal team because of the way we try to work together. I think that that only comes from experience" (QF).

A content analysis of the interviews suggests that the CEOs regard underlying values of more importance to effective interpersonal relationships than the development and application of specific skills. In developing the final taxonomy it may be more viable to regard 'interpersonal skills' as a general underpinning set of skills and attitudes, rather than as a specific skill.

Motivating / inspiring skills

Behavioural Indicator: "Uses a variety of approaches to build support/commitment to a course of action or to modify the thinking or behaviour of others." (See Appendix C)

The manager's responsibility for the motivation and activation of others is probably the most widely recognised of all managerial roles. As seen in the review of literature, it is an area which has been subject to a great deal of theory and research from Taylor through to the present time.

The broad concept of leadership has, as its central tenet, the notion of one person influencing others to act for certain goals (Burns 1978). In this sense motivating/inspiring skills are seen as closely related to 'leadership'. This was the 'skill' group which most CEOs in the study considered they would look for in a replacement to themselves.

It proved difficult to identify, from the data, specific skill-based behaviours inherent in the concept of motivation. Descriptors used by respondents in describing how they motivate others included such statements as:

"I try to get people to believe in themselves" (MZ).
"Enthusiasm plays a very important part" (EJ).
"Example is critical; in behaviour, standards and work patterns" (CF).

One of the respondent's, involved in trying to change the culture of her
organisation in a complex political and commercial environment, developed a systemic view of motivation based on some tertiary studies and also on personal experiences:

"When we were in .......... my husband had an idea for improving work that he was doing. He was told he wasn't paid to think but to do what he was told. Some of those key messages you get as examples. With motivating skills I did a lot of thinking and working and just generally considering the issues involved in that when I was doing the MBA course. You can't motivate people. You can create environments in which they will be motivated" (BF).

Specific techniques or skills for motivating/influencing people were raised by only one respondent:

"Motivation is about touching people. Being able to read people and be sensitive to them. Make it real to them. Keep it exciting. That gives growth" (CF).

This response is closely related to the notion of vision, to be discussed next. Indeed, analysis of the data related to motivation suggests that the specific skills are to be found in the area of interpersonal skills, visioning or communication. It seems that 'motivation' does not describe a skill or even a set of skills — it is, rather, a goal to be achieved by the application of other skills, such as these three, discussed separately. Accordingly, it will be omitted from the final taxonomy.

Visioning skills

Behavioural Indicator: "Develops/converts ideas and goals into imaginative visual images." (See Appendix C)

Management literature over the past 10 years or so has been replete with references to the significance of 'visioning' as a critical part of leadership and organisational effectiveness. In Senge's view (1990) the notion of 'shared vision' and the significance of 'mental models' are critical to the development of the learning organisation. He believes the core role of the
leader is to develop and build a shared vision. The leader not only has a clear sense of vision, but this vision is placed in a broader context of systems thinking. "Vision paints the picture of what we want to create. Systems thinking reveals how we have created what we currently have." (ibid., p. 231)

Rosabeth Moss Kanter (1983) in discussing the significance of vision, identifies as critical the clarity of vision, its worthwhileness and its complexity. "[Architects of change] have to operate integratively, bringing other people in, bridging multiple realities and reconceptualizing activities to take account of this new, shared reality." (ibid., p. 305)

Analysis of data in the present study showed that most respondents regarded visioning skills as of particular significance in giving employees a sense of stability and direction in times of turbulence. This is illustrated by the Chief Executive of a Local Council appointed relatively recently (from a similar position in another organisation) who, for most of his local government life has been involved in establishing or 'reviving' organisations:

"I suppose over the period of time that I've been in Local Government, I've been within that turbulent climate and my adaption (sic) to it all is that you have to have the vision. I mean you have got to set the direction; you must be able to adopt, you must be able to motivate people towards a particular vision and get people moving in the one direction to circumvent the chaos that exists. It's what I've been doing successfully" (CF).

"... to translate where you want to go into practical steps in a way people can understand. Give people a framework" (BV).

Most respondents did not see vision as being a 'grand master-plan.' Rather it was seen as the ability to see ahead: "what's over the next hill" and to talk about that — "to paint the pictures" (UE). This was illustrated by one CEO from a Public Sector organisation, which is in a particularly volatile environment, who stated:
"It's fine to imagine where you want to be, but if nobody else can either see it or imagine how you get there then it's useless. So you have to be able to translate it, in a way that other people can understand it. That's learned. It's not something that I have that's special that nobody else could possibly have. It's about understanding that not everybody else shares your vision of the world — not even if you can conceptualise the grand vision for 100 years. Because what they really need to do is to be able to understand the step from what you've said to putting it on a piece of paper. I guess the skill is actually acknowledging that not everyone around you sees the same as you do nor is happy with just the big picture or just the detail. You have to accommodate the needs of people" (BV).

The data suggests there are two core elements to the skill of visioning; identifying and communicating. Identifying future scenarios does not mean a simple extrapolation of the past. Indeed, a number of respondents stressed that this was an ineffective way to manage, given the constancy of change. (In the light of this perhaps 'non-extrapolative' forecasting is a more accurate term than 'visioning'). The vision, respondents also pointed out, needed to be pitched just far enough ahead in order to be challenging but close enough to seem achievable. Communicating the vision requires the capacity to translate the vision into practical action steps that people can understand, relate to and share. This element of vision overlaps, therefore, with one of the other core skills; communication. Visioning also is closely related to another of the core skills (conceptual skills) which will be discussed later in this chapter.

While not directly testable by the data in this study, it is conjectured that leaders may be differentiated from lower level managers in terms of their capacity to see future scenarios, identify which are desirable, and communicate this so people understand — all of which is implicit in 'visioning'. It is, in short, likely to be a skill which differentiates those who reach higher levels within their organisation from others.

Communication skills

Behavioural Indicator: "Gives and receives oral and written
information clearly and accurately." (See Appendix C)

The importance of communication skills is widely recognised and, unlike visioning, are skills seen to be required at all levels of supervision and management. As described in the review of literature (Chapter 2), the Human Relations school, in particular, highlighted the significance of communication to the formal and informal organisation. Many theorists, such as McGregor (1960), Argyris and Schon (1978) and, most recently, Senge (1990) have stressed the importance of communication skills — including listening skills — as a key component in effective management.

Respondents in this study stressed the attitudes and values needed for effective communication, as well as the specific skills. This is exemplified by the CEO from the Community Services organisation, who had spent some years working as a Trade Union official:

"I have a passion about communication. I observe around me all the time people who see withholding information as power and it's very destructive. I believe really strongly that if you don't share with people either the things that are happening that give them a context for their activity, or if you don't give them an understanding of the environment in which they're operating, which is largely what senior management need to communicate to their staff, then you can't actually get the best out of them. You cut off a key bit of your capacity to manage if you don't share information" (BV).

The Chief Executive of a mining company became aware of the importance of communication skills as he became more experienced:

"... as one gets into more difficult roles [you realise] that you can't do it all on your own. You're not a one man band; you're not capable of being able to do things by oneself, so you have to enlist other people to achieve difficult tasks. Communication then becomes very very important so that you can explain what you want done and why, or you can explain why they need to be involved — you don't have the answers, you want to get them involved. So there's a lot of communication there — verbal and written — that becomes very
important. I did not understand that very well until I got into roles where I dealt with more people who both worked for me and more complex tasks that required involvement of other people. So that wasn’t easily understood by me at an early age" (EN).

In addition to these broad values, respondents all referred to specific skills they exercise to facilitate effective communication. Some, for example, saw the need to modify their communication, depending on the views and ‘mindsets’ of the other person. This calls for personal sensitivity and awareness. The head of an information/communication service, with nearly 500 employees, described the variety of workplaces she has experienced in developing and developed cultures. She considered:

"I have had to work with a huge variety of people. Learning to communicate with cross-cultural communications really means that you do learn that you can’t rely on other people sharing your concepts when you’re talking to them. You have to find where they’re coming from to be able to communicate with them and to use their concepts to communicate with. If you are going to communicate with people who provide resources you have to put your arguments in their terms, things that will be important to them. If you are going to talk with the media you can’t expect to talk in your terms — you have to put it in terms that are meaningful to them. The people skills, the communication skills, come out of that" (BF).

This respondent, together with others, spoke of the associated skills of listening and of careful observation:

"... I’m not a particularly observant person about anything except I guess I’m observant about people’s demeanour and how they’re reacting..." (BF).

Clarity is another skill identified in the context of communication:

"When I worked in ........ I learnt the value and the skill of being clear about the point of what you’re trying to say. You need to work out in your own mind the key issues you need to tell someone to get them to
make a decision" (BV).

A relatively new CEO, recruited into an organisation with a history of acute industrial relations problems, stated:

"I can go into a group, whether it's unions or whatever, and say 'none of these people is going to like it' and the only thing you can be is straight with them. So, it's not so much empathy, it's being straight with them and making sure there's no ambiguity in the message that you're delivering" (FL).

In terms of content, a number of respondents stressed the need to provide an understanding of the broader environment:

"The main thing senior management needs to communicate is an understanding of the environment in which they're operating" (BI).

"You need to give a context — an understanding of their environment" (BV).

It can be seen with these comments that linkages can be made between communication skills and others included in the list of core skills.

Learning and adaptive skills

Behavioural Indicator: "Ability to learn and apply new or unfamiliar material and to reflect on (and learn from) positive and negative experiences. Adjust rapidly and effectively to changes in work demands, situations or requirements." (See Appendix C).

Analysis of responses indicated that the skills of learning and of adaptation reflect the same underlying characteristics. They have therefore been combined.

The significance of learning emerged from an examination of the responses in this study. Virtually all respondents emphasised the need for being
flexible, adaptive and capable of learning from experiences. This requires a positive attitude towards learning — as well as the capacity to do so.

Other research has consistently shown the significance of learning. Osmond (1973, p. 84) found that "Chief Executives fail, not because they make mistakes, but because they do not learn from them". Burns (1978) claimed the capacity to learn from others and from the environment is the most significant feature of potential leaders. Pedlar et al. (1978) have shown that the presence or absence of balanced learning habits or skills plays a significant part in the degree to which managers are successful. They regard learning as one of the meta-qualities, so called as they represent the capacity to develop new skills and approaches for dealing with new situations.

A common theme among the respondents was not only their willingness to adapt, but their search for challenges. They frequently reported boredom with a job they had mastered or that did not offer opportunities to bring about changes.

Torbett (1973) suggested that learning involves becoming aware of the qualities, patterns and consequences of one's own experience as one experiences it. Drawing on Torbet, McGill et al. (1992) believe that the ability of a manager is not measured by what the manager knows (that is the product of learning), but rather how the manager learns — the process of learning. In their view this involves openness, systemic thinking, creativity, a sense of efficacy and empathy.

Analysis of the data leads to the conclusion that learning is a skill which permeates all other skills. It involves the capacity to be open to new experiences, to make relevant connections and to assimilate learnings. This research is consistent with the findings of Bennis and Nanus (1985) who found that personal learning ability was cited as the characteristic most needed to run organisations. It is believed the data in the present study confirms the view of Pedlar et al. (1991) that learning and adaptive skills can be regarded as a 'meta-skill'.

These issues, and the underpinning factors and relationships associated with learning and adaptive skills, together with illustrations from the
interviews, will be explored in more detail in the next chapter.

Conceptual / global thinking skills

Behavioural Indicator: "Recognises opportunities, problems or underlying patterns and relationships that others tend to miss."
(See Appendix C).

The review of the literature suggests that relatively less attention has been given to this skill area than to most of the others. It is not reflected in the writings of the Classical or Bureaucratic school, plays little part in behavioural science or decision making theories or research, and has only become an area of focus relatively recently. It is found in the writings of Pedlar et al. (1978), the competency model of Boyatzis (1982) and the systems views of Senge (1990).

The respondents in the present study generally regarded conceptual/global thinking as the central skill for a Chief Executive Officer. More references, at greater depth, were made to this skill at interview than to any other. When other skills were discussed, more cross-references were made to conceptual/global thinking than others.

In describing how the skill was used, most references were in terms of understanding the environment in which the individual and the organisation operates. The following quotes illustrate the approach taken by respondents in describing the significant characteristics of conceptual/global thinking. The head of a Public Sector agency, who had experienced a great diversity of work, considered:

"(You need) a framework of looking at the big picture environment that you're trying to solve problems within, and then working from that to apply within the individual workplace; you develop a framework for operating" (BV).

The Managing Director of a small but very sophisticated and successful Electronics Company spoke of the importance of maintaining perspective:
"(You need) a perspective of where your company is in relationship to the total environment — the environment is changing constantly and you have to be aware. You need that before you can decide where you need to move to. Because the environment around you continually changes, you have to be aware of those subtle changes that are occurring all the time; changes in Government, changes in people's perceptions of Industrial Relations, for instance. Changes where you sit in your environment as a Company. Obviously the economic situation is a classic, as are relations with other Companies. Where they're standing in their own country, what's happening to them. We deal with ... quite a bit and so you have to realise what are the concerns and constraints that are facing your major partners. So it's a very large perspective" (El).

A CEO in a relatively new industry, who had been heavily involved in a number of organisations which "... grew like the atomic mushroom cloud" (KV), stated:

"... if you didn't think ahead and say, 'well where is this all leading us?' you were going to be led into great catastrophe and indeed many of the ....... companies eventually were, because I think they'd lost the overall plot; they got so hooked on growth without thinking about the environment in which they were growing, that got them into a lot of trouble. I think that was a practical situation where, to achieve the sorts of things we were trying to achieve, you really did have to think on a wide scale" (ibid.).

Another CEO, in an area of rapidly changing technology, with the goal of building a learning culture, regarded environmental sensitivity as a central skill:

"The environmental sensitivity thing is as much environmental sensitivity as sensitivity to all sorts of directions that are going on; the social developments that are happening world-wide, the changes in direction that are happening, and the technological developments — so it's combining that big picture, that feeling for what are the shifts, where are things going so that you're aware of it and then out of that
trying to read it and be there first” (BF).

The responses confirm that the behavioural indicators identified for this skill in the taxonomy are quite relevant. There is a need for lateral thinking; i.e. recognising relationships between different problems and breaking from the pre-existing frame. The ability to develop models or frameworks to describe complex processes and concepts was also referred to, as was the ability to focus not only on current events and realities, but on systemic structures. This is also known as the 'helicopter view' — being able to rise above the detail and see the overall pattern.

5.5 Linking the Skills — A Derivative Model

Analysis of the respondents' descriptions of the critical skills and behaviours suggests that there are two more precisely defined skills inherent in 'conceptual/global thinking'. On the one hand is a skill associated with 'understanding the context'. This involves gathering information and making connections, in order to understand and make meaningful a broader perspective. Having identified the core issues and seen any patterns, the other skill relates to processing the information, drawing conclusions, determining priorities and developing strategies for use within the organisation.

To gain a clearer picture of possible linkages, and to further analyse the skills apparently involved in understanding and interpreting the environmental context within which the organisation (and the CEO) operates, a model has been developed which relates to the processes and skills involved.

Broadly, four skill clusters seem to be involved in understanding and interpreting the environment. This is illustrated in Figure 5.1.
Skills in Understanding and Interpreting the Environment

FIGURE 5.1

INFORMATION GATHERING

TRANSLATING FOR INTERNAL APPLICATION

INFORMATION PROCESSING

DEVELOPING A FRAMEWORK
While the four processes are considered in sequence, the model is portrayed as a loop for the reason that any of the processes can commence the cycle. While it would be most common that the first stage is 'information gathering', this need not necessarily be the case. For example, it is feasible that an executive puts forward a strategic direction within the organisation ('translating for internal application') and will then gather information externally, leading to the formation or sensing of a pattern, and then to an operating framework or model which could well modify the internal application. Each of the elements will be discussed in turn.

1. Information gathering

Analysis of the results has shown that a great deal of importance was placed by the CEOs on being aware of the wider world. This was not restricted to their specific area of interest, but was found to be a general level of curiosity; a search for information and ideas from a wide array of external sources. Despite their work commitments, for example, a large number of the respondents described themselves as avid readers. They expressed interest and curiosity about the world around them. The head of a project management company, also involved as chairman on a number of Boards, put it this way:

"... it is just so easy to get buried in day to day issues, all of which are important, all need to be fixed yesterday. I mean you have to make a quite conscious effort to cut yourself off from that from time to time. In my experience you also have to make a conscious effort to actually continue to be widely connected with the world in terms of what you read and the sort of people you talk to and all of those sorts of things because I think that does help you very much to be thinking much more broadly. I mean you really do need to talk to people in other industries and talk to public servants and you need to read foreign magazines and you need to travel and all of those sorts of things" (KV).

Having a desire to take a broader view would seem to be a necessary but not a sufficient condition to understand and utilise external data. Responses suggest relevant information also needs to be gathered effectively and then
processed. The research indicates that to do this two skills, in particular, were called on; scanning and networking.

1.1 Scanning

The word 'scanning' was used quite often to describe an active quest to take in information and 'process' it — i.e. identify what is relevant and what can be utilised. The CEOs had a high level of awareness of the need, value and techniques of scanning. The CEO of the mining company, who is closely involved with many other Chief Executives and senior managers, stated:

"My preferred learning style is by scanning. I'm scanning all the time — I always keep looking around. I note successful people spend probably a higher level of time on scanning activities than the vast majority of the population. Some will do it through reading. Some will do it who enjoy talking, so that some will say 'I get my best ideas by talking to others', so they're very gregarious, they go out and talk to a range of people in ranges of situations doing different things, not all mirror images of themselves. Similarly they will read in non-conventional areas to that which you would think they would in the job they have. High achievers in my view are switched in to the world at large and are very curious" (EN).

