#### **CHAPTER 3**

#### LEARNING ORGANISATIONS

## 3.1 INTRODUCTION

In an ever-changing environment, organisations need to adapt continuously, and organisational renewal is high on the agenda. The learning organisation concept may help to address this need. The idea that organisations can learn developed over a number of decades and some of the first researchers that investigated learning organisations were Argyris and Schön in their book: *Organizational Learning: a theory of action perspective*, in 1978. During the 1980's and 1990's, the way in which organisations operate changed dramatically. Where organisations in the past were more concerned with manufacture (creation using physical tools), the focus shifted to "mentofacture" (creation using the mind) (Burgoyne 1995: 2). In other words, the ownership of the critical means of production shifted to employees, in the form of brainpower (Burgoyne 1995: 2). This is where the concept of the learning organisation offered a potential useful new focus for organisational change programmes (Burgoyne 1995: 2).

When approaching the concept of the learning organisation, the researcher realised that a discussion of the concept would be fruitless if the concept of learning isn't touched upon first. This chapter is therefore initiated by a discussion of different definitions of learning as found in literature, followed by a discussion of the different types of learning pertinent to this study. Wenger's perspective on learning as *learning in the context of lived experience and participation in the world* is also touched upon, as it relates learning to participation in Communities. After discussing the concept of learning, the learning organisation concept is approached. Definitions of the concept are investigated and its origin determined. This is followed by an overview of the idea of disciplines to describe the concept, after which the characteristics of learning organisations are listed. Having determined what a learning organisation is, the processes as well as the stages through which learning organisations develop are discussed. Since this study is conducted in the context of academic libraries, a discussion on the relationship between academic libraries and learning organisations have been included, which in turn is

followed by a discussion on the relationship between knowledge management and learning organisations.

#### 3.2 LEARNING

The concept of learning is approached by first defining it, followed by a discussion on the different types of learning, which in turn is followed by a discussion on *learning in* the context of lived experience and participation in the world.

#### 3.2.1 DEFINITION OF LEARNING

"Learning" can be defined in various ways, as a study of literature has shown. However, only a few definitions pertinent to this study are discussed.

Learning is regarded by Stata (1989: 64) as the process whereby individuals obtain new knowledge and insights, and through which their behaviour and actions are changed.

According to Huber (1991: 88) "learning occurs in an entity if, through its processing of information, the range of its potential behaviours is changed". The processing can involve acquiring, distributing or interpreting information.

Kolb, Rubin and Osland (1995: 49) regard learning as a process with a four-stage cycle. The process is active and passive, but also abstract and concrete. "The learning cycle revolves around concrete experience, followed by observation and reflection, which leads to formation of concepts and generalisations, which leads to hypothesis to be tested in future action, which in turn leads to new experiences" (Kolb, Rubin and Osland 1995: 49).

Learning according to Hosley et al. (1994: 7) is "the process whereby a person acquires knowledge and skills, which leads to a change in attitudes".

Marcum (1998: Online) regards learning as "the process by which we move beyond information (explicit knowledge) to knowledge (tacit knowledge)".

For the purpose of this study, the following definition of learning that integrates the above definitions has been compiled: *learning is the process whereby a person processes information, and by doing so obtain new knowledge, insight, experience and skills. This process includes acquirement, observation, reflection and interpretation of tacit and explicit knowledge, which leads to a change in behaviour, actions and attitudes.* 

Learning can take different forms, as discussed in the next section.

# 3.2.2 TYPES OF LEARNING AND ITS APPLICATION IN ORGANISATIONAL SETTINGS

Three types of learning pertinent to this study have been identified in literature. These are: single-loop-, double-loop- and deutero-learning (Argyris and Schön 1978: 8; Bateson 1972: 166-167).

#### 3.2.2.1 Single-loop learning

In single-loop learning, also called *adaptive learning* by Senge (1990a: 206), the members of the organisation respond to changes in the internal and external environments of the organisation by detecting errors, which they then correct. The focus is thus on "survival learning" (Senge 1990a: 206). This is the type of learning that enables an organisation to remain stable in a changing context. Single-loop learning has a single feedback loop, which links detected outcomes to organisational strategies and assumptions that are adapted so as to keep organisational performance within the range set by organisational norms. The norms themselves however remain unchanged (Argyris and Schön 1978: 18-19). To illustrate this, an image of a thermostat can be used. In single loop learning, the temperature is just adjusted in accordance with the specific setting of the thermostat (Argyris 1991 as cited by Hitt 1995: 22). In other words, an individual working at a single loop level just conforms to the set standards and will focus on solving the problem. Single-loop learning it seems tends to occur more frequently in traditional organisations (Hitt 1995: 23).