The head of a relatively small but very influential regulatory agency asserted:

"The fact is that I have no formal management skills and I don't even know how you identify them all — what they really are. But that theoretical framework which most tertiary courses have isn't part of my framework at all. However, the things that I have found necessary to do have been dictated by my perception of the environment I'm operating in. It's not just about the money and budget and so on, but the attitude that's held to this place and therefore very much it's effectiveness at large. So, I guess [my main skill is] an ability to translate the environment, the climate out there, which is relevant to the work of this Agency, into the things you
have to do in order to achieve the objectives of the Agency" (VI).

The head of a medium sized, Australia-wide organisation involved in public financial and associated operations, described her approach to 'global thinking' as follows:

"It's also about reading and being interested in the world and involved in it. I have quite a lot of interests outside, which I either actively or inactively support or pursue which are a mixture of intellectual, business and sporting things. I do subscribe to quite a lot of journals of varying kinds, not management ones, but I read business journals avidly and I have quite a few contacts in the business community who keep talking to me about things. You know what's going on in the business world, economic world and what sort of inputs decision-makers are having to the way they think'. So I guess it's a personality thing about not limiting yourself. Like actively seeking more and it actually rubs off. People know and they tell you things" (KQ).

1.2 Networking

Networking is another mechanism cited by virtually all CEOs as an important pathway for gathering information about the external environment. It plays an important part in their skill repertoire. Some referred to this as 'political' skills, but when asked to elaborate, referred to the significance of identifying, developing and utilising networks in various ways.

One of the respondents, a member of the Business Council of Australia, described it in these terms:

"To a Chief Executive (networking) is absolutely critical and that's one of the essential things of the Business Council — you have 80 top executives that would never get together and never come to know one another in the same way as they do. It is absolutely exceptional in that respect — you mightn't always see eye to eye but you do know them, you start to hear things, you get feedoffs and if you want to talk
about [an identified subject] or something, you can talk about that, even if you're in somewhat the same field. That's very critical — for a chief executive, it's essential. You know you can always ring up a Brian Lotten or whoever because you came to know them across that table” (QF).

A similar view is taken in the Public Sector. The head of a large Department, with significant influence on Government policy and program development, described his views in these terms:

"[Networking is] absolutely important to a Chief Executive — it's part of what I meant by looking at things interactively. I often hear things from five or six different sources and I have schooled myself not to say 'I know that', but to say 'thank you for telling me'. I don't mind hearing a thing five times; it's when you don't hear it at all that problems are reinforced. So I think I've been active in networking and I've also been quite open in terms of allowing people in the community and other agencies to come to me" (CK).

This activity has not been greatly explored in the literature, apart from some specific empirical studies. Mintzberg (1973) who uses the term 'liaison' role to describe this activity, acknowledges its significance in playing a key part in the executive linking with the environment. Sayles probes deeply into the liaison role of lower level managers with the objective of "... building and maintaining a predictable, reciprocating system of relationships" (1964, p. 258).

While the sample is too small to draw any valid conclusions, there seemed to be a gender difference with regard to networking. The males regarded networks as instrumental — a way of gathering additional information and establishing business contacts. While recognising the importance of networks, during the interviews none of the men initiated discussion on this topic unless the subject was raised. On the other hand, all the women raised the subject without prompting. They saw networks as playing a dual role of information provision as well as fulfilling broader needs of sharing and support. This could well be an area of further research.
2. Information processing

The next stage in this 'environmental impact loop' is understanding and giving meaning to the information that is gathered. There are two parts to this element which are regarded as unrelated; the skill of being able to identify a pattern in the information (the term 'patternmaking' is used to describe this skill) and analytical/systematic thinking.

2.1 Patternmaking

The head of a Community Services organisation, who has worked in many different areas, described this skill as follows:

"It involves sensitivity to all sorts of directions — social developments, changes in direction, technological developments — combining the big picture, feeling for the shifts and trying to read it. I read it all — making the connections" (BV).

This quote referred to interpreting the 'big picture'. This need to filter or process the information gathered was identified by a number of CEOs. Patternmaking is about making connections; seeing the linkages between seemingly unrelated events. For example, the Chief Executive of a very large, complex organisation involved in a major restructuring process stated this is a capacity he has had for a very long time:

"I think I'm fairly good at the pattern level; being able to look for and see a pattern in things and say to people 'come on, let's see the pattern, let's get ahead of that'. I think I've got those qualities. Being able to fairly quickly see the heart, the essence of things. To link various things together — to develop a more systematic approach. It comes out of observation" (UE).

One of the female respondents, in describing the importance of this capacity, also referred to the fact that she has had the capacity to 'see the patterns' for a very long time:

"It's making the connections, it's that ability to say this is happening
there and that’s happening there and we ought to be doing X in the
middle here — seeing the patterns emerge. You just let all of that
simmer and then the ideas start to come — in the shower, or in bed, or
when you’re not at work, not doing, then the ideas just emerge out of
those patterns. I’d only really become aware of it as something that I
did, that other people didn’t automatically do, probably when I was in
the first job in ...... when I was about 29. I became aware that I was
saying to the profession, ’look we need to be doing X, Y, Z’ and they
wouldn’t even have been thinking that we needed to do these things.

I’ve always read enormous amounts and when that was mainly
fiction, which it was when I was younger, what you were getting was
an understanding of the way people worked and then when you’d
then experience things it would then fit into the overall pattern that
had been formed for you through the broad fictional reading about
people and relationships and all that sort of thing. It was when I
started to move into areas where I had to be doing other sorts of
reading that the same thing would just operate across the non-people
things” (BF).

The notion of the holistic approach, the gestalt, is very important in this
context:

"[I had a] gradual realisation that parts need to be seen against the
whole as an active issue, rather than saying after the event, or well
into thinking something through, where does this fit? Rather saying,
very early in the process, ’How does it fit?’ ’How might it fit? ’What is
the larger world here?’ ’What are the other issues?’ I think that came
over time” (EN).

This skill would normally be regarded as conceptual or divergent thinking;
of recognising relationships between different elements and of making
non-linear connections. Again, however, the point is made that most
references to this skill were in relation to the connection between the
external environment and the organisation.
2.2 Analytical/systematic thinking

Analytical thinking skills are widely regarded as central to the effective performance of the top executive (see Chapter 2). This involves using methodical, thorough and systematic thinking to gather information, identify and analyse problems and make decisions. As 'patternmaking' is described as divergent thinking, analytical/systematic thinking is convergent. Convergent and divergent thinking skills are complementary to one another. Both were regarded by respondents as important in understanding and giving meaning to information, although the data pointed to the latter as being of greater significance in the light of the need for rapid understanding and adaptation to turbulence and change.

3. Developing a framework

A number of respondents spoke of the value to them in having a framework, to enable some 'testing' to be made of the external data gathered to determine what may be internally useful. The framework is, in a sense, a set of guiding principles against which the external information can be tested and its value (or otherwise) determined. This is illustrated by the head of a Public Sector Agency, who had experienced a range of different careers:

"You develop a framework of looking at the big picture environments that you're trying to solve problems within, and then working from that to apply within the workplace; you develop a framework for operating that never leaves you" (BV).

Another Agency head, who had also had a varied and successful career path, described her most significant skill as 'a broad vision of the world and business'. She described this as:

"... about having a philosophical framework in which you see the world and how the world changes. It means that in terms of any operating environment that I'm in, I get the political parameters of what I'm required to do and I can situate that into something that's much much bigger. I think that having that has been one of the
key reasons why I've been able to be successful in jobs that I have done: because I can see my way through. I kind of know where to go" (KQ).

In describing global/conceptual thinking skills as one of his key strengths, a respondent, in the Airline industry, stated:

"I've always had the ability to be able to step outside of the situation, the holistic/helicopter view, go up for a while and look down and say 'hey, what's going on here?'. I've always been able to do that. (I am) always able to distil the issues very quickly. It was like being successful on the sporting field. One of the things a coach said to me years ago was that one of the reasons why you get fit is not only so that you have enough physical reserve to do things on the field, it is so that you can keep thinking while you're doing. The same theory of being able to keep thinking about what's happening as well as doing it; [it's] just been a natural thing which I've done" (EG).

As indicated by the last respondent, an operating framework is not a static reference point which is turned to before action occurs. As Schon (1983) has pointed out, doing and thinking are complementary. Without such a framework it is much harder for individuals to make their tacit understandings explicit and to learn from their reflective attention. A willingness and desire to modify and re-develop an operating framework (theory-in-use) is one of the characteristics of an 'open learner' and of a learning organisation. This will be discussed in Chapter 9.

Developing an operational framework would seem to be an important skill in learning from experience. Just as other employees can be guided by the vision of the CEO, and this gives stability and strength during periods of change, CEOs would seem to perceive the need for an underpinning framework for operating, to provide a measure of consistency and direction. The need for and value of a framework was highlighted by the younger CEOs in this study. The older respondents placed greater weight on 'traditional' values and ethics. This is their tacit operating framework, in Nonaka's terms (1991). It is conjectured that the younger CEOs may be
more likely to develop an operating framework on an ongoing and interactive basis which would be more flexible, adaptive and hence more open. This also could be a useful area for further research.

4. Translating for internal application

Having obtained and processed the external information, the next stage in the loop is to translate the information in ways that are useful and meaningful within the organisation. To achieve this, there are clear links with the skills of visioning and communicating. For example, one of the CEOs, who had worked in political, professional and trade union environments, considered that this was a critical skill for senior executives:

"The key thing is putting it into language that gives people a framework within which they can operate. Know where you want to go and translate it into practical steps in a way people can understand" (BV).

The Chief Executive of a very large, diversified organisation who saw one of his most significant challenges as 'getting senior people committed to and active in pursuit of new directions' described this translation process:

"I have got a capacity/facility to link various things together; it sort of comes out of observation. I get a lot of satisfaction out of saying 'eh I can see all those things, put it together, now let's do something about it'. There are three levels — events, patterns and systems. [You have to] paint the pictures. To get enough people as followers" (UE).

The data suggests it is unlikely that effective visioning can take place unless the various phases of the environmental impact cycle have been pursued.

The broad skill description which best seems to encapsulate these phases is 'understanding and interpreting the external environment'. It involves the capacity to stand back from the detail to some degree, to integrate diverse information and to be 'thinking while doing'.

5.6 A Revised Taxonomy
As a result of the research undertaken in this study, it is possible to review the taxonomy developed earlier (see Chapter 3) with a view to seeing whether the skills identified meet the criteria of perceived relevance, differentiation and are generalisable. A useful taxonomy, it will be recalled, also needs to focus on skills — not qualities, traits or functions.

This chapter has drawn out the skills identified as of most significance to the respondents, using the range of qualitative and quantitative data sources described earlier. The analysis has highlighted the fact that a useable and relevant taxonomy also needs to reflect the realities of the context within which senior managers operate. It has become apparent that a contingency taxonomy is most appropriate; different skills are needed at different times.

In reviewing the taxonomy developed at the commencement of this study, as well as some regrouping of skills, the following changes were seen as relevant: (The revised taxonomy is shown in Table 5.1.)

- 'the skills needed in current circumstances' were most appropriately grouped in terms of the three categories arising from the analysis of the key challenges facing CEOs: the external environment, the organisation and its workforce and the individual executive. This grouping is quite different from the original taxonomy

- distinctions were made between skills regarded as of most significance and other important skills

- 'conceptual/global' skills were replaced with two sets of skills related to understanding and interpreting the external environment; 'information gathering' and 'information processing' skills

- the skill of 'motivating and inspiring' was omitted as it was determined that it is not a behaviouraly based and discrete skill.
<table>
<thead>
<tr>
<th>TABLE 5.1 Revised Skill Taxonomy</th>
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<tbody>
<tr>
<td><strong>Understanding and Interpreting the External Environment</strong></td>
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<tr>
<td>Information gathering skills</td>
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<tr>
<td>*Scanning</td>
</tr>
<tr>
<td>*Networking</td>
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<tr>
<td>Information processing skills</td>
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<tr>
<td>*Patternmaking</td>
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<tr>
<td>*Analytical/systematic thinking</td>
</tr>
<tr>
<td>Developing a framework</td>
</tr>
<tr>
<td><strong>Understanding and Mobilising the Internal Environment</strong></td>
</tr>
<tr>
<td>*Visioning skills</td>
</tr>
<tr>
<td>*Interpersonal/group skills</td>
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<tr>
<td>*Communication skills</td>
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<tr>
<td>Conflict resolution skills</td>
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<tr>
<td>Designing/facilitating learning processes</td>
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<td>Monitoring/directing skills</td>
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<tr>
<td>Resource allocation skills</td>
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<tr>
<td><strong>Understanding and Mobilising Personal Resources</strong></td>
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<tr>
<td>*Learning/adaptive skills [meta-skill]</td>
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<tr>
<td>Self awareness/introspective skills</td>
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<tr>
<td>Informed decisiveness</td>
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<tr>
<td>Innovation/entrepreneurial skills</td>
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<td>Peer skills</td>
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* = 'Key' skills
The revised taxonomy reflects the dominant characteristics, in terms of the external environment, of uncertainty, change and turbulence. This was true for respondents from both public and private sector organisations, irrespective of their employment strengths. In the light of this, it is considered that any relevant taxonomy has to recognise the imperative of change, and the need for CEOs to understand the forces (external and internal) impacting on their organisations. They then have the task of positioning their organisations in a way that will respond to and capitalise on the external forces, and possibly influence them. The analysis has led to the view that these 'forces' can, in fact, best be understood as information which effective CEOs gather, process and translate. CEOs are then faced with the challenge of maintaining the motivation and morale of staff through the use of interpersonal and communication skills, while also being able to establish and maintain a clear direction through the use of conceptual, strategic or analytical planning skills. There are other skills required of CEOs which, while not rated at the same level of significance as the 'key' skills, are still seen as of importance.

Overriding all these key skills is the meta-skill of learning and adaptation. CEOs need to be capable of responding to feedback (internal and external), to embed this learning in a personal operational framework and to be able to respond effectively to changing circumstances. The nature and correlates of this meta-skill will form the basis of the rest of this thesis.
CHAPTER 6

LEARNING STYLES

6.1 Perceived Significance of Learning

Without exception, all respondents to this study placed a very high value on the capacity and desire to learn on an ongoing basis. This capacity was regarded as central to their effectiveness. The primary significance was not in the acquisition of specific knowledge or 'academic' learning, but in a broadening of perceptions and an understanding of the context in which decisions are made. Effective learning is seen as impacting on the acquisition and utilisation of all other skills, and for that reason is described, in the previous chapter, as a meta-skill.

Learning was seen as a continuous process, which was a direct product of day to day experiences "...you are learning as you go" (CF).

The data suggests that the CEOs in this study do not simply have a tacit view of the significance of learning. An overt and positive recognition of the importance of continuous learning marked the responses.

"You can’t ever stop learning. If you do, you stop dead in the water." (EF)

"(It’s) most important to have an attitude that it’s important to keep learning. Always keep your mind open and keep trying to learn something."(QF)

For a number of respondents, learning appeared to be the most powerful motivating force in their career choices and was closely related to job satisfaction and work fulfilment. A very common theme was that respondents enjoyed jobs in which learning opportunities exist and became bored and frustrated with jobs that did not provide the opportunity to learn something new.
"I enjoy jobs while I'm learning. I leave them if I'm not learning." (KQ)

"I have a low boredom threshold [it] makes me want to learn new things and do new challenges." (KV)

This is related to the high curiosity and enquiring nature expressed by many of the CEOs. As one of the respondents pointed out:

"Most successful managers need to have some curiosity. That is part of the change process. If you're not curious you probably don't realise things are changing until the roof falls on your head" (KV).

Analysis of responses to the survey questionnaire and the interview data is consistent with the findings of Bennis and Nanus (1985), that personal learning ability is the characteristic most needed to run an organisation. The results also confirm the research of Wood and Bandura (1988) that effectiveness is linked to a positive belief in the value of personal development.

While not a formal part of the study, the interviews revealed some common characteristics among the sample of CEOs in terms of their childhood. It is recognised that generalisations are not possible, given the restricted size of the sample. Nevertheless, it became apparent that for a number of various reasons, most of the respondents were 'loners' or in some way were 'outsiders' as children. This seems to have led them to learn the skill of adaptation and self-reliance in order to deal with their environments. While not testable with the methodology utilised in this study, it is likely that their capacity to take a broader perspective was also a product of these earlier challenges. This, in turn, could have influenced the extent to which they place a high personal value on learning and its various correlates.

6.2 Learning Goals

Although many respondents said they may have set specific learning goals
when they were young, they did not do so now. Learning was seen as an on-going part of their day to day activities, and generally was not seen as something to be regarded differently.

When specific knowledge or skills are required to achieve organisational goals, learning is quite focussed. In these cases it is situation based and solution focussed, and respondents typically encompass only what they need to learn on the way to achieving the specific goal.

In short, the respondents to this study demonstrated two types of learning goals. On the one hand they exhibited the search for a broad-based, conceptual understanding of the environment, emanating from a generalised curiosity and the desire to understand the environment and to make linkages, as described earlier. The learning framework used is systemic, based on gathering and processing information in a relatively non-specific way. On the other hand, learning related to specific work goals is far more specific. In this respect, respondents learn on the basis of the need to know, in order to achieve an organisational objective. This approach provides a framework seen as necessary in the time-limited environment in which CEOs operate. This second type of learning is, it is believed, the subject of most attention in the literature relating to adult learning.

6.3 Openness to Learning

Researchers such as Vaillant (1977) have shown the significance of life stages and career transitions to the development of management skills. It is implied, through research of this type, that there are times when executives are more, or less, open to learning.

Analysis of responses in this study indicated that it was not possible to identify any particular 'life-stages' characterised by openness to learning. The capacity to learn was regarded as highly situational. Most respondents demonstrated a desire to learn new things and take on new challenges. They tended to seek stimulation from their environment, and were more open to new ideas - and thus to learning - when in a state of arousal.
"I learnt most when I was in a stimulating environment. I was more open to ideas than ever." (FI)

A minority of the CEOs concluded they learnt most when under real pressure and discomfort, as evidenced by statements such as:

"Pain is a great teacher. Comfort isn't much of a teacher at all" (KV).

"Deprivation increases your desire to want to learn" (MZ).

On the other hand, the majority considered they were more open to learning when they were positively stimulated — when they felt in control and 'on top of things'. They felt less open to learning when tired, when feeling threatened, under pressure or over-stretched.

Insight by executives into the circumstances under which they are more, or less, likely to be open to new learning is an important element in the capacity to 'learn how to learn', and thus in applying this meta-skill. The CEOs in this sample appeared to have a reasonably high level of insight into their personal strengths and weaknesses in learning. For example, most recognised the ease with which they could become insulated and close-minded, and that special efforts are needed to avoid this:

"Learning is imperative. But [it] gets harder as people get more removed; [you] get a bit full of your own self importance, which isn't conducive to new information or admitting you don't know" (BV).

"You're a bit more closed as a CEO. More insulated. If you want to close your mind you can" (CK).

To overcome this tendency, effective CEOs respond in a variety of ways to try and obtain feedback on their performance (discussed in Chapter 7) and to deliberately retain an openness in their approach. Objective self-awareness would seem to be one of the key skills needed to retain this openness. Under the prevailing conditions of change and turbulence, this becomes even more important, as paradigm shifts require the capacity to
change basic assumptions and mindsets in many areas. In change management terminology, this requires the capacity — and willingness — to 'unfreeze' or 'unlearn', before new learnings take place. As one of the respondents stated:

"... by the time people become senior, the ability to unlearn basic things is difficult" (CK).

The personal capacity to learn would seem to involve, therefore, the regular testing of personal assumptions and standards against which decisions are being made, in a non-threatening and, preferably, a positively stimulating environment.

6.4 Learning Styles

As described in Chapter 4, the Honey & Mumford Learning Style Questionnaire was administered in order to gain an insight into the preferred learning style of the respondents, and to relate the preferred styles to actual learning experiences. A secondary purpose in using the questionnaire was to identify the level of insight demonstrated by the CEOs into their own learning styles.

The results are shown in Table 6.1. Each of the four scales has a maximum raw score of 20; the general population mean (based on a large scale UK sample) is shown at the foot of the table.

It was not possible to identify studies in which this instrument has been utilised with other senior management groups, either in Australia or in other countries, other than a group of female managers in the UK. There was a close relationship between average scores obtained by the UK female managers and the females in the present study.

Taking the results overall, it is apparent that the CEOs in this study reflected the general population average quite closely. On three of the four scales ('activist', 'pragmatist' and 'theoretical' style) the mean preferences shown by CEOs in this sample were comparable with the general population average — i.e. within the same standard deviation. On the 'reflective' scale the mean rating was below the general population average.
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<thead>
<tr>
<th>Identif.</th>
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<th>Theorist</th>
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**TABLE 6.1 LEARNING STYLES OF CEOs**
It is acknowledged that these results are indicative only, as the sample is too small for any meaningful generalisations. Generalisations are made even more unreliable when the variations between the respondents are considered. On the 'activist' scale, for example, the range is from five — a very low preference — to fifteen.

Comparing the individual scores with the population average is regarded as a more meaningful way to interpret the data. Using this approach, a definite pattern is discernable. On the 'activist' scale, six of the respondents rated below the general population mean, and only three rated above it. The rest were in the average range. A similar pattern emerged for the 'reflector' scale; six below and two above. In contrast, on the 'theorist' scale, six were above the average and two were below it. A similar pattern was evident for the pragmatist scale (five above; two below).

It can be concluded that the dominant learning styles of this group of CEOs is either 'theorist' or 'pragmatist', and in a small number of cases a combination of both.

On the surface, it would appear inconsistent to have low ratings on the 'activist' scale and high ratings on the 'pragmatist' scale, given that both relate to learning from concrete experiences. However, the origins and underlying meaning of the scales need to be considered. The originator of the learning styles theory (Kolb 1984) postulated that there are two dialectically opposed orientations related to how people grasp experience ('prehension') and then how they translate it ('transformation').

Bearing in mind the theorist/pragmatist nature of the learning styles of this group, a possible interpretation of the results is that the majority of respondents draw on conceptual interpretation and symbolic representation ('abstract conceptualisation') to grasp and understand their experiences rather than relying on the direct and concrete experience itself. This would also be consistent with the focus many of them placed on the importance of conceptual/global thinking skills and the heavy emphasis placed on scanning the environment, on reading, and being involved in interactive discussions; all of which are consistent with a 'theoretical' and conceptual way of obtaining information and helping to structure it.
Having 'grasped' the experience in this way, the respondents then appeared to transform that into assimilated knowledge, not through internal reflection ('reflective observation') but through active experimentation.

Experience grasped through abstract conceptualisation and transformed through active experimentation is described by Kolb (1984) as convergent knowledge. Convergent thinkers, according to Kolb, prefer dealing with technical tasks and problems rather than social and interpersonal issues. In general, people with primarily convergent learning styles are particularly found among professions with a technical or scientific base – accounting, engineering, medicine and, to a lesser degree, management (ibid., p. 89).

During the interviews, respondents were asked what they considered their dominant learning styles. Results of the LSQ were not disclosed at this stage. Virtually all respondents indicated a preference for 'learning by doing' or 'learning by experience'. This type of response is consistent with what managers generally report (Honey and Mumford 1989). On the surface this could suggest that the respondents lacked insight into their preferred learning styles, as their actual preferences were more complex, and more varied, than simply 'learning by experience'. However, when asked to clarify the nature of their learning processes, it became clear that 'learning by doing' was usually underpinned by another type of activity which provided a more sophisticated means of gathering and ordering information. The data showed that three primary types of mechanisms were used by respondents:

a) Learning through talking and interacting with others. This group saw considerable value in attending speeches and conferences and far preferred this approach to reading.

b) Learning through reading. This group, in almost all cases, described themselves as 'voracious readers' and in general, "can’t bear just sitting listening to talks" (BF).

c) Learning through having a framework; "to have the tools to maximise the learning experience" (CF).
These three mechanisms can be equated with 'abstract conceptualisation' as a means of grasping experience. Respondents were well able to articulate and show insight into the significance of these type of activities in developing their knowledge and understanding of key issues and, more broadly, in being aware of environmental factors and the personal skills needed to respond.

In general, it is concluded that respondents were insightful into their learning styles but not in the sense of putting an appropriate label on them. They recognised their strong and weak learning modes and sought to capitalise on the strengths. On the other hand, there was little evidence of them seeking to strengthen their weak learning modes.

Analysis of the individual responses was undertaken to see whether any relationships could be identified between the LSQ preferences and other variables. No significant differences were identified between males and females, executives from the public compared to the private sector or those from large compared to small organisations.

6.5 Feedback on Performance

Given the central importance of feedback in the process of learning, respondents were asked how they went about obtaining feedback on their own performance.

The initial reaction of most respondents to this question was an expression of the difficulty of obtaining feedback and, indeed, the 'isolation at the top'. While recognising how difficult it is to obtain objective feedback, and while acknowledging the importance of feedback to improvement, most respondents had not introduced any systematic or deliberate approach to obtaining feedback on their performance. They tended to rely broadly on judging their performance by the outcomes of their organisation by 'seeing how things are working'. Some obtained feedback from a mentor, a spouse or in a few cases, from subordinates — either as part of an appraisal process or more informally. The degree to which this was judged as successful depended, naturally, on the degree of trust and openness perceived to be present.
In only three cases did CEOs specifically indicate they asked staff to provide views on their performance. This was described in the following way by one respondent:

"CEOs sometimes don’t know how they’re affecting other people. They all end up sometimes doing unforgiveable things — abusing their office. I wanted to have someone who, at the right time, will tell me when I was getting close and when I had stepped over the line. I was very conscious of that and sought help with that. I was lucky I had the right person" (CK).

A slightly different approach, but with the same intent, was adopted by another CEO who very deliberately sought feedback from staff in general:

"If I live by the rhetoric of working as a team, they need to be able to tell me what they need from me and whether they’re getting it. Unless you go looking for it, you’re in danger of getting out of touch with what people think about you. You’re in grave danger of believing your own rhetoric about what you’re doing and about your own performance" (BV).

As indicated, these two were exceptions. It requires considerable openness on the part of CEOs to deliberately invite and accommodate such feedback. The majority relied on their own perceptions and assessments of their own performance.

The conclusion to be drawn is that while CEOs accept the centrality of continuous learning, and recognise the importance of performance feedback as part of this process, when it comes to their own identification of development needs they find it difficult to establish systematic or structured processes.

6.6 The Place of Reflection

Superficially, respondents might be said to regard reflection as of relatively limited significance in their learning. The average rating on the 'reflector'
scale on the Learning Styles Questionnaire was lower than any of the other three scales, and was the only one of the five below the population average. Analysis of the interview responses also seemed to indicate that little conscious effort was made to identify, in a deliberate way, the learnings derived from experience.

With only one exception, respondents indicated that they did not deliberately focus on the question 'what have I learnt?' when thinking about an experience they have had at work, after moving to a new job etc. The one exception was a CEO whose dominant learning style was, in fact, that of reflector. He described how he created particular systems to force reflection. For example, he established an appraisal process so he was forced to reflect on how he related with particular staff before discussions took place with them. He also reported that he found it necessary to constantly remind himself that reflection does not automatically happen, but it is something of considerable importance:

"You have to make reflection happen. I have to smack myself on the head and ask 'what have I learnt? Where am I getting better or not?'" (EN)

An interpretation that CEOs in this sample were not reflective, on the basis of this data, would be inaccurate. While they did not deliberately reflect on 'what have I learnt', they all indicated a strong tendency to review experiences and seek to identify what worked and what did not work; to determine how better to handle a similar situation in the future. The reflection was on actions — not learnings. Some examples of responses which convey the manner in which respondents perceived reflection are:

"(I) reflect on what has been and the way things are going" (UE).

"(I) reflect a lot on what worked and what didn’t work. Try to sort out key problems or ways I might handle situations others didn’t handle" (BV).

"(I) reflect on my actions, not on my learnings. It’s something I do instinctively" (FL).
Drawing on this and other data leads to the view that a distinction can be made between reflection as learning and reflection as action. This is not the same as the usage by Schon (1983) who uses the term 'reflection-in-action' to describe the practice of people "... thinking about what they are doing while doing it" (ibid., p. 275).

There was little evidence that in the process of 'reflecting on action' respondents actually sought to step back from the details of the process in order to question their underlying assumptions, beliefs or values. They were, essentially, solution focussed. This might be thought a little surprising, given the realities of organisational life in which:

"... workers at all levels are called upon to think differently and more deeply about themselves, their work and their relationship to the organisation. This is nowhere more evident than in the ranks of managers, whose very survival is threatened by mergers and acquisitions, downsizing and flattening of the organisational pyramid. Frequently trained to implement policies rationally, managers are being called upon to make subjective judgements, take risks and question the assumptions on which they have operated" (Marsick 1991, p. 23).

The key points arising from this analysis of data relating to learning styles and learning significance can be summarised as follows:

- CEOs in this study demonstrate a strong personal motivation and a capacity for continuous learning.

- Learning strategies and goals differ on the basis of two major types of learning undertaken by the CEOs. One is diffuse, broad based and ongoing and relates to understanding and learning from the environment in order to improve personal effectiveness. The other is related to specific work goals. The learning is on the basis of the need to know and is most effective when immediate and seen as relevant.
• Learning was most effective, the CEOs reported, when they were positively stimulated and free of stress. Openness to learning was highly situational, and did not appear to be related to the stage in life or other such factors.

• While not able to cogently label their preferred learning style, the CEOs demonstrated a reasonably high level of insight into their learning strengths, weaknesses and styles. Many activities were implicitly aimed at their own learning, but were not necessarily seen in that light.

• The actual learning style preferences of the CEOs showed, in general, a combination of 'theorist' and 'pragmatist'. There was a high degree of internal consistency between preferences on the Learning Styles Questionnaire and actual behavioural descriptions. The data is fully consistent with Kolb's theory of the dual orientation of learning. In this sample, there is a preference for information to be 'grasped' in one way (abstract conceptualisation) and transformed through another (active experimentation). It is believed this distinction will be important in the development of a grounded theory of managerial learning, to be discussed in the final chapter of this thesis.

• Reflection on learning and learning goal setting, typically considered as key dimensions of adult learning, were applied in an unstructured, tentative and variable way, and were seen by respondents as work-linked rather than learning related. 'Reflection as action' is a term used in this study to describe the reflection process.

• CEOs typically lacked the direct feedback opportunities available to other employees. In some cases they set up alternative structures and systems to obtain feedback, but more often they made subjective judgements about their performance and possible development needs.
CHAPTER 7

LEARNING PATHWAYS

7.1. Relative Significance of Learning Pathways

Other research has shown that there are six learning pathways which are most significant in contributing to skill development. As discussed in Chapter 4, these are:

- formal tertiary education
- formal short management training
- successful work experiences
- unsuccessful work experiences
- having a mentor
- job rotation.

Respondents were asked to rate, on a five point scale, the significance to them of these pathways in gaining the skills they regarded as most important. Results are shown in Table 7.1.

'Successful work experiences' was consistently rated on the written questionnaire as the most significant way of gaining crucial skills, followed by 'unsuccessful work experiences'. The interview data confirmed the overwhelming importance of learning through direct work experience. This supports the research of McCall et al. (1988) showing the relative significance of actual work experience in learning critical management skills. 'Formal tertiary education' and 'having a mentor' were perceived as of particular importance to some respondents, and of low significance to others. They rated next in overall order of significance.
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**TABLE 7.1 LEARNING PATHWAYS OF CEOs**
In exploring the perceived significance of formal tertiary education, it became clear that this form of learning was seen by a number of the CEOs as of value in providing the basic tools for analytical, systematic and logical thinking. For example, one of the respondents described the value of her formal course as "... a structured way of approaching the process of decision making" (B1). It was significant as it provided her with a personal operating model.

Formal training was not linked with the development of any other specific skills. A typical response was "I really don't think there are classroom ways of developing managers. The more senior you get the less relevant they become" (C2). There were indications that those who undertook management training on a part-time basis felt they gained more value as they could "... test out the theories" (B5). This type of training was also described as useful in "... broadening out the thinking" (ibid.).

Notwithstanding this, those who had not done formal management training generally expressed the wish that they had undertaken tertiary studies such as an MBA, primarily to provide confirmation and legitimacy of their own approach; "... to understand what the conventional wisdom was and wasn't" (B5). Most of the CEOs also felt that it would be desirable for younger managers to undergo formal management training.

Job rotation as a skill development tool was seen as very important to about one third of respondents, and of relatively low significance to the other two thirds. Nevertheless, it became clear at the interviews that the broadening effect of diverse experiences was a strong factor in the learning pathways of nearly all respondents. The mixed response to this item reflects differing interpretations of the terminology.

Short management training courses were regarded as the least significant of the various approaches to contribute to skill development. This might be thought surprising as the development of specific skills is often the sole purpose of such training. In the follow up interviews, 'short management training' was primarily seen as a way of confirming the known and providing confidence as a result. "A lot of those things I was doing because I thought they were the right thing to do. After the course I knew they were
the right thing to do." (DD) Short management courses were seen as having been of relatively little value in the past. Interview data indicates that by the time managers reach the top of their organisations, they:

- no longer have time for short courses
- no longer see the courses as relevant
- believe there are no courses available to help them learn the skills they need
- are unable to identify their skill deficiencies. As discussed below, virtually all respondents found it difficult to obtain feedback on their own performance.

An analysis was made to determine whether there was any relationship between learning style preferences (as determined by responses to the LSQ) and the ratings given to the various learning pathways. It might have been expected, for example, that those with a strong preference for theoretical learning might rate 'formal tertiary training' as of greater significance. Analysis indicated no such relationship existed.

7.2 Learning from Work Experiences

McCall et al. (1988) found in their research that unsuccessful work experiences were the most significant learning experience for managers in their study. This was not the case for respondents in the present study. While most CEOs accepted in principle the value of learning from failures, in practice this was not cited as of significance in learning particular skills of relevance to senior management.

Learning experiences of most significance were those in which there was a need to adjust to and deal with an extremely demanding situation — usually as a relatively young person and as an outsider. The phrase 'thrown in the deep end' was regularly used. The organisations in which the respondents were placed were typically in the midst of a crisis of quite chronic proportions. Descriptions were used such as a "haemorrhaging plant" (QF) and a "renovator's opportunity" (FL).

Respondents were not able to identify any specific skills developed in this
way; a generalised learning of appropriate styles and strategies took place. The key learning resulted from successfully dealing with the challenges.

A tentative conclusion to be drawn from the analysis of the data is that the process of learning is by doing and is incremental. It leads to the development or modification of personal style rather than the development of particular skills. For example, the experience of one CEO, in a situation requiring a significant change led to learning that it was acceptable to take the risk of being "... more open, more relaxed and more natural" (BF). The theme of change management was a recurring one, and was one of the areas where learning was most significant as a result of successful experiences. Given the incremental and work-linked nature of learning in this study, the findings do not confirm those of Howard & Bray (1988) that there needs to be a structured approach to learning to enable experiences to be meaningful. This is not to say, however, that a more structured approach would not enhance some forms of learning. Much depends on the type of learning and the particular skills being learnt. In addition, simply having an experience does not seem, in itself, sufficient for learning to occur. There needs to be a capacity and motivation to take advantage of the opportunities and seek out the learning, and a framework which enables the learning to be assimilated. These matters will be explored more fully in the final chapter.

In general, CEOs in this study have had few examples of failure and therefore their level of self esteem and self confidence is high. Indeed, as Bandura (1987) has shown, the principle source of self confidence (which he describes as self-efficacy) is in the experience of success. Bandura's research also shows that self-efficacy can also derive from vicarious experiences, in which the strategies of successful people are copied (see references to modelling in 7.3 below). However, the most reliable method of developing self-confidence is in the capacity to accomplish goals; i.e. in the direct experience of mastery. The importance of successfully handling challenging work assignments is clearly of significance in this respect.