#### 3.2.2.2 Double-loop learning

Double-loop learning, also called generative learning by Senge (1990a: 206), occurs when flaws are detected and corrected in a manner that results in the modification of an organisation's underlying norms, policies, strategies, objectives, and assumptions associated with the norms (Argyris and Schön 1978: 3). This type of learning "has a double feedback loop, which connects the detection of" flaws or "errors not only to strategies and assumptions for effective performance but also to the very norms which define effective performance" (Argyris and Schön 1978: 22). In other words, double loop differs from single loop learning in that products and services are not the focus of modification when error is detected, but the organisation's underlying norms, policies, strategies, objectives, and assumptions associated with the norms. To illustrate this type of learning, one could again use Agyris's (1991) analogy of the thermostat (As cited by Hitt 1995: 23). Whereas in single- loop learning the temperature is just adjusted in accordance with the specific setting of the thermostat, with double-loop learning, one can ask whether this temperature setting is the proper one (Hitt 1995: 23). People operating at a double-loop level will not just conform to the standards and norms that have been set, but will question whether the standards and norms are the proper ones, and will ask what could be done to redesign the system so that problems won't occur again. Double-loop learning seems to be more aligned with learning organisations (Hitt 1995: 23).

#### 3.2.2.3 Deutero-learning (Second-order-learning)

Deutero-learning was first coined by Bateson (1972: 166-167), and is the type of learning where organisations learn how to learn, in other words how to carry out single-loop and double-loop learning (Argyris and Schön 1978: 26). Through deutero-learning, an organisation's members also learn about previous contexts for learning. Previous episodes of organisational learning, or failure to learn, present opportunities for reflection to discover what they do that facilitate or inhibit learning (Argyris and Schön 1978: 27). The results of these are encoded in images and maps. Consequently, they invent new strategies for learning, which they then produce, evaluate and generalize (Argyris and Schön 1978: 27). In other words, deutero-learning can be regarded as the type of learning where organisations learn about learning.

All three of these types of learning are important to an organisation and should be present for an organisation to have the competitive edge. All three can also be found in Communities of Practice, which is the focus of this study. By engaging with other members of a Community of Practice, members can become aware of changes in the internal and external environments of the organisation and detect errors in the products and services of the organisation they belong to (single-loop learning can thus take place). Sometimes the errors detected can lead to the modification of the organisation's underlying norms, policies, strategies, objectives, and assumptions associated with the norms (in other words double-loop learning takes place). Members of a Community of Practice also learn from one another "how to learn" (deutero-learning). Through storytelling, role-play and simulations (see Section 4.8.11), members share with one another about previous episodes of learning that were a success or failed, and are given opportunities to reflect on what promoted learning and what hindered learning.

Wenger (1996: 22) however suggests a different perspective on learning, which will be discussed in the next section.

# 3.2.3 LEARNING IN THE CONTEXT OF LIVED EXPERIENCE AND PARTICIPATION IN THE WORLD

Wenger (1996: 22) suggests a perspective on learning that places learning in the context of our lived experience or participation in the world, in other words social learning. Learning is seen as part of human nature, which are both life sustaining, inevitable and a fundamentally social phenomenon. Consequently, Wenger (1998: 4) proposes a social learning theory around the concept of participation in a community life, which provides the basis for learning and identity construction processes. First the theory sees all life experience as social experience in various communities. According to him, everyone is involved in multiple communities, and this participation is usually so natural that they are not even aware of it (Wenger 1998: 6-7). Secondly, the theory regards social participation as a process of learning and knowing that leads to the development transformation of identity (Wenger 1998: 4, 13). Thirdly, Wenger (1998: 53) proposes negotiation of meaning as being at the base of learning, the purpose being to ascribe meaning to life experience. Negotiation of meaning is regarded as being composed of participation and reification processes, with participation referring to "the social experience of living in the world in terms of membership in social communities

and active involvement in social enterprises" (Wenger 1998: 55). The reification process is regarded as "giving form to our experience by producing objects that congeal this experience into thingness" (Wenger 1998: 58).