7.3 The Significance of Mentors and Supervisors

All respondents were able to identify one or more people who have been
very significant in their overall development as managers. In a few cases there was a mentor relationship which had extended over a long period. More frequently, respondents referred to the significance of supervisors or others who had deliberately helped in their development as situations arose by giving them advice and encouragement. Although there was not necessarily a long term mentoring relationship, the learning was seen as very significant. This is consistent with the findings of McCall et al. (1988) who found in their study that 90% of the people who "... left a vivid and lasting mark on the developing executive" were organisational superiors, and that while intense mentoring relationships are important in adult development, they rarely occur on the job (ibid., p. 67).

Virtually all CEOs stressed the importance they placed, in their development, in continually observing and seeking to learn from the performance of other people to determine what does and does not work and applying what is seen to be useful. For example, a common statement, exemplified by one of the CEOs, is:

"(I) always look for people to learn from. You're likely to meet someone who gives you something extra" (EN).

This is consistent with one of the skills of CEOs, described earlier; that of information gathering and scanning. The learning reported by CEOs as having been gained through these processes covered both broad systemic approaches, such as the importance and methods of developing other people, as well as specific skills such as analytical thinking, conceptual thinking, communication skills and conflict resolution.

A number of the CEOs had learnt a great deal from observing other managers who demonstrated weaknesses in at least one area. Analysis indicates that, without exception, when CEOs reflected on what they learnt from a negative model, the learning related specifically to people management skills. In these cases an awareness of the importance of, and skills implicit in, effective people management developed by seeing — and feeling — the consequences of poor skills in this area. As one CEO put it:

"I saw what didn't work. I can remember how I felt when I was
treated that way" (Cf). Another stated: "I have worked mostly with managers for whom I had little respect. I thought 'as a manager there's no way I'm going to behave in that sort of way'" (B1).

Analysis of the responses indicated that the CEOs in this study derived three primary types of significant sustainable learning from mentors and/or supervisors:

a) Learning to help understand the importance (and associated techniques of good interpersonal skills to enable effective people management and people development. In this respect, negative examples were as of as much significance as positive.

b) Learning which facilitated the development of a system of learning; i.e. 'learning to learn'.

c) Learning to help in the development of a system of thinking. This includes conceptual thinking (e.g. taking a broader perspective) and a better understanding of the analytical thinking process.

In the case of b) and c) above, the supervisor/mentor helped in the development of an operating framework with which the respondents could further advance their own learning and thinking. This is important in the context of 'learning how to learn'; a critical skill for CEOs as seen earlier.

7.4 Learning Pathways in Developing Core Skills

At the interviews, respondents were asked to focus on each of the skills they regarded as a strength and identify relevant learning experiences that were important in helping them understand and develop the particular skill. The purpose was to see whether specific learning pathways could be associated with specific skills.

In general, respondents found it very difficult to identify specific events, learning experiences or training programs that were influential in facilitating the development of particular skills. They typically responded
that they had 'learnt through experience' and that they had gradually
developed the skills they demonstrated through a range of experiences and
pathways — such as those discussed earlier in this chapter.

Nevertheless, for a number of the skills in the taxonomy developed for this
study, it was possible to identify some specific learning pathways or
learning experiences that were of significance. The seven key skills in the
taxonomy were examined to determine whether any dominant learning
pathways could be identified, or what other influential characteristics
emerged.

**Information Gathering Skills**

Scanning and networking were the two key skills identified earlier as being
critical to understanding the context within which the organisation
operates. The analysis suggests that these skills are age and experience
related. The development of these skills was described by most respondents
as flowing from a broadening of the experience base. Scanning skills
developed from observing others, from reading, (virtually all respondents
described themselves as avid readers) and from travel. These types of
experience seemed to be a response to the inherent curiosity of the
respondents, but also seemed to heighten sensitivity to various directions
and opportunities for further information gathering.

Networking skills draw, in part, on interpersonal skills. Respondents who
described themselves as particularly adept in relation to this skill were
those who had experience in politics, the Women's movement or the
Trade Union movement and had developed the skills by observing others
and through direct experience. Thus, while there seemed to be a general
view that the value of networking could be taught, the actual skills were
the product of observation and experience and did not readily lend
themselves to formal learning processes.

**Information Processing Skills**

The taxonomy also identified two key skills associated with information
processing; patternmaking and analytical/systematic thinking.
Unlike the two skills associated with 'information gathering' which appear to develop with age and experience, the skills associated with information processing appear, on the basis of this research, to be largely independent of experience or any specific development opportunities.

Patternmaking, for example, was claimed by a number of respondents to have always been a skill they could draw on. For example:

"I've always been able to distill what the issues are very quickly" (EG).

"I like to see and hear what's in place and step back and look at it for what it is. I've always been able to look at issues" (CF).

In some cases respondents only became aware they had this ability — and that others did not — after they had become managers.

The skill of patternmaking, as identified in this study, is probably best understood in cognitive terms. It is considered that it is related to abstract or spatial reasoning and to field dependence and independence. Research has shown that significant differences can be identified in achievements and attitudes as a function of the cognitive style of subjects in relation to spatial reasoning (Halpin et al. 1986). These differences can be measured by cognitive tests such as the Group Embedded Figures test and Ravens Progressives Matrices. The indications are that spatial reasoning is a skill or capacity which is largely innate, and not amenable to development through structured training programs or other learning experiences.

**Analytical/Systematic Thinking**

Analytical and systematic thinking is also a cognitive capacity and as such its potential development is constrained by the inherent capacity of the individual. Nevertheless, analysis of interview responses indicated that formal education — both secondary and tertiary — was regarded as the most important development pathway for this skill. Respondents cited the importance of their education in science ("chemistry experiments teach you about cause and effect" (EN)), engineering, statistics ("forces you to think things through logically" (QF)) and law ("all about ratio decidendi" (UE)).
Only one respondent referred to a development process other than formal education when exploring the development of analytical skills. In this case the CEO identified modelling as of significance:

"... I learnt an awful lot from sitting hearing those people solve problems and wondering why it was easier for them than it was for me, and somehow trying to catch up" (CK).

Observing others provided a benchmark against which this respondent could gauge his own skills, and through which he recognised the need to develop in this area. It provided the awareness of a need, but not the tools nor techniques; the latter were then developed by deliberately seeking the systems and techniques and applying them in a practical way. This CEO placed considerable value on mentoring and from closely observing and learning from people who were very effective in a particular area.

Visioning Skills

The two core elements involved in visioning were discussed in Chapter 5; identifying a vision and communicating it in a meaningful way. The data did not provide any meaningful indication as to learning pathways which facilitated the CEOs in developing the skills of identifying or developing a vision. Two of the CEOs indicated that it was a skill they had had since they were young. For example: "I always enjoyed having a vision of where I wanted to be in the future — from a young age" (EJ). Most of the CEOs who identified this skill as a particular strength were unable to explain its source. By inference, it would seem that the skill of visioning does not develop through any training or education programs. It is linked with patternmaking, discussed above, and may well be associated with a similar cognitive predisposition.

The second aspect of visioning — communicating the vision — frequently involves converting tacit into explicit knowledge. The use of metaphors, analogies and models is necessary (Nonaka, 1991).

The development of this skill, as for communication skills generally, seems to be based on experiential learning. It is also conjectured that the capacity
to communicate a vision is a function of the breadth of experience and attitudes of the CEOs and the extent to which they have insight into their own mental models (self-awareness) and those of their employees (empathy).

**Interpersonal Skills**

In discussing this skill in the development of the taxonomy (Chapter 5) the point was made that the underpinning values and attitudes demonstrated by the CEOs were of more significance than actual skills involved in dealing with people.

The sources of development of such attitudes and values goes beyond the scope of this study, but needs to be borne in mind when considering the genesis of the complex set of attitudes and skills which define 'interpersonal relations'.

Observation of effective managers and the experience of successful application of interpersonal skills emerged as the most significant learning pathway for the skills involved. "The best learning is when you see it [people management] succeeding and you gradually build on success." (PC) However, this assumes effective feedback mechanisms are in place to determine what does 'succeed'. As discussed above, this is frequently lacking. Observation and experience of managers that were not effective in their interpersonal skills also provided an important learning pathway. Formal training programs were only cited once as having helped in the development of interpersonal skills. In this case the respondent had completed an enterprise workshop (an experiential, project-based learning program) which enhanced team interaction and interpersonal skills.

**Communication Skills**

The principal learning pathway for this skill, not surprisingly, was simply stated as 'experience' or 'trial and error'. The view was expressed by one respondent that learning the skills involved in communication could have been quicker if a 'good teacher' had been available, rather than relying on trial and error. A large number of the respondents indicated, in fact, that
the ability to express thoughts and ideas — orally or in writing — was facilitated by teachers, parents or mentors. Modelling seemed to be particularly important for the development of communication skills.

A more subtle and complex aspect of communication is the capacity to understand the mindset and frame of reference of others. As one respondent pointed out:

"You learn you can't rely on other people sharing your concepts. You have to find out where they're coming from to be able to communicate with them; to put things in terms meaningful to them" (BF).

Skills implicit in this approach, like those in relation to interpersonal skills, derive from experience, self-awareness and the availability of feedback.

Learning and Adaptive Skills

Despite the considerable importance placed on this skill by all respondents, and the high degree of motivation for continuous learning, with only one exception there was no evidence of the use of systematic approaches to learning the skill of learning. Of all the key skills it would appear to be most subject to randomness and chance. One CEO proved the exception in this respect. He spoke of a teacher at school who had provided him with an enduring system of learning: "She taught me how to learn and how to improve one's ability to retain" (EN).

Mobility played a significant part in the development of many of the respondents, either as a child or in their early work life. They often found themselves in unfamiliar surroundings with different social and cultural expectations. This appears to have facilitated their ability to adapt. As one CEO put it: "You had to learn to keep adapting" (QF).

Another CEO's response showed the relationship between adaptation and the skill of scanning: "I've been in a variety of work experiences and moving around. You have to learn to adapt and to read the environment pretty quickly" (BF).
It can be seen, therefore, that learning to learn and to adapt was largely experiential, unstructured and randomised.

7.5 Summary of Findings on Learning

The results reported in this Chapter broadly confirm the findings of a number of overseas-based studies (referred to in Chapter 2) related to the significance and nature of managerial learning. In summary these are:

- Personal learning ability was the characteristic identified as most needed to run organisations.

- Effectiveness in learning was linked to a positive belief in the possibility of personal development.

- Mentoring was relatively rare, but previous supervisors played a very significant part, both directly and indirectly, in the development of executive skills. Observation and modelling were important factors in this development.

- Negative models were of particular significance in learning about interpersonal skills.

- Significant learnings were associated with demanding management challenges that were handled successfully.

- The four stage learning cycle developed by Honey & Mumford (1986), based on Kolb (1984) (experiencing; reviewing the experience; drawing conclusions and applying the conclusions) was relevant to the CEOs in some situations. However, the process was rarely as ordered as implied by the model. Most significant learning was randomised and incremental. Based on Mumford's model of the three types of management development, this sample could be described as Type 1 ('informal managerial' - accidental process). There appeared to be very little activity with the specific and sole intention of development. However,
development underpinned, almost unconsciously, many of the activities of the CEOs and was a strong pervading motivation. This suggests the three type categorisation of Mumford may need reconsideration. This will be discussed in Chapter 9.
CHAPTER 8

EXECUTIVE STYLES AND PERCEPTIONS

8.1 Significance of Age and Length of Experience

The age at which executives commence leadership and general management activities has been found to be a very important factor in their development, as has the length of time they have spent in 'growing' (Margerison 1980, Kotter 1982, Mukhi 1982).

Table 8.1 sets out the age of each of the respondents in the present study and shows when they:

- first took on overall responsibility for important management tasks
- commenced leadership activities
- became involved in the execution of many managerial functions (i.e. became a 'general manager').

It can be seen that the average age of respondents at the time of the fieldwork was 49. They commenced leadership activities, on average, at the age of 28 and were 34 when they reached a general management position. This is consistent with Mukhi's research into Australian CEOs (1982). He found the average age of reaching a senior management position was 33; virtually the same as for this study.

This group, therefore, spent only an average of six years between taking on a position of leadership and reaching a general management position. This is significantly less than identified by Kotter (1982). He found it takes 10 - 20 years to 'grow' a general manager. Mukhi did not investigate this aspect, but he did find that on average seven years elapsed between gaining a senior management position and the 'top job'. The findings are therefore consistent with other research in this area (Mukhi 1982, Margerison 1980) in that being under 35 years of age when reaching a leadership position is a critical point. Only two of the respondents were over 35 when they started leadership activities and took on important management tasks.
<table>
<thead>
<tr>
<th>Identif.</th>
<th>Mgt Tasks</th>
<th>L'ship</th>
<th>General Mng</th>
<th>Current</th>
</tr>
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<tbody>
<tr>
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<td>35</td>
<td>35</td>
<td>35</td>
<td>49</td>
</tr>
<tr>
<td>1111603QF</td>
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<td>66</td>
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<tr>
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<td>48</td>
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<td>48</td>
<td>56</td>
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<tr>
<td>1210208CK</td>
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<tr>
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<td>22</td>
<td>22</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>1220303DF</td>
<td>29</td>
<td>24</td>
<td>29</td>
<td>56</td>
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<tr>
<td>2120716 HS</td>
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<td>45</td>
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<td>2210103BF</td>
<td>24</td>
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<tr>
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<tr>
<td>2221014KQ</td>
<td>30</td>
<td>30</td>
<td>39</td>
<td>45</td>
</tr>
</tbody>
</table>

| Mean      | 30        | 28     | 34          | 49      |

**TABLE 8.1** AGE AND MANAGEMENT ROLES OF CEOS
8.2 Role Perceptions: Manager or Leader?

At interview the CEOs were asked whether they described themselves as a 'manager' or a 'leader'. Responses were analysed to see whether their perception of this factor was related to their learning style, to the skills they rated as of most significance or to other factors.

There was a great deal of consistency in the overall responses to this item. Of the males in the sample, nearly all described themselves as leaders. Leadership was generally understood to involve visioning (setting a vision, articulating it and supporting those doing it), modelling (showing by example), empowering (giving people authority and confidence to do what they believe is the right thing to do) and communicating (explaining how people fit into the broader picture).

Only two males described themselves as managers. These respondents seemed to have a very traditional view of 'leaders' as the charismatic-hero type of person. Although they considered they did not have leadership attributes, they both stressed the importance of building teams and of working through and with other people. In describing his lack of charismatic qualities, one of the respondents stated:

"I don't grab the banner and walk down the corridor with it" (QF).

The other considered he had not been as successful in leadership as he could have been:

"Most of the good results I've had was achieved working with other people" (CF).

Each of the women in the sample, unlike any of the men, described themselves as both a manager and a leader. The women did not see the two roles as mutually exclusive. They perceived that while their leadership role was a very important one, there was also considerable significance in their role as a manager of resources, of monitoring progress and, significantly, of managing the external environment ("... to make sure it is comfortable for the organisation" (KQ)).
It cannot be concluded from this that women handle multiple roles more effectively than men; this would require a separate study. However, in this limited sample it would appear that the female CEOs' perceptions of their positions enables them to more readily accommodate diversity of roles than do the male perceptions. The men in this sample appeared more likely to want to be seen (and see themselves) in the traditional leader image, whereas to the women this was less important. They were more inclined to articulate the duality and diversity that actually is found in the role of the CEO.

From the point of view of management development practices, it would be an important area for further investigation to see whether this perceptual difference — if supported by a wider study — has any bearing on the development opportunities managers see as relevant to themselves.

8.3 Views on Management Development Strategies

Respondents were asked at interview: 'What strategies are needed at enterprise or industry level to enhance management skill development?'

While there were a number of specific suggestions related to processes such as mentoring, the value of formal short courses and the importance of feedback, the overwhelming response was the importance of providing people with a broader range of experiences and opportunities.

"The more generalists you can produce, the better. There is too much of a tendency to specialise. They don't see the big picture." (CV)

The suggested approaches to bring about this broadening covered exchange experiences, in which people are accountable for specific outcomes, experiential workshops, and simply 'learning by doing'. Although in some cases there was a recognition that a more strategic and focussed approach may be needed, few real suggestions were put forward as to how this might be done. One respondent stated:

"... to reduce the costs of shifting people about without any good outcomes we have to get better at understanding what makes a
successful manager. Learning on the job becomes more important" (EN).

Another spoke of the possible value of a management interchange scheme to:

"... provide the opportunity to observe a different lot of staff, a different lot of people with a different lot of procedures" (HS).

In addition, respondents pointed out the importance of people being open to learning and an exposure to new areas seen to be relevant and appropriate.

To further explore their attitudes towards management development, and to facilitate a better understanding of their values and the place of learning, respondents were also asked: 'What advice would you give to a younger manager in the process of developing their own career. What are the key things to learn and how can they best be learnt?'

Openness, breadth, flexibility and people skills emerged as the dominant themes. Typical examples were:

"Get wider experience to see what’s over the next hill or down in the next valley. Look for the broad things" (UE).

"Learn to interact with the environment — and to create an environment where there is openness in discussion" (KQ).

"Seek a broader framework. Be open minded and look what’s happening around you. Be curious" (EN).

"Be open to a whole range of experience. The flexibility to learn is important" (FL).

"People skills make the difference. That can best be learnt by working with people" (BF).
In terms of learning, the key messages arising from an analysis of the responses are:

- the importance of openness to new experiences and ideas
- the importance of challenging the 'comfort zone'
- the importance of keeping options open.

To achieve these goals, it is seen as critical that people seek to develop a broad framework within which they can grow and develop. Such a framework can best be developed by being curious, by observing others judged as effective and by seeking to understand and interact with the environment and with other people. The importance of obtaining — and being prepared to accept — open feedback was also seen as an important development strategy. This was exemplified as follows:

"At some stage someone needs to put a mirror in front of managers and say 'see yourself as others are seeing you and how you're performing'. There needs to be an environment in Australia where that can happen without people feeling discredited and worthless" (CF).

There were virtually no references to the importance of developing specific technical skills nor to obtaining those skills traditionally regarded as central to good management (e.g. controlling, directing, analysing). This reaffirms the findings, described in earlier chapters, of the perceived importance of the broader based skills of environmental scanning and 'people' skills.

Similar findings emerged from an analysis of a question that may be regarded as most closely tapping the underlying values of the respondents. They were asked to indicate the most significant thing they have learnt as an adult; 'the one thing you would pass on to someone else if you could'.

Three dominant themes emerged:

1. The importance of effective people skills and of a basic belief in the
potential of people. The CEOs stressed the importance of valuing people and recognising that if people are given the 'right' environment far more can be achieved through individual and group self-determination.

2. The importance of continuous learning; the notion of ongoing questioning and staying open to new ideas.

3. The importance of balance, perspective and sound judgement.

Some examples of these are as follows:

"People have so much more ability than we give them credit for. If you trust the people, they'll come up with the goods. And if you don’t do that, then you’re never going to have an environment in which people are motivated" (BF).

"Stay open to new ideas. Keep listening. Continue to learn. No matter where you are, how senior, there’s always more to learn" (KQ).

"Keep questioning. Believe in people and their potential" (UE).

"Get the right people into the right jobs and let them go with the minimum of interference" (CV).

"Don’t take yourself too seriously. Life is a moveable feast" (BV).

There is a high level of consistency between these dominant themes and the key skills required by executives as elaborated in the revised skills taxonomy (Chapter 5). The significance of people skills, of learning skills and of environmental scanning skills is consistently highlighted by the data and is one of the principal findings of this research.
CHAPTER 9

CONCLUSIONS AND IMPLICATIONS

9.1 Major Findings and Their Relationship to Existing Theoretical Perspectives

If insight is to be obtained into ways of improving management learning, it is necessary to know what are the central skills of senior executives and how they are acquired or developed. This research was based on these two issues.

The specific research objectives were:

1. To develop a taxonomy of core skills relevant and appropriate to senior executives in the current Australian environment, based on a review of relevant research.

2. To test the validity of the taxonomy and modify it, if indicated, following field research.

3. To determine the methods used by a sample of Chief Executives to develop or acquire the core skills.

4. To identify the theoretical and practical implications for executive development.

The Skill Taxonomy

In common with a number of theorists (Mintzberg 1973, Boyatzis 1982, Schroder 1989) it was found that a contingency taxonomy is most appropriate. Executives call on different skills at different times. As a response to current circumstances, the respondents in this study placed particular emphasis on the systemic nature of their organisation and its place in the wider environment. They saw their organisation as part of an open system, and accordingly focussed much of their attention on the external environment. This reflects,
it is believed, a shift in the role and orientation of senior executives. Much of the research literature indicates that in the past the role and skills of senior executives has been focussed largely — if not exclusively — on the role of the executive within the organisational boundaries (i.e. within a closed system).

This view is supported by Mukhi (1988, p. 73) who states:

"Older perspectives on management such as scientific management, human relations and administrative theory are inward-looking; they tend to neglect the complicated, lively environment and the open-systems nature of its relationship with organizations. ... It does seem undeniable that environment is a powerful determinant of managers' concerns and activities. The impact of more complex and rapidly changing environments upon organizations renders the task of management much more challenging than it would be in simpler and more placid conditions".

The taxonomy, as developed, takes account of this shift. The research found that the major challenges faced by Chief Executives related to the organisational/environmental interface. Challenges of particular significance were implementing and responding to change, understanding and translating the external environment and developing, communicating and maintaining a strategic direction. Internal challenges (motivating staff and maintaining morale; resource acquisition and utilisation) were of relatively less significance as compared to the external factors.

The initial taxonomy, developed on a theoretical basis following the research review, was modified to a great degree following the field work. In all, seventeen skills were identified as of considerable importance to the functioning of CEOs. These are listed in Table 9.1.
<table>
<thead>
<tr>
<th>Table 9.1  Skill Taxonomy</th>
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<table>
<thead>
<tr>
<th>Understanding and Interpreting the External Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information gathering skills</td>
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<td>*Scanning</td>
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<tr>
<td>*Networking</td>
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<tr>
<td>Information processing skills</td>
</tr>
<tr>
<td>*Patternmaking</td>
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<tr>
<td>*Analytical/systematic thinking</td>
</tr>
<tr>
<td>Developing a framework</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding and Mobilising the Internal Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Visioning skills</td>
</tr>
<tr>
<td>*Interpersonal/group skills</td>
</tr>
<tr>
<td>*Communication skills</td>
</tr>
<tr>
<td>Conflict resolution skills</td>
</tr>
<tr>
<td>Designing/facilitating learning processes</td>
</tr>
<tr>
<td>Monitoring/directing skills</td>
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<td>Resource allocation skills</td>
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<table>
<thead>
<tr>
<th>Understanding and Mobilising Personal Resources</th>
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<tbody>
<tr>
<td>*Learning/adaptive skills [meta-skill]</td>
</tr>
<tr>
<td>Self awareness/introspective skills</td>
</tr>
<tr>
<td>Informed decisiveness</td>
</tr>
<tr>
<td>Innovation/entrepreneurial skills</td>
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<td>Peer skills</td>
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</table>

* = 'Key' skills
As discussed in Chapter 5, the 17 skills were explicitly grouped into three major categories, reflecting the elements involved when CEOs respond to the dominant challenges they face. While confirmatory research is needed, it is postulated that effectiveness as a CEO is a product of high skill levels in each of the three categories. They are:

- understanding and interpreting the external environment
- understanding and mobilising the internal environment
- understanding and mobilising personal resources.

It should be noted that the skills identified in this taxonomy do not involve technical skills, nor those traditionally regarded as central to good management (e.g. controlling, directing, analysing). In addition to the skill of learning, far greater emphasis is placed on broader based systemic skills such as environmental scanning and interpreting as well as on 'people' skills. This is one of the key findings of this study.

The skills associated with understanding and interpreting the external environment were found to be a derivative of the more generic skill of 'conceptual/global thinking' which was identified by the CEOs as one of the two most central skills for them to perform effectively (the other was the skill of learning). A four stage model was developed, illustrating the key elements involved in understanding and interpreting the external environment; information gathering (including scanning and networking); information processing (involving patternmaking and analytical/systematic thinking), developing a personal framework and translating for internal application. The literature review suggests that relatively little attention has been given to this set of skills. As far as can be ascertained, this analysis and conceptual development has not been undertaken before.

One of the gaps identified in the review of literature (Chapter 2) was that relatively little previous research has focussed on the skills demonstrated by Chief Executives. The question was raised as to whether the skills called on by people at this level are necessarily the same as those required by managers at other levels. Further research would be needed to empirically test this question. However, it is considered that the data in this study provides some initial direction for such research. In particular, it is proposed that the skills
associated with understanding and interpreting the external environment, together with the meta-skill of learning, may be regarded as key **differentiating** skills which significantly help to define the critical skills needed for Chief Executives. These are:

- information gathering skills, involving a capacity to constantly scan the environment (scanning/networking)

- information processing skills, involving the ability to interpret the signals in ways that make sense (patternmaking/analytical thinking)

- ability to portray these patterns in ways that are meaningful and motivating to staff (visioning)

- capacity to be open to learning on a continuous basis (learningadaptive skills).

It is not suggested that managers at other levels do not need these skills, nor that these are the only skills needed by Chief Executives. It is suggested, however, that if these particular skills are not present at the CEO level there will be a notable impact on the performance of the organisation. If other skills identified in the taxonomy are not present, and if this is recognised by CEOs (which is implied by the skill of continuous learning) appropriate action can be taken, such as the appointment of a deputy with complementary skills.

These six differentiating skills, together with two others (interpersonal/group skills and communication skills) were consistently rated on various indicators as of more central significance than the other nine. They have, therefore, been characterised as 'key' skills.

To graphically demonstrate the linkages and influence patterns that exist in relation to the three skill categories, the model in figure 9.1 has been developed. It portrays this researcher's view of how the key skills can be seen in relation to one another, and in relation to the key challenges identified by the CEOs.
**Figure 9.1**

Interrelationship of Key Skills and Key Challenges
The model demonstrates that the skills needed by CEOs are a response to the challenges facing them. It also illustrates the broad significance of learning/adaptive skills, which impact on the way both the external and the internal environment is understood and handled. It permeates all three broad elements and is significant in determining how well the specific skills within each are learnt. For this reason it is regarded as a meta-skill. The model also illustrates how 'visioning' is a bridging skill, linking the analysis of the external environment with the skills of mobilising the internal environment.

The two way nature of the influence processes in this model is also significant, as it illustrates the systemic, interactive and dynamic influences at work in the application of the skills needed — and exercised — by Chief Executives.

From a theoretical perspective, the taxonomy developed for this study is eclectic. It does not relate directly to any single management theory. It shares with Streufert and Swezey (1986) a view that multi-dimensional thinking is a key skill for executives. Indeed the three characteristics cited by them — differentiation, integration and adaptability — are comparable with findings of the present study. On the other hand the quantitative analytical view adopted by the 'decision theory' school, with which Streufert and Swezey are identified, is not consistent with the data in this study, which highlights the significance of both analytical thinking and also skills associated with attitudinal, perceptual and other factors not normally associated with rational decision making. The taxonomy also has conceptual and empirical links with the leadership theories of Burns (1978), who regards learning and communication skills to be among the key skills of transforming leaders. These were two of the key skills identified in the present study.

There is also a close relationship, it is believed, between the empirical findings of this study and the theories and concepts of Mintzberg (1973) and the 'Work Activity' school. The links can be seen both in terms of Mintzberg's contingency theory of managerial work (the contingent nature of management skills was an important finding of the present study) and in terms of similarities in the skills found to be of significance. However, this study has placed far greater emphasis on skills associated with understanding and interpreting the external environment than has Mintzberg or, indeed, most other researchers. Finally, there are parallels between the findings of this
study, insofar as it has highlighted the centrality of systemic skills and systemic learning, and the skills and disciplines identified in the theories of Senge (1990).

Learning Styles and Pathways

The complexity of the learning process was borne out by the data analysis. Despite a very detailed data investigation and analysis in relation to possible learning pathways associated with the key skills identified in the taxonomy, it was found impossible to identify specific events, learning experiences or training programs that were consistently influential in facilitating the development of specific skills. Nor was it possible to develop a single and precise answer as to the manner in which the CEOs developed their learning skills or the processes they followed in learning. There were wide variations in preferred learning styles and learning approaches, with no direct relationship between a preference for a particular learning style and learning effectiveness. Individual managers adopted different styles to build on their personal strengths.

Learning effectiveness appeared to be related to two elements; an overt and positive recognition of the value and importance of ongoing learning and a reasonably high level of insight into personal learning styles, strengths and weaknesses. This involved, in particular, the capacity and willingness to regularly test personal assumptions and standards against which decisions were made. This, in turn, was found to need a non-threatening and positively stimulating environment.

Most significant learning took place in a randomised, incremental and unstructured fashion. The findings in this study in this respect appear to be consistent with those of Danis and Tremblay (1985) and Brookfield (1986) who have also found that successful independent learners report that random, accidental events are often significant in suggesting new learning paths. These findings thus contradict many of the learning principles proposed in the literature as generalisable to all adults and "... on which many institutionally organized education and training programs are premised" (ibid., p. 45).

The CEOs in the study recognised the risks of being insulated, and responded
in a variety of ways — and with varying degrees of success — to seek performance feedback and, importantly, to retain an openness in their approach.

The centrality of direct work experience in learning was an important finding of this research, and confirms the findings of McCall et al. (1988) and Wick et al. (1993). Significant learnings, in particular, were associated with the broadening effect of a diversity of experience and also with demanding management challenges that were handled successfully. However it was evident that learning was not simply a product of having an experience. Direct work experience encompasses not only executing the functions of the position, but also the deliberate observation of other executives (for the purpose of positive or negative modelling) and the testing out of management styles. The CEOs in this study placed particular emphasis on deliberately seeking to learn from most situations and, in particular, from consciously observing the behaviour of others. A degree of objectivity, assessment and evaluation of these experiences typically formed a part of the learning process, although it was largely unstructured and unsystematic. These findings confirm those of Kaplan et al. (1985) that learning from experience is central to executive development rather than work experience per se. The implication of this is that there needs to be a focus on the learning process if learning effectiveness is to be enhanced.

The research found that formal management training played a relatively minor role in skill development. Equally, while formal tertiary education was important in providing the basic tools for systematic and analytical thinking, it was not identified as a significant pathway for any of the other key skills.

Mentoring was found to be relatively rare, but observation and modelling, based on the behaviour of others (often previous supervisors) played an important part in the development of skills. Sources of influence such as these were of particular significance in helping form, confirm or challenge perspectives (or 'mindsets'). There were two types of significant sustainable learning which derived from supervisors or mentors:

a) Learning which helped in the understanding of the importance of good interpersonal skills or helped in the development of specific
techniques. In this respect it was noted that negative examples were of as much significance as positive examples.

b) Learning which facilitated the development of an operating framework in which managers could further advance their own learning and thinking. For example, helping the development of a system of learning ('learning to learn') or a system of thinking (e.g. taking a broader perspective).

While it proved impossible to link specific learning pathways with specific skills identified in the taxonomy, it was found possible to draw some general conclusions. The data suggests, for example, that development of some of the skills (scanning, networking, communication and interpersonal skills) was gradual, experiential and was facilitated by positive underpinning values and attitudes. On the other hand, the indications are that some of the other skills (patternmaking, visioning and, to some extent, analytical thinking) are largely related to basic cognitive capacities. The scope for development of these skills through either planned or informal learning processes, therefore, is more limited. The learning pathways for the meta-skill of learning, although arguably the most important skill, proved the most elusive, although there are indications that the desire to learn — and adapt — is heavily influenced by early developmental experiences.

In the light of these findings a clear implication is that executive selection processes need to take particular account of those skills identified as both significant and either inherent or developed through early formative experiences.

From a theoretical perspective, it was found that the most significant learning undertaken by the CEOs is not fully consistent with the experiential learning model. Nor do the findings of the study conform with Mumford's model of the three types of management development (1988). Given the randomised, unstructured and incremental way in which learning occurred, on the surface it might appear that the way managers in this study learn conforms to Type 1 of Mumford's model; 'Informal Managerial' — Accidental Process (in which there is very little activity with the specific and sole intention of development). However, there was a broad developmental objective
underpinning many of the activities undertaken by the CEOs. While not necessarily identified as 'learning', many activities were implicitly aimed at enhancing knowledge and understanding. There was no evidence that a more explicitly structured and planned approach to learning (the essence of Type 2 and Type 3 in Mumford's model) would have led to better or more integrated learning.

The clear implication is that an ordered, structured and purposive learning approach, as implied by models such as developed by Mumford, are not necessarily most appropriate for the skills identified as of most significance in this study. For other skills, particularly those that are specifically task related, such an approach does seem relevant. In a sense this conclusion is supported by reference to the way learning was found to have occurred through the processing of information. There was congruence between the data in this study and Kolb's (1984) theory of the dual orientation of learning. New information was grasped in one way (for the group of CEOs in this study the dominant style was 'abstract conceptualisation') and transformed through another ('active experimentation'). This distinction is considered to underlie the nature of the randomness and lack of structure that has been discussed.

9.2. A Tri-Modal Typology of Learning

The findings of the study, at first inspection, carry a basic ambiguity. At times the Kolb learning model was relevant and could be applied; at other times it could not. Similarly, Mumford's three stage model applied in some situations but not in others. In the view of most theorists and practitioners in the field of adult education, learning effectiveness, particularly for adults, is normally associated with the setting of learning goals, performance feedback and with active reflection (Brookfield 1986). The findings of this study indicate that while the motivation to learn was strong, and learning can be assumed to have been effective (given the nature of the sample) these three elements were not a strongly explicit feature in the experiences of the sample in relation to the skills identified as central to their work.

The resolution of this ambiguity was found in the theory that there are three major types of learning undertaken by CEOs and that learning strategies and goals differ according to which of the major types is applicable. One type of
learning is precise, ordered and situational. It involves the deliberate acquisition of specific skills and knowledge to meet a particular need or to solve a particular problem, typically related to specific work goals. The learning is on the basis of the need to know. It is most effective when immediate and is perceived as relevant. It typically involves the very specific application of learning goals and reflection on outcomes; normally regarded as key dimensions of adult learning. It is argued that it is this type of learning (identified as 'instrumental learning') which 'fits' the models described by Kolb (1984), Honey & Mumford (1986) and others.

The second type of learning is a relatively undifferentiated learning process reflecting a generalised desire for ongoing personal development; a strong driving force which underpinned many of the activities of the CEOs and influenced many of their vocational and avocational decisions. This type of learning, identified here as systemic learning, is aimed at the development or modification of personal style and with enhancing knowledge and understanding, particularly of the environment and its possible impact on the organisation. It is diffuse and ongoing. Systemic learning shares with instrumental learning the fact that it is not cognitively based and it is experiential. However, there are a number of marked differences. Firstly, systemic learning is less ordered or structured and is more likely to occur through randomness. Secondly, it is integrative and systemic. Ongoing and deliberate efforts are made by the learner to see the gestalt — the interrelationships between different events, facts or concepts. This relates particularly to the conceptual skills described earlier, involving obtaining, understanding, synthesising and interpreting information from multiple sources in the environment. The focus is on giving meaning to this information, as a basis for enhancing personal and organisational understanding and action. Thirdly, systemic learning involves being aware of and questioning the underlying assumptions, attitudes and beliefs the individual uses to assimilate information, with a view to seeing and presenting the information in a new light (reframing). Fourthly, systemic learning cannot take place in isolation from the organisational and environmental systems which impact on the individual. It is integrated with both work and non-work activities.