To illustrate this social learning perspective, Wenger (1996: 22) suggests 7 principles:

# 3.2.3.1 Learning is inherent in human nature

According to this principle, we learn all the time, whether or not we see our learning, and whether or not we learn what is expected of us or of our organisations (Wenger 1996: 22). This means we already have learning organisations. We do not need to create learning, but circumstances that make learning empowering and productive (Wenger 1996: 22). Communities of Practice can supply the necessary framework for learning.

#### 3.2.3.2 Learning is fundamentally social

This principle demonstrates that the social world is essential to learning, as man is a social being (Wenger 1996: 22). In other words, working together is at the heart of learning. According to Wenger (1996: 22), learning is organised in an apprenticeshipmanner. He also sees no distinction between learning and social participation. Wenger (1996: 22) does not deny the place of neurological processes in learning, but emphasize that the placing of it in social contexts make them meaningful. Communities of Practice can provide the necessary social contexts for learning to occur.

#### 3.2.3.3 Learning changes who we are

According to Wenger (1996: 23), learning changes our ability to participate in the world. By transforming our relations with the world and with others, learning transforms our identities as social beings (Wenger 1996: 23). This happens when we participate in Communities of Practice.

### 3.2.3.4 Learning is a matter of engagement in practice

This principle implies the ability to engage in the world in certain ways, so as to recognise oneself and to be recognised as a member of a community (Wenger 1996: 23). In other words, it is a matter of being able to participate in socially defined activities and to contribute to a community and its enterprise. This engagement in practice, according to Wenger (1996: 23), determines what we learn and empowers us to be who we are.

#### 3.2.3.5 Learning reflects our participation in Communities of Practice

If learning is a matter of engagement in social practices, the communities that share these practices play an important role in shaping learning (Wenger 1996: 24). As people pursue a shared enterprise over time, they develop a common practice, that is, shared ways of doing things and relating to one another, which allow them to achieve their joint purpose (Wenger 1996: 24). Their joint learning affects the identities of those involved by changing their sense of how they can engage with the world (Wenger 1996: 24). Learning is both the vehicle and the result of our participation; as a matter of fact, it is integrated in the experience of participation (Wenger 1996: 24).

### 3.2.3.6 Learning means dealing with boundaries

In the formation of Communities of Practice, boundaries are created between those that are engaged and those that are not (Wenger 1996: 24). These boundaries are created by differences in the perspectives, the languages, and the styles that characterize each Practice. These boundaries are relevant to learning in the following ways: first they often confront newcomers or outsiders who seek entry into a Community; and secondly, they are reflected in our identities (Wenger 1996: 24). For example, if you are a member of such a community and belong to a business unit, you have to learn to function with the conflicting demands between the various forms of accountability. This means you have to find an identity that can encompass and reconcile these two forms of membership into a way to proceed (Wenger 1996: 24). Thirdly, boundaries have to be crossed for Communities of Practice to work together, and for their various perspectives to be coordinated. People who cross these boundaries have different experiences in different practices, and they may broker learning from one community to

another. Wenger (1996: 24) emphasizes further that the boundaries of practice may either be liabilities or if properly understood, learning assets for a learning organisation. Much learning occurs when boundaries are rich in interactions, and creates fertile ground for innovation.

# 3.2.3.7 Learning is an interplay between the local and the global

This principle emphasizes the aspect of individuals being employed by organisations but working on a day-to-day practice for and with much smaller circles of people who share their situations and enterprise (Wenger 1996: 25). Communities of Practice are seen not just places where local activities are organised, but also where the meaning of belonging to broader organisations is negotiated and experienced. Communities have to create a picture of the broader context in which its practice is located. Local practices thus deal with a variety of global categories of membership and identification, like profession, age, and gender, or institutional affiliation, styles, etc. (Wenger 1996: 25).

Having discussed definitions of learning, types of learning, and learning in the context of lived experience, the concept of the learning organisation can now be approached.

# 3.3 THE LEARNING ORGANISATION CONCEPT

In order to have a clear understanding of the learning organisation concept, the researcher deemed it important to define the concept and investigate its origin and characteristics. The idea of disciplines to describe the concept is also touched upon.