Some examples drawn from the interviews with CEOs illustrate the type of
processes involved:

"You need sensitivity to all sorts of directions going on; social developments, worldwide technological developments. It's making the connections. It's the ability to say 'this is happening there and that's happening there and we ought to be doing x in the middle here. It's seeing the patterns emerge ... largely developed from an enormous amount of reading" (BF).

"If you look at the big picture environments that you're trying to solve problems within, and then work down from that to 'how do you do it in this workplace?' then you develop a framework for operating that never leaves you" (BV).

"[I like to] see different ways of doing things; different people. You're not as ready to say 'well, that's the only way to do something'. Don't pre-judge. Be open to any input before making up your mind" (EJ).

"The wide variety of experiences I've had and variety of people I've worked with means you learn you can't rely on other people sharing your concepts" (BF).

"[As a new CEO, with the same work background as my colleagues] I listened too much and too long to those who, from their own background, just wanted to go on with traditional management. I nearly got locked into that" (UE).

Systemic learning is neither 'accidental' nor is it overtly 'deliberative'. It did not prove possible to categorise this type of learning in terms of any of the existing models of adult learning, nor was it found to be consistent with the basic learning cycle elaborated by Kolb and others. It is, as practiced by the CEOs, largely unconscious — yet there is an awareness of its significance and the need for it to be maintained. This sample of CEOs assessed it as the most important type of learning. It is not based on theoretical knowledge nor is it linked with the acquisition of specific practical or vocational skills. It leads to the development or modification of personal style and effectiveness rather than to the development of particular skills.
In recognition of the fact that learning was identified in this study as an overriding skill which permeates all others, and in view of the complexity and diversity of the learning process, as indicated above, the obvious corollary is that learning the process of learning is a critical requirement to enhance organisational and personal effectiveness. Thus, the third mode is meta-learning. Just as systemic learning requires the capacity to stand back from the detail of information to seek patterns, make connections and question assumptions, meta-learning calls for the ability to be aware of, question and change personal learning styles and responses.

The literature deals extensively with the concept of instrumental or performance-centred learning. For example, it underlies one of the four basic assumptions of andragogy (a term developed by Knowles (1980) to describe the process by which we learn — as distinct from 'pedagogy' to describe how we are taught). One of the assumptions, for example, is described in the following terms:

"Adults are competency based learners in that they work to apply newly acquired skills or knowledge to their immediate circumstances. Adults are, therefore, 'performance-centred' in their orientation to learning" (Knowles 1980, cited in Brookfield 1986, p. 92).

Very little reference, however, is found to the more generalised, pervasive life-experience forms of learning. In the light of the interactive/systemic model developed in this study, the broad-based skills developed through systemic learning are regarded as more significant than instrumental learning. This research therefore challenges the assumption in recent literature that learning should be predominantly linked to competencies and to immediate circumstances. Kolb and Brookfield are among the few theorists who have referred to this type of learning. Kolb (1984, p. 204) states, for example:

"... there is little question that integrative development is important for both personal fulfilment and cultural development. It appears essential for growth and mastery of the period of adult development that Erikson has called the crisis of generativity versus stagnation".
Brookfield (1986, p. 213) described it in the following terms:

"... the most significant personal learning [is] the kind that results from reflection on experiences and from trying to make sense of one's life by exploring the meanings others have assigned to similar experiences. [It is] learning in which adults come to reflect on their self-images, change their self-concepts, question their previously uncritically internalized norms (behavioural and moral) and reinterpret their current and past behaviors from a new perspective."

The distinction between instrumental and systemic learning may be characterised as the distinction between 'learning to do' as against 'learning to be'. The former is reductionist, structured, systematic, immediate and impact-centred with specific performance-related objectives. The latter is unstructured, unsystematic, randomised, learner-centred and integrative. Meta-learning ('learning to learn') is associated with systemic learning in terms of its learning pathways, but is relevant to both instrumental and systemic learning. Nevertheless it is consistent with the thesis presented here that the ultimate goal of meta-learning is to learn how to learn systematically.

A central question for this research is whether it is possible to develop methodologies to enhance the efficiency and nature of the learning process in relation to systemic and meta-learning and, if so, how?

9.3 Systemic Learning and its Correlates

Given the centrality of systemic learning, as identified in this study, it is considered appropriate to elaborate on its nature and correlates. This is a necessary step in order to seek to determine whether — and how — executives can enhance their skills in this type of learning. Based on the analysis of data in this study, and relating it to existing theoretical perspectives, it is considered that there are four primary elements involved in systemic learning. While something of an ideal, the full expression of these elements will, it is postulated, lead to a systemic learning person. Meta-learning involves, in large part, developing the attributes and skills associated with each of these elements.
a) A strong motivation for continuous integrated learning

'Openness to learning' is sometimes used as a phrase to describe this element, but it suggests a passivity that is misleading. In the sense used here, there is an active search for meaning and order in the environment.

For a range of reasons (in this study, early experiences of independence and self-reliance were important sources of influence) a person described as a systemic learner exhibits a strong desire to learn on a continuous basis. This is indicated by a high level of focussed curiosity, leading to a search for diversity and risk taking in experiences. There is a strong belief that learning is possible from experience and that opportunities for this to occur are grasped. In this sense there is a focus on deliberate learning and on seeking to understand the learning process.

A positive attitude to systemic learning is reinforced by implicit and explicit feedback as to the personal and organisational value of obtaining, synthesising and applying information obtained in this way. What has been described as a 'virtuous cycle' is thereby set in motion.

b) Self-directedness

The review of literature (Chapter 2) identified self-directed learning as an important theme of management development. This was supported by the present research, in which all respondents demonstrated a high level of personal responsibility for their own growth and development through, as far as possible, the realisation and extension of their potential. They were prepared to take responsibility for both the process and content of their own learning, were reasonably insightful into their own learning processes and styles and deliberately sought out situations to enhance their learning potential.

Self-directedness in learning takes on particular significance in relation to systemic learning. It requires an awareness of the need and value in looking for linkages and patterns in events and experiences as compared with instrumental learning which inevitably is more educator driven and more structured.
Much research has shown that the opportunity and capacity for self-directedness and autonomy is a major contributor to personal fulfilment and growth (Gunzburg 1975). Self-directedness will not only facilitate systemic learning but is likely to be a product of it. A recursive pattern is established, which constantly reinforces itself, thus contributing to a high degree of self efficacy. It is postulated that the experience of success in systemic learning leads to greater self efficacy which leads to greater openness and willingness to 'capture learning' from experience and to challenge established paradigms. A high level of self efficacy and a perception of personal mastery has been identified as one of the key disciplines needed for a learning organisation (Senge 1990). This will be elaborated below.

c) Non-extrapolative thinking

This study highlighted the extent to which effective senior executives recognise the imperative of turbulent change and the consequent futility of using extrapolation as a basis for decision making. They recognise that the future does not simply mirror the past and that responses to a decision that may have been appropriate at one point in time may be quite inappropriate in another. Effective systemic learners, therefore, recognise the importance of seeking and being open to new information and of being prepared to explore and challenge the existing assumptions they hold and that others hold.

It has been shown that systemic learning involves understanding and interpreting information in order to give it meaning in a holistic way. Typically, the way information is perceived and interpreted is most strongly influenced by the assumptions, attitudes and values carried by the individual — usually unexpressed and often not consciously perceived. Non-extrapolative thinking involves being aware of these "... presuppositions on which our beliefs have been built" (Mezirow et al. 1991, p. 1) and accordingly being able to moderate their effect on the decisions or action being taken. Senge (1990) describes this as 'challenging mental models'. He regards it as one of the central disciplines needed in learning organisations. He argues that the problems with mental models arise when the models are tacit — when they exist below the level of awareness. If they are unexamined they will remain unchanged. Hence one of the key requirements of a systemic learner
is to make explicit the tacit influences and forces.

Open and insightful information about the impact of specific actions is a necessary requirement if dominant behavioural patterns (and dominant personal assumptions) are to be modified. Some of the CEOs in this study deliberately set up systems and structures in order to obtain this type of feedback (e.g. using peers, mentors or others) while others relied on their own judgement. In one way or another they compensated for a perceived lack of feedback opportunities by developing and drawing on alternate sources of feedback.

d) Active reflection

Systemic learning, as with instrumental learning, requires some level of reflection and review in order for the learnings of experience to be 'processed' and embedded. The process of reflection is particularly important if, as discussed above, personal assumptions and mental models are to be surfaced, tested and reviewed.

The CEOs in this study demonstrated a strong tendency to review specific experiences in order to determine how to handle similar situations in the future. The reflection was task oriented and content based. While there were indications that this process involved some fundamental questioning of personal style and assumptions, this appeared to be relatively restricted and unfocussed. There appeared to be more concern for the 'how' and the 'how to' of action than with the 'why'; the reasons for and consequences of the action. The nature of reflective behaviour demonstrated by the respondents in this study supports the views of Mezirow et al. (1991) who point out that reflection (i.e. consideration of 'what happened' or 'what is happening') can occur almost simultaneously with action, and can therefore be an integral part of it. They assert that while reflection and action are dialectic in their relationship, they should not be polarised, as in Kolb (1984).

It is at the level of more fundamental questioning of basic values and assumptions that critical reflection is of particular significance (Mezirow et al. 1991). This type of reflection involves reassessing personal perspectives and, if necessary, changing them. It is regarded as unlikely that this type of reflective
action can be done in the context of the normal ongoing pressures of the work of a senior executive, and specific opportunities (or pressures) may need to be established.

It is hypothesised that learning would be more efficient if deliberate efforts were made to identify — and embed — learnings from reflection, rather than leaving the process to chance. 'Capturing' learning from experience includes becoming aware of tacit knowledge, skills, and assumptions (acquired and possibly exercised unconsciously) and converting this to explicit knowledge.

It is considered that effective learners tend to be insightful into their own learning processes, including having a personal system of learning or a learning framework to be able to 'capture' learning (i.e. to know how to learn from experience). They also have a more accurate understanding of their preferred learning style, so they can build on it. A willingness and desire to modify and redevelop this framework is one of the characteristics of a 'learning person' and of a learning organisation.

9.4 Implications for Executive Education and Development

The respondents' views on strategies needed to enhance management skill development were presented in Chapter 8. The dominant theme was the overriding importance of providing people with a broad range of experience and opportunities. It was also recognised that for this to be of real value, people need to be open to learning and be prepared to challenge their 'comfort zone'.

Analysis of the data confirmed that the stated views of the respondents are consistent with their actual learning experiences and pathways. With the exception of the skill of analytical thinking (largely developed as a result of formal educational processes) all other skills identified as significant were developed through an ongoing process of experiential learning. It is apparent that formal training or education — irrespective of its other values in terms of knowledge and cognitive understanding — did not lead to the development of the skills identified in this research as significant to senior executives.

As discussed above, this research has demonstrated that the process of
experiential learning is far more complex than simply 'learning by doing'. As described, the process can be differentiated in terms of three learning modes; instrumental learning, systemic learning and learning to learn. The implications for executive development will be considered in terms of each of these modes of learning.

Given that most of the learning identified in this study was randomised and largely unstructured, the central question, for each of these levels of learning, is whether enhancements or efficiencies can be brought to bear to facilitate the learning processes involved and, if so, how.

9.4.1 Instrumental Learning

The instrumental learning model is the dominant model for management skill development. It is most effective and appropriate when the skills to be developed are task related and performance centred and when clear measurable goals are capable of being achieved. There will always be specific task related skills that executives need to learn. They will want to do this in the most productive way possible. In these circumstances, learning that is designed and delivered in a manner consistent with most contemporary adult learning theory is considered most appropriate.

The effective acquisition of skills in this way typically utilises a structured learning approach which involves identifying learning needs and preferred learning styles, having clear learning goals, determining a method of acquiring the relevant skill, reviewing and evaluating progress and generally following a planned and well structured approach to skill acquisition.

Learning under these circumstances is most effective when it focusses on issues of current and real concern to the learner. Extrinsic and intrinsic motivation is high in these circumstances. Learning is facilitated when ongoing feedback is available about the learner's performance and progress and when a process of reflection is deliberately present — recognising that the reflection can be directly linked to the tasks and need not derive from a period of hiatus. This is the essence of the four stage adult learning cycle developed by Kolb (1984) and adapted by Honey & Mumford (1986). The four stages are: having an experience; reviewing the experience; concluding from the
experience and planning the next steps.

Most experiential management development programs are built around this model. Indeed, the essence of adult education theory is the need for the engagement of the learner in a continuous and alternating process of investigation and exploration, followed by action grounded in this exploration, followed by reflection on this action, followed by further investigation and exploration and so on. This is the notion of praxis (Brookfield 1986). This approach is demonstrably more likely to lead to skill development than knowledge-based or other pedagogical approaches, in which there is no opportunity to identify and internalise appropriate behaviours.

The organisational environment in which instrumental learning occurs is arguably less important than in the case of systemic learning. Nevertheless in both cases it is desirable that it is relatively threat free and encourages, rewards and recognises mastery.

The actual learning methodology for skill acquisition will vary greatly, dependent on the skill, the learner and the circumstances. It is, nevertheless the basic view of this thesis that as far as possible learning should take place as part of the normal work for it to be meaningful.

For the skills identified in the taxonomy of this study, those associated with resource allocation and monitoring/directing are regarded as the only ones for which instrumental learning would be the most appropriate pathway. In both cases precise behavioural indicators can be identified and there is little need to question basic assumptions or to seek to determine complex linkages as is the case in systemic learning.

9.4.2 Systemic Learning

The indications from this study are that it is neither possible nor appropriate to develop a structured process to facilitate systemic learning, notwithstanding the superficial attractiveness of such an approach. It has been shown earlier, for example, that the experiential learning cycle is not a relevant model for this type of learning. Given the integrative and systemic nature of systemic
learning, it is believed it cannot be codified in a curriculum or a set of competency based modules. At best the conditions need to be created in which the self-directed systemic learner can learn from his/her randomised experiences and can capture and embed the learning. These conditions might be created through challenging assignments that genuinely take the individual 'out of his/her comfort zone', or through simulated (e.g. computer based 'micro-worlds') or real situations in which established ways of responding are challenged. Learning prospects are enhanced when the situation is not excessively threatening and there is a reasonable prospect of a successful outcome; i.e. there is potential for demonstrating mastery.

The most effective systemic learning, it is postulated, will take place only when there is a framework which encourages, nurtures and supports the four elements of systemic learning described earlier (strong motivation for continuous integrated learning, self-directedness, non-extrapolative thinking and active reflection). It is considered that the conditions required for continuous systemic learning are in fact the same conditions required for organisational learning. These include a recognition of the need to change, a willingness to take risks and to make mistakes, a cooperative team based approach in which learning is shared and reinforced rather than an individual and competitive approach and, fundamentally, systems and structures which facilitate integrative and reflective activities.

In short, the goal of management development under these circumstances is not to provide information or develop specific skills but to provide a broad framework within which the learner can define (and redefine) his/her behavioural and perceptual responses leading to personal growth and the capacity to deal with turbulence and change in productive and integrative ways. Genuine diversity of experience is of significance from two points of view. First, the props and supports available to the executive (and which encourage extrapolative thinking and action) are likely to be absent or less influential. Second, a new and challenging environment demands that the skills identified earlier in this study as of particular significance (particularly those associated with information gathering and information processing) are rapidly developed and utilised. As one CEO described it, when speaking of a new challenge:
"Suddenly the perspective and everything else changed. You’re looking for leads" (EN).

The point should be made that it is not simply having an experience that is likely to be of significance from the viewpoint of learning and skill development. The learning needs to be 'captured' and tested out in practical ways. For this to occur the organisational culture should allow for, and encourage, a review and analysis of challenging or new events, through discussion with colleagues, mentors or others. This helps to surface and then embed any learning and enables plans to be developed in relation to further testing of what has been learned. As shown, this is particularly difficult for CEOs. However those with a particular commitment to personal learning on a continual basis deliberately seek both review time and feedback from at least one trusted source.

The two modes — obtaining information and testing it out — represent another aspect of the findings of this study. There is consistency with the theories of Kolb (1984) with respect to the dual nature of experiential learning. The prevalent approach of the executives in the study was that they took in new information conceptually and tested it out through active experimentation. Put simply, different strategies and styles appear to be needed for each of the two modes. Experiential learning is far more complex than simply 'learning by doing'.

Systemic learning, it is considered, is the most appropriate learning pathway for those skills identified in this study as differentiating skills; i.e. information gathering (scanning and networking), information processing (patternmaking and analytical thinking) and visioning. These skills typically receive little attention in formal or informal management development programs. Given their centrality, as determined by this study, a clear implication is that a deliberate focus on these skills would serve to enhance their development.

It is believed that these skills can be developed, or at least enhanced, through focussed experiences, either in simulated or actual environments, in which explicit attention is given to helping the individual understand the nature and significance of each of the critical skills and the learning pathways that may be most appropriate.
Action learning is one strategy that appears to offer the potential to meet this requirement and, in fact, many of the learning needs identified in this study. As shown in the review of literature, the process of action learning is active rather than passive. It is project based and requires feedback, reflection and review. Importantly, from the perspective of this study, it allows for and encourages the examination of problems from multiple viewpoints. It helps people to learn to challenge accepted norms and to gain insight into themselves as managers. It would not be difficult to ensure that in the process of setting up an action learning process for senior managers, specific focus was given to the differentiating skills identified in this study.

Following the review of relevant research into action learning, reported in Chapter 2 of this thesis, the conclusion was reached by this researcher that its value "... in seeking to develop specific skills and competencies has not been demonstrated by the research" (see p. 55). The view is still held that further research into the processes and impact of action learning would be of considerable value. However, in the light of the findings of this study it is considered that it is neither feasible nor desirable to undertake research into the impact of action research on specific skills or competencies. As has been demonstrated, the skills of senior executives are systemic and interlinked. Any evaluation of programs such as action learning should be concerned with the impact on the overall behaviour of the executive, and on systemic skills, such as those identified in this study, and not on excessively specific skills or competencies.

Notwithstanding this, not all skills are equally amenable to development through learning. The indications from this study are that the skills of patternmaking, analytical thinking and visioning are largely innate or are developed at an early age and thus the scope for their development may be more restricted than the other key skills identified. A similar conclusion might be reached with respect to interpersonal skills, which were also of considerable significance to CEOs. Observation and modelling (both positive and negative) play an important part in the development of these skills, but personal values and attitudes (e.g. a belief in the importance of sound interpersonal skills) are probably of greater significance. While it is considered that these skills can be enhanced through relevant learning, a clear implication is that particular attention should be given at the
recruitment/selection stage to the presence of these skills. The use of assessment centres and other sophisticated and thorough selection processes may be needed to better diagnose the degree to which these skills are present. It is recognised that this conclusion is tentative, and further research would be needed to determine its validity.

9.4.3 'Learning to Learn'

This research has highlighted the centrality of the skill of learning. Effective learning is a key meta-skill of senior executives, both in terms of their own learning and in facilitating the learning of others. It was shown in the literature review that previous research provides little insight into the specific skills or methodologies to facilitate 'learning to learn'.

To determine appropriate strategies to learn the skills of systemic learning, it is first necessary to identify the key characteristics of effective learners. The following characteristics are drawn from this study:

- Early experiences of independence and self reliance.
- Continual search for diversity, risk taking and challenging experiences.
- Strong desire to learn on a continual basis; high curiosity level.
- Self-directedness; taking personal responsibility for learning.
- Self-awareness; awareness of personal learning strengths and weaknesses.
- Capacity to internalise learnings; i.e. to integrate 'new' information and ideas with existing operating framework.
- Effective use of modelling — of observing and learning from others (both positive and negative).
- Effective search for and use of feedback processes.
Willingness and capacity to challenge personal paradigms and assumptions.

Given the blend of attitudes, values and behavioural dimensions involved in effective systemic learning, it is neither possible — nor desirable — to develop systemic learning skills on the basis of a structured learning model. The skills of systemic learning cannot be learnt in an instrumental or constricting fashion. As with systemic learning generally, meta-learning needs to develop in an environment which stimulates and facilitates its development. To develop meta-learning skills, it is not enough to simply be in a situation where they are required; that is a necessary but not sufficient condition. The individual needs to have a capacity and motivation to take advantage of the opportunities and seek out the learnings, and a personal framework which enables the learning to be assimilated.

One important element in learning to learn involves critical self awareness; the learner becoming aware of his/her learning framework and idiosyncratic learning style. As Brookfield (1986) points out, this involves a degree of self-knowledge regarding the way one plans (or fails to plan) learning objectives, the approaches most consistent with one's learning style, the strategies employed to make sense of abstract concepts and how one approaches learning new skills. Brookfield also pointed out that some educators and trainers have developed 'learning how to learn' orientation courses. This presumes that there are identifiable learning skills that are generic and replicable. While this may well be true of pedagogic and instrumental learning, the indications from this study are that meta-learning cannot be reduced to specific elements in this way.

Nevertheless, it is believed possible and desirable for the conditions to be established which would help an individual understand his/her learning style, to deliberately and consciously focus on the key characteristics identified above, and to help (and possibly place pressure) in confronting, challenging and modifying their personal assumptions. The process of doing this is in some ways similar to the three-phase process utilised in organisational change models, first developed by Lewin (1951), involving 'unfreezing', moving and 'refreezing'. Unfreezing means becoming aware that existing concepts, assumptions or paradigms are no longer relevant or appropriate to
the current circumstances. It was described by one of the respondents in this study as 'unlearning':

"... by the time people become senior the ability to unlearn is difficult" (CK).

This respondent also expressed the view, echoed by others, that the capacity to unlearn may be more important than the capacity to learn. This is particularly important in contemporary Australian organisations, in which there is a strong requirement for 'unlearning' and, as a leading Australian researcher and analyst points out, "... rethinking traditional concepts of job functions, organisation hierarchies and even the nature of work itself" (Lansbury 1991, p. 9).

As a number of the CEOs in this study found, being faced with a complex management task in a new, challenging and unfamiliar environment in which previously learnt responses and perceptions are not relevant can serve to accelerate meta-learning, as the executive is confronted with the necessity of non-extrapolative thinking. Specific techniques have been developed with the aim of helping executives work through this unfreezing process, to see the influence of their 'theories-in use' and to help them become connected with their thinking and learning processes. For example, Argyrus (1982) has developed what appears to be a powerful experiential tool, involving techniques of inner and outer dialogue transcriptions.

While systemic learning skills may well be fostered by significant experiences or even significant sources of influence at any time (e.g. powerful role models or mentors), a key requirement for the effective senior executive, as identified in this study, is that the executive is 'open' to learning. The data from this study suggests this is an attitudinal characteristic, largely developed in formative years as a response to the need for self-reliance. Thus it is considered that during the process of recruitment and selection of senior executives, specific attention is given to the extent to which there is a basic learning predisposition and an 'openness' to learning. Evidence as to the extent to which the individual has enhanced the learning of others is one indicator of this openness, as is the extent to which the characteristics of an effective learner (listed earlier in this Section) have been demonstrated in
previous vocational or avocational activities.

9.4.4 The Learning Organisation

The conclusions of this thesis have highlighted the importance of experiential, integrative and continuing learning for the development of the key skills identified. This builds on recent research (McCall et al. 1988, Carter & Gribble 1991) which suggests that the primary context for management learning is at the workplace. This implies, in turn, that learning will be more or less facilitated depending on the organisational environment and the degree to which it is conducive to individual learning. While not focussing on management skill development as such, Cropper (1991, p. 21) nevertheless made a relevant point in confirmation:

"Skills formation works on the assumption that people can manage their own learning and skills development more than they have been allowed. The more competent people become in 'learning to learn', the more confident and willing they will be about gaining new skills and competencies. Given the right kind of work organisation and learning processes, people learn skills through more avenues than just traditional learning.

Skill formation cannot be merely training driven. An entire range of strategies and mechanisms have to be put in place to support the growth of the learning organisation".

In considering the nature of these strategies and mechanisms, it is postulated that there is a close similarity between the concept of the CEO as a systemic learning person and the concept of the learning organisation. This latter term, as discussed in the review of literature, is best defined as an organisation in which there is an ongoing commitment — and opportunity — for continuous learning. An organisation does not have a life of its own. A learning organisation is an entity made up of learning people. The principles, and the action steps, for the development of a learning person and a learning organisation are very similar. Concepts of instrumental and systemic learning are relevant for both. Both require the motivation to be open to change and to new ideas, values and principles and a willingness to innovate
and take risks. Both seem to require an external impetus to challenge existing ways of organising and handling work and ways of learning. Both recognise the need and value for continuous learning in order to live with a constantly changing environment. Both recognise and act on the principle of systems thinking.

While not directly testable in this study, it is hypothesised that unless the CEO (or equivalent head of an identifiable work unit with a high degree of autonomy) exhibits the characteristics of a systemic learning person, it is unlikely that a learning organisation will develop. Learning is not a 'comfortable' process, and without the encouragement, support and, at times, pressure from key sources of influence, it is unlikely the momentum for openness and exploration will be maintained. An active and overt commitment to learning by the CEO provides a powerful model of learning behaviour. The CEO committed to continual learning will ensure that the organisational structures and internal systems are likely to facilitate continual learning and not act as barriers; what Senge (1990) refers to as organisational learning disabilities. It is for this reason that learning is fostered best in an environment in which it is recognised as important. In communicating his/her vision of continual learning, and translating this in readily understood ways, the CEO seeks to ensure a common understanding, commitment and supporting action throughout the organisation.

Drawing from this assertion, and from other indications in this study, it is postulated that there are three factors that will determine the potential effectiveness of a learning organisation:

a) The effectiveness of the learning of the CEO and the extent to which he/she is committed to organisational learning, as detailed above.

b) The effectiveness of the systemic learning of each individual in the organisation.

c) The effectiveness with which that learning is shared between individuals.

The indications are that most organisations fall well short of this standard. To
support this point, as a result of an extensive review of recent research and literature into the learning organisation, the following conclusion was developed by an international researcher. It is considered that the basic theme of the conclusion is also very relevant to the general finding of the present research:

"Corporate education has not really got off the ground. Although it should be instrumental in augmenting the flexibility, vitality, and innovative capacity of an organization, it is, in reality, a rather lifeless affair playing only a marginal role in many companies. As a rule the objectives of training activities are likely to be adjustment and control, not development and breakthroughs of existing patterns, codes, and habits. The demand for a greater say in vital corporate questions, in the formation of strategic policy, and especially in molding (sic) the adaptive qualities of the organization remains so many empty words until there is an overall vision about how this can be achieved ..." (van der Zee 1992, p. 225).

9.4.5 A Model of Experiential Work-Linked Learning

As indicated above, it was not possible to relate specific learning pathways directly with the specific skills identified as relevant for senior executives. The skills, and the learning pathways, are integrative, interactive and holistic.

However, the conclusion can be drawn that the development of the key skills is a product of the interaction between the individual executive's motivation and skills in continuous systemic and meta-learning ('learning to learn') and the organisational context within which learning opportunities exist. In this regard, the data has shown that relevant skill development can be fostered by an organisational environment which provides development opportunities through a positive learning culture, the use of challenging work assignments, managers who act as role models (positive and negative) and sources of influence to challenge assumptions and stretch the boundaries of thinking of the learner and to force reflection in some way. Additionally, there are various structured training and development processes, such as action learning programs, simulations and specific skill-development courses which will enhance opportunities for learning. It needs to be stressed, however, that
the effectiveness with which learning opportunities are grasped (and indeed are sought) is heavily influenced by the executive's personal attitudes and skills in continuous learning.

The model at Figure 9.2 seeks to summarise and illustrate these interrelationships. It highlights the centrality of continuous learning, which is the core element for each of the three components of the model.

The model seeks to highlight the experiential nature of learning, in recognition of the fact that the work experience itself is not the key element; learning from the experience is crucial. 'Work-linked learning' is the phrase used to highlight the relationship between learning and ongoing work. It is used in contrast to 'work-based learning' (Levy 1987) which puts particular emphasis on structuring learning in the workplace, is focussed on individual development plans and is related to the assessment of prior learning (Carter & Gribble 1991). While such an approach may well be relevant and appropriate for vocational training, the integrative nature of senior executive skills, and the random and diverse learning pathways they utilise, make such an approach less meaningful at these levels.
FIGURE 9.2

A Model of Experiential Work-Linked Learning
9.5 Implications for Further Research

It was shown in the review of literature that relatively little research has been undertaken into the skills and learning pathways of Chief Executives, particularly in Australia. Given the significance of this group of executives in influencing the strategic direction and the internal culture of organisations, further research into their roles, skills and values is regarded as potentially important in understanding significant individual and organisational dynamics. Arising from this research, the following four specific avenues of further research relating to CEOs have been identified; research is also proposed in two areas relating to organisational training and development:

1. The data from this study suggests that it may be possible to identify skills (or skill groupings) which are specifically needed and demonstrated by CEOs (or equivalent) but which are of less significance at other levels. The identification of such 'differentiating' skills would have important implications for senior executive selection and development activities.

2. Similar implications would apply to research designed to confirm (or otherwise) the indication in this study that effectiveness as a CEO requires at least one high level of skill in each of the three skill categories identified; understanding and interpreting the external environment, understanding and mobilising the internal environment and understanding and mobilising personal resources.

3. The evidence suggests that not all the identified skills are equally amenable to development through learning. Some of the skills (e.g. patternmaking, analytical thinking, visioning) appear to be largely innate or developed at an early age and thus the scope for their development may be more restricted than the other key skills identified. However, further research is needed to determine the validity of this conclusion.

4. The view was put forward in this study that unless the CEO exhibits the characteristics of a systemic learning person (these characteristics were defined) it is unlikely that a learning organisation will develop.
Given the growing international and local interest in the concept of the learning organisation, and recognising the lack of empirical data as to the factors most likely to contribute to its development, such research would be particularly timely.

5. In the light of the potential significance of programs such as action learning to the development of the key systemic and meta-learning skills identified in this study, it is considered that further research into the processes and impact of action learning would be of considerable value. However, rather than focussing on the possible impact of action learning on 'specific skills and competencies', evaluative studies of this type should be concerned with the impact on the overall behaviour of the executive, and on the extent to which the development of systemic skills, such as those identified in this study, was facilitated.

6. The key findings of this research challenge, to some extent, the learning principles on which many organisational education and training programs are premised. However, further research would be needed to empirically test this possibility. More specifically, further research opportunities exist to determine the extent to which actual management development is instrumental, reductionist, trainer-centred and based on existing patterns and assumptions rather than the converse of these characteristics. The relationship between these variables, and the effectiveness of individual organisations (and their senior executives) in dealing with turbulence and change would demonstrate the extent to which current development practices are relevant and appropriate.

9.6 Conclusion

In conclusion, it seems that the challenge of continuous executive development is above all a challenge of integrative development (Kolb 1984). This is unlikely to occur if a reductionist view is taken of either skills, tasks or of learning. For example, if jobs, tasks or responsibilities are broken into discrete elements there can be little opportunity for the individual to respond or to learn either appropriately or holistically. This is seen as particularly
important in view of the contingent and systemic nature of executive skills, as identified in this study. Equally, if learning is broken into discrete elements (e.g. through an overly rigorous application of a competency based approach) the opportunity for — and the modelling of — integrative learning is lost. This research therefore challenges the assumption that executive learning should predominantly be linked to specific, goal oriented competencies.

Much attention is being given to the development and application of competencies at the present time both in Australia and in a number of other countries (Gunzburg 1992). While there is value in this approach for certain skills and attributes, the findings of this study suggest that an excessive focus on competencies at the senior management level could be inappropriate. By giving undue attention to specific, measureable and precisely defined skills, the essence of the interrelationships and the systemic view may be lost. Indeed, some leading management theorists believe that many of the difficulties in management training in the past have arisen because the focus has been on the specific technical and bureaucratic aspects and not on the gestalt (Mintzberg, cited in Gunzburg 1992).

The evidence from this study points to the finding that ongoing learning is the most important skill for effective senior executives. A positive attitude to learning appears to be a product of breadth of experience in both work and non-work activities. In developing the significant executive skills identified in this study, work and learning are inter-linked. Most learning takes place as part of ongoing work. However, this is not simply to assert that managers will automatically 'learn by doing' or that there is one simple model of experiential learning. This research has identified three principal experiential learning modes. The first mode involves the acquisition of specific task or problem solving skills. This type of skill development conforms with the well documented models and principles associated with andragogy; the process of adult learning. This includes processes such as the setting of specific learning goals, the opportunity for direct and immediate feedback and the opportunity for 'testing out' the learning. It is, however, relevant to few of the key skills identified in this study.

The second type of learning utilises the skills of systemic learning. It is integrative and systemic, and involves creating opportunities for the
executive to grow and develop. It involves challenging basic assumptions as a result of having to deal with — and learn from — stretching and challenging experiences and from observing how others behave. In this way it enables — and encourages — the development of the skills (with appropriate modelling, feedback and conceptual clarification) of the four elements which make up systemic learning; being motivated for continuous integrated learning, self-directedness, non-extrapolative thinking, and active reflection. It is aimed at 'learning to be' rather than the aim of instrumental learning of 'learning to do'.

The third, and probably most significant, type of learning has been characterised as 'learning to learn' or meta learning. It involves learning the skills of systemic learning.

If senior executives are to deal effectively with change and uncertainty, they need to bring to bear a range of skills which are complex and systemic. The application of the skills are a product of their attitudes, values and assumptions and the organisational environment in which they work. The learning pathways are necessarily complex and multi-dimensional. Fundamentally, however, it is postulated that effective senior executives develop and demonstrate skills in understanding and interpreting the external environment, understanding and mobilising the internal environment, and understanding and mobilising their personal resources through the application of meta-learning and systemic learning. The development of these skills is not likely to occur as a result of a series of planned and precise interventions. Their development is best facilitated when there is an organisational (or educational) environment which allows for and encourages diversity, risk taking and in which new ways of perceiving and responding to the internal and external environments are encouraged.
APPENDIX A

INITIAL LETTER TO RESPONDENTS

PO Box 5022
KINGSTON
ACT 2604

(address)

(date)

Dear

Thank you for agreeing to participate in a study of the skills and learning modes of top managers in Australia. This research is central to my PhD thesis being undertaken through Deakin University. My primary purpose is to determine:

a) What are seen as the most relevant skills for top managers in today's environment?

b) How do successful managers acquire the skills they demonstrate?

My approach requires you to respond initially to the attached two brief questionnaires which I will follow up with a personal discussion with you (of approximately one hour). This will seek your ideas on the learning experiences (formal and informal) that helped you develop the skills you identified. Prior to the interview I will send you an outline of the issues to be discussed.
The first of the two attached questionnaires is built around a listing of 17 skills frequently associated with effective top management/leadership. While, in general, all managers display skills in each of the areas identified, and frequently a combination of skills is necessary, the research is aimed at identifying those skills you regard as essential for effective performance.

The second questionnaire, which will take 10-15 minutes to answer, is the 'Learning Style Questionnaire'. This identifies your preferred learning style, and will be used in association with the interview data to develop a picture of how senior executives best learn. I will give you feedback on your 'dominant style' at our discussion.

Any information you provide will be treated strictly as confidential. Your name or position will not be associated with the data. Indeed, unless express permission is given to the contrary, no information will be included in any report (written or oral) which could identify or link you or your organisation with the research findings.

Please return the completed material to me at the above address. I will then make contact with your secretary to arrange a time for our interview. If you wish to discuss any matter I can be contacted on (06) 272 3529 (bh) or (06) 239 7527 (ah).

Thank you, again, for your agreement to participate in this important project.

Yours sincerely

Doron Gunzburg
IDENTIFYING & DEVELOPING MANAGEMENT SKILLS*

SURVEY OF TOP MANAGEMENT

* Skill is defined as specific behaviour that results in effective performance.

1. **Biographical Information**

   1.1 Identification: __________________________

   1.2 Age: __________________________

   1.3 Position: __________________________

   1.4 Industry: __________________________

   1.5 No. of Employees: __________________________
   (Direct & indirect responsibility)

   1.6 Qualifications: __________________________
   (inc. formal management education)

2. **Managerial Experience & Challenges**

   2.1 At what age did you:

   a) Take on overall responsibility for important management tasks? __________________________
b) Commence leadership activities?
(if different to above) ______________

c) Become involved in the execution
   of many managerial functions?
   (i.e. become a 'general' manager) ______________

2.2 What are the three most significant challenges that you
   face as a manager?
   a) _________________________________________
   _________________________________________
   _________________________________________
   b) _________________________________________
   _________________________________________
   _________________________________________
   c) _________________________________________
   _________________________________________

2.3 What skills would you look for in a person to replace
   you?
   _________________________________________
   _________________________________________
   _________________________________________
   _________________________________________

3. Views on Managerial Skills

The following questions relate to the attached skills inventory
and associated 'behavioural' indicators.
3.1 For each of the following skills, please indicate its relative significance in terms of your job.
(see attached skills inventory for descriptions)

<table>
<thead>
<tr>
<th>Critical Skill</th>
<th>Relative Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(i.e. how essential is skill in successful performance of job?)</td>
</tr>
<tr>
<td>1.1 Analytical/systematic thinking</td>
<td></td>
</tr>
<tr>
<td>1.2 Conceptual/global thinking skill</td>
<td></td>
</tr>
<tr>
<td>1.3 Visioning skills</td>
<td></td>
</tr>
<tr>
<td>1.4 Information processing skills under ambiguous circumstances</td>
<td></td>
</tr>
<tr>
<td>1.5 Resource allocation skill</td>
<td></td>
</tr>
<tr>
<td>1.6 Informed decisiveness</td>
<td></td>
</tr>
<tr>
<td>2.1 Interpersonal/group skills</td>
<td></td>
</tr>
<tr>
<td>2.2 Conflict resolution skills</td>
<td></td>
</tr>
</tbody>
</table>
2.3 Communication skills
   (Listening, writing, speaking)  
   1 2 3 4 5

2.4 Peer skills  
   1 2 3 4 5

3.1 Motivating & inspiring others  
   1 2 3 4 5

3.2 Designing/facilitating learning processes  
   1 2 3 4 5

3.3 Monitoring & directing  
   1 2 3 4 5

4.1 Self awareness/introspection skills  
   1 2 3 4 5

4.2 Adaptation skills  
   1 2 3 4 5

4.3 Learning skills  
   1 2 3 4 5

4.4 Innovation/entrepreneurial skills  
   1 2 3 4 5

3.2 Does the list of skills effectively encompass those needed by today's managers/leaders? If not, what additional skills are needed for effective performance?
3.3 Which skills do you consider are most needed for effective leadership under conditions of environmental uncertainty/organisational transformation? (max. 5)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3.4 Which skills do you consider are most needed for effective leadership under conditions of organisational/environmental stability? (max. 5)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

3.5 Of all the above skills you have identified as most important, which would you describe as your real strengths? (max. 5)

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
3.6 In gaining the above skills, how significant have you found:

- Formal tertiary education
  
  1 2 3 4 5

- Formal short management training
  
  1 2 3 4 5

- Successful work experiences
  
  1 2 3 4 5

- Unsuccessful work experiences
  
  1 2 3 4 5

- Having a mentor
  
  1 2 3 4 5

- Job rotation
  
  1 2 3 4 5

- Other (Please describe)

  ______________
  
  1 2 3 4 5

  ______________
  
  1 2 3 4 5

  ______________
  
  1 2 3 4 5

  ______________
  
  1 2 3 4 5

Thank you
<table>
<thead>
<tr>
<th>SKILL CLUSTER</th>
<th>CRITICAL SKILLS</th>
<th>BEHAVIOURAL INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decision Making</td>
<td>1.1 Analytical/Systematic Thinking Skills</td>
<td>Uses methodical, thorough and systematic thinking to gather information, identify and analyse problems and make decisions.</td>
</tr>
<tr>
<td>(Thinking)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breaks problems into component elements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifies alternate courses of action and evaluates pros and cons.</td>
</tr>
<tr>
<td></td>
<td>1.2 Conceptual/Global Thinking Skills</td>
<td>Recognises opportunities, problems or underlying patterns/relationships that others tend to miss.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lateral thinking - recognises relationships between different problems or needs; breaks from the pre-existing frame.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develops models or frameworks to describe complex concepts or processes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focusses not only on current events and realities, but on systemic structures.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Helicopter view - able to rise above the detail and see the overall pattern.</td>
</tr>
</tbody>
</table>

APPENDIX C  SKILLS INVENTORY
<p>| 1.3 Information Processing Skills under Ambiguity | Assembles and evaluates information and reaches decisions under pressure despite a high degree of uncertainty and ambiguity. Readily identifies priorities in complex situations. |
| 1.4 Resource Allocation Skills | Allocates resources on the basis of perceived priorities and goals in the face of competing interests. Identifies critical success factors. |
| 1.5 Informed Decisiveness | Displays a 'bias for action'; calculated risks and quick decisions. Knowledge and understanding of the internal and external environment. |
| 2. Interpersonal Skills (Linking) | 2.1 Interpersonal/Group Skills | Possesses an awareness of, a consideration for the feelings and concerns of others and promotes effective interpersonal and group relationships. Seeks to maximise trust and commitment. Identifies differences and responds accordingly. Willingness to remove deficient team members. |
| 2.2 Conflict Resolution Skills | Intervenes in conflict situations with others to identify mutually agreeable situations, protecting the rights of less powerful individuals or groups. |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.3 Communication Skills (Listening, Writing, Speaking)</td>
<td></td>
<td>Gives and receives oral and written information clearly and accurately. Active objective listening. Encourages fair and honest communication. There is usually consistency between words and deeds. Explains the reasons behind important decisions that affect subordinates.</td>
</tr>
<tr>
<td>2.4 Peer Skills</td>
<td></td>
<td>Effectively works with peers to get suitable results for self and organisation. Understands and utilises networks (internal and external).</td>
</tr>
<tr>
<td>3. Leadership Skills (Leading)</td>
<td>3.1 Motivating &amp; Inspiring Others</td>
<td>Recognises role is to motivate and work through others to achieve key objectives. Uses a variety of approaches (persuasion, political and collaborative influence, negotiation) to build support/commitment to a course of action or to modify the thinking or behaviour of others. Creates and effectively communicates (and dramatises) a vision (practical, realistic, attainable). Demonstrates personal commitment to the vision. Actively seeks to understand what motivates his/her subordinates and uses these insights to manage them so they perform at their best.</td>
</tr>
</tbody>
</table>
3.2 Designing/Facilitating Learning Processes

- Creates a positive learning environment
- Gives high priority to coaching/mentoring of staff.
- Encourages people to take risks, by setting examples and providing challenge and opportunity.
- Delegates effectively, helping others to learn.
- Selects and develops champions - uncommon ability to judge talent.

3.3 Monitoring & Directing

- Situational flexibility: Applies appropriate supervision skills (directing, coaching, supportive) depending on the situation.
- Delegation skills: Assigns tasks & responsibilities to others.

3.4 Visioning Skills

- Develops/translations ideas and goals into imaginative visual images.
- Farsightedness - gives the future a tangible target or purpose.
- The vision is placed in a broader context of "Where we've come from & where we're headed" (Senge).
<table>
<thead>
<tr>
<th>4. Self Management Skills (Being)</th>
<th>4.1 Self Awareness/Introspection Skills</th>
<th>Recognises and assesses own strengths &amp; limitations how others can complement own learning.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive self regard.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regularly seeks feedback from others on his/her performance and acts on constructive criticism.</td>
</tr>
<tr>
<td>4.2 Adaptation Skills</td>
<td></td>
<td>Adjusts rapidly and effectively to changes in work demands, situations or requirements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to deal with pressure, ambiguity and change.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thinking and behaving with flexibility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mastery of change: demonstrates flexibility of responsiveness and ability to influence external environment and ability to control uncertainty.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fulfills the change agent role - identify and react to opportunities and pressures in creative ways.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learns quickly in new situations by identifying critical information and issues and relating effectively to key people.</td>
</tr>
<tr>
<td>4.3 Learning Skills</td>
<td></td>
<td>Ability to learn and apply new or unfamiliar material, and to reflect on (and learn from) positive and negative experiences.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to learn not only from actual experiences but, particularly, from anticipating the future.</td>
</tr>
<tr>
<td>4.4 Innovation/Entrepreneurial Skills</td>
<td></td>
<td>Generates original &amp; imaginative ideas, products or solutions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Actively identifies and pursues new opportunities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to take calculated risks.</td>
</tr>
</tbody>
</table>
LEARNING STYLES QUESTIONNAIRE

This questionnaire is designed to find out your preferred learning style(s). Over the years you have probably developed learning 'habits' that help you benefit more from some experiences than from others. Since you are probably unaware of this, this questionnaire will help you pinpoint your learning preferences so that you are in a better position to select learning experiences that suit your style.

There is no time limit to this questionnaire. It will probably take you 10-15 minutes. The accuracy of the results depends on how honest you can be. There are no right or wrong answers. If you agree more than you disagree with a statement put a tick by it (✓). If you disagree more than you agree put a cross by it (✗). Be sure to mark each item with either a tick or cross.

☐ 1. I have strong beliefs about what is right and wrong, good and bad.
☐ 2. I often 'throw caution to the winds'.
☐ 3. I tend to solve problems using a step-by-step approach, avoiding any 'flight of fancy'.
☐ 4. I believe that formal procedures and policies cramp people's style.
☐ 5. I have a reputation for having a no-nonsense, 'call a spade a spade' style.
☐ 6. I often find that actions based on 'gut feel' are as sound as those based on careful thought and analysis.
☐ 7. I like to do the sort of work where I have time to 'leave no stone unturned'.
☐ 8. I regularly question people about their basic assumptions.
☐ 9. What matters most is whether something works in practice.
☐ 10. I actively seek out new experiences.
☐ 11. When I hear about a new idea or approach I immediately start working out how to apply it in practice.
☐ 12. I am keen on self discipline such as watching my diet, taking regular exercise, sticking to a fixed routine, etc.
☐ 13. I take pride in doing a thorough job.
☐ 14. I gel on best with logical, analytical people and less well with spontaneous, 'irrational' people.
☐ 15. I take care over the interpretation of data available to me and avoid jumping to conclusions.
☐ 16. I like to reach a decision carefully after weighing up many alternatives.
☐ 17. I'm attracted more to novel, unusual ideas than to practical ones.
☐ 18. I don't like 'loose-ends' and prefer to fit things into a coherent pattern.
☐ 19. I accept and stick to laid down procedures and policies so long as I regard them as an efficient way of getting the job done.
☐ 20. I like to relate my actions to a general principle.
☐ 21. In discussions I like to get straight to the point.
☐ 22. I tend to have distant, rather formal relationships with people at work.
☐ 23. I thrive on the challenge of tackling something new and different.
☐ 25. I pay meticulous attention to detail before coming to a conclusion.
☐ 26. I find it difficult to come up with wild, off-the-top-of-the-head ideas.
☐ 27. I don't believe in wasting time by 'beating around the bush'.
☐ 28. I am careful not to jump to conclusions too quickly.

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APPENDIX D
29. I prefer to have as many sources of information as possible—the more data to mull over the better.

30. Flippant people who don't take things seriously enough usually irritate me.

31. I listen to other people's point of view before putting my own forward.

32. I tend to be open about how I'm feeling.

33. In discussions I enjoy watching the manoeuvrings of the other participants.

34. I prefer to respond to events on a spontaneous, flexible basis rather than plan things out in advance.

35. I tend to be attracted to techniques such as network analysis, flow charts, branching programmes, contingency planning, etc.

36. It worries me if I have to rush out a piece of work to meet a tight deadline.

37. I tend to judge people's ideas on their practical merits.

38. Quiet, thoughtful people tend to make me feel uneasy.

39. I often get irritated by people who want to rush headlong into things.

40. It is more important to enjoy the present moment than to think about the past or future.

41. I think that decisions based on a thorough analysis of all the information are sounder than those based on intuition.

42. I tend to be a perfectionist.

43. In discussions I usually pitch in with lots of off-the-top-of-the-head ideas.

44. In meetings I put forward practical realistic ideas.

45. More often than not, rules are there to be broken.

46. I prefer to stand back from a situation and consider all the perspectives.

47. I can often see inconsistencies and weaknesses in other people's arguments.

48. On balance I talk more than I listen.

49. I can often see better, more practical ways to get things done.

50. I think written reports should be short, punchy and to the point.

51. I believe that rational, logical thinking should win the day.

52. I tend to discuss specific things with people rather than engaging in 'small talk'.

53. I like people who have both feet firmly on the ground.

54. In discussions I get impatient with irrelevancies and 'red herrings'.

55. If I have a report to write I tend to produce lots of drafts before settling on the final version.

56. I am keen to try things out to see if they work in practice.

57. I am keen to reach answers via a logical approach.

58. I enjoy being the one that talks a lot.

59. In discussions I often find I am the realist, keeping people to the point and avoiding 'cloud nine' speculations.

60. I like to ponder many alternatives before making up my mind.

61. In discussions with people I often find I am the most dispassionate and objective.

62. In discussions I'm more likely to adopt a 'low profile' than to take the lead and do most of the talking.

63. I like to be able to relate current actions to a longer term bigger picture.

© Peter Honey, 1982
64. When things go wrong I am happy to shrug it off and 'put it down to experience'.
65. I tend to reject wild, off-the-top-off-the-head ideas as being impractical.
66. It's best to 'look before you leap'.
67. On balance I do the listening rather than the talking.
68. I tend to be tough on people who find it difficult to adopt a logical approach.
69. Most times I believe the end justifies the means.
70. I don't mind hurting people's feelings so long as the job gets done.
71. I find the formality of having specific objectives and plans stifling.
72. I'm usually the 'life and soul' of the party.
73. I do whatever is expedient to get the job done.
74. I quickly get bored with methodical, detailed work.
75. I am keen on exploring the basic assumptions, principles and theories underpinning things and events.
76. I'm always interested to find out what other people think.
77. I like meetings to be run on methodical lines, sticking to laid down agenda, etc.
78. I steer clear of subjective or ambiguous topics.
79. I enjoy the drama and excitement of a crisis situation.
80. People often find me insensitive to their feelings.
APPENDIX E

INTERVIEW GUIDE

1. Clarify any issues arising from the questionnaire.

2. How important to a manager, in your view, is the ability to learn? How can it be fostered?

3. What was the most significant 'learning environment' in which you have worked? Why?

   Skill Development

4. To what extent did you receive assistance from your supervisors/mentors in your career development? (advice, feedback, coaching, exposure to senior management)? (5 point scale)

5. What specific skills have you developed through formal management training?
6. In your questionnaire you indicated your real strengths were:

6.1 For each skill, can you identify a learning experience that was crucial in helping you understand and develop the skill? (i.e. events that made a difference to the way you manage)
   . What happened?
   . What did you learn from it? (positive and negative)

6.2 For each skill, what was the most significant way you acquired the skill?:

   a) formal education
   b) formal training and development
   c) systematic on the job development
   d) random, unstructured on the job experience
   e) significant successes and failures
   f) other

   N.B. focus on critical incidents. Distinguish structured v unstructured approaches

7. Identify your biggest management challenge.
   Identify your most significant near miss.

   Learning Style

8. How would you describe your preferred learning style?

9. When are you more open to learning? More closed?
10. Has there been a particular stage in your life when you have been more open to learning? More closed?

11. To what extent do you seek to learn from or reflect on experience? How do you go about doing this?

12. To what extent do you set your own specific learning goals and strategies?

13. Do you assess your own skills? Do you get feedback on your personal management style and your strengths and weaknesses?

General

14. What is the most significant thing you’ve learned as an adult — the one thing you’d pass on to someone else if you could?

15. What advice would you give to a younger manager about managing his or her career? What are the key things to learn? How can they best be learnt?

16. Would you describe yourself as a manager or leader? Why?

17. What strategies are needed at enterprise and industry level to enhance management skill development?
APPENDIX F

ANALYSIS CODING INDEX

(2)  gender
(2 1)  gender/male
(2 2)  gender/female

(3)  age
(3 1)  age/30s
(3 2)  age/40s
(3 3)  age/50s
(3 4)  age/60s

(4)  position
(4 1)  position/Chief Executive Officer

(8)  industry
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(8 1 2)  industry/public/state
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(8 1 4)  industry/public/other
(8 2)  industry/private
(8 2 1)  industry/private/manufacturing..
(8 2 2)  industry/private/travel

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(9 7)  size/10000+
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(10 2) Qualifications/hons deg
(10 3) Qualifications/pass degree
(10 4) Qualifications/formal mgt trng long
(10 5) Qualifications/short mgt trng
(10 6) Qualifications/no trng.

(11) birth order
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(11 2) birth order/eldest
(11 3) birth order/middle
(11 4) birth order/youngest
(11 5) birth order/other

(12) school

(13) management experiences
(13 1) management experiences/age for important tasks
(13 2) management experiences/start leadership
(13 3) management experiences/general manager

(14) key skills
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learning/personal approach/capturing learning (reflection)
learning/personal approach/openness to learning
learning/personal approach/wide reading
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(18) General skill devpt strategies
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(19) Change
(19 1) Change/Dealing with

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**KEY**

Turbulence: T
Constancy: C
Strength: 5

APPENDIX G  INDIVIDUAL RATINGS OF SKILLS IN TAXONOMY
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