#### 3.3.1 DEFINITION OF THE LEARNING ORGANISATION CONCEPT

The learning organisation concept has been defined by many authors, but only those definitions that could be of value to this study are included.

Burgoyne (1995: 6) defines a learning organisation as "an organisation that facilitates the learning of all of its members and continuously transforms itself".

Daft and Marcic (1998: 25) on the other hand defines the learning organisation as "one in which everyone in the organisation participates in identifying and solving problems,

enabling the organisation to continuously experiment, improve, and increase its capability".

Senge (1990a: 14) regards a learning organisation as "an organisation that is continually expanding its capacity to create its future".

The learning organisation is defined by Garvin (1993: 78) as an organisation "that is skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights".

King (2001: 12) however regards Garvin and Senge's definitions as insufficient, because it does not encompass the notion of organisational results. According to him, few firms would be willing to invest in the pursuit of a learning organisation if the results were to be solely "expanding its capacity" (Senge 1990a: 14) or even "modifying its behaviour" (Garvin 1993: 78). King (2001: 14) regards a learning organisation as "one that focuses on developing and using its information and knowledge capabilities in order to create higher-valued information and knowledge, to change behaviours, and to improve bottom-line results". To King (2001: 14), the learning organisation is "a goal to be pursued rather than a state of affairs to be achieved".

For the purpose of this study, however, the learning organisation is defined as an organisation that can identify, develop and utilize its tacit and explicit knowledge capabilities, enabling the organisation to expand its capacity to learn and grow, and to modify its behaviour to reflect new knowledge and insights, and in doing so to improve its performance and success.

Having defined the terms *learning* and *learning organisation*, one could ask where the idea of a learning organisation originated? This question is addressed in the next section.

#### 3.3.2 THE BACKGROUND TO THE LEARNING ORGANISATION

Hitt (1995: 17) describes the learning organisation as a "paradigm shift from the more traditional organisation". According to him, organisations experienced three organisational paradigm shifts in the 20<sup>th</sup> Century. The early part of the 20<sup>th</sup> Century

were characterised by bureaucratic organisations, which focused on rationality and efficiency. Then, in the middle of the Century, Peter Drucker (1964) introduced the concept of performance-based organisations, which focused on results and effectiveness (Hitt 1995: 18). At the end of the Century, a third paradigm shift took place, with the popularisation of the learning organisation concept by Peter Senge (1990a and 1990b). This is the paradigm most of today's organisations find themselves in.

The three paradigms highlighted three important aspects that all organisations should have, namely efficiency ("doing things right"), effectiveness ("doing the right things") and learning ("expanding an organisation's capacity to do the right things and to do things right") (Hitt 1995: 18). In other words, learning organisations have incorporated the core features of the previous paradigms, but the level has been raised.

During the 1960s, 1970s and 1980s, some authors prepared the way for the development of the learning organisation concept. Some of these were Burns and Stalker (1962) who focused on organic organisations in their book *The management of innovation*, Revans (1983) who focused on action learning in the article *Action learning: kindling the touch paper*, and Argyris and Schön (1978) with their study on organisational learning in the 1970s with their book, *Organizational learning: a theory of action perspective*.

Then, during the 1980s and 1990s, the environment in which organisations operated started to change radically, as a result of advances in technology and communications. Organisations were compelled to transform themselves in order to adjust to the changing environment and to ensure their competitive advantage. Many organisations went through change programmes, which were driven by principles of total quality management, business process re-engineering, "becoming lean", delayering, focusing on the mission-vision-commitment, and putting human resource development on the background (Burgoyne 1995: 2). Once these processes were completed, organisations found that though their firms were functioning with maximum efficiency to operate their value chains (basic chains to perform primary organisational tasks), they could not develop further (Burgoyne 1995: 2). Organisations were left vulnerable, with little capacity to see them through crises'. Their pursuit for leanness had led to valuable expertise being lost, resulting in little capacity to investigate potential business

developments and an inability to deal with periodically occurring problems (Burgoyne 1995: 2). This is where the concept of a learning organisation offered a useful new focus in organisational change programmes (Burgoyne 1995: 2).

In 1990, Peter Senge published a book that heralded the third organisational paradigm in organisational evolution, namely the learning organisation, as mentioned earlier. This book, entitled *The Fifth Discipline: the art and practice of the learning organization*, provided a systems view of the learning organisation, by suggesting a fifth discipline called systems thinking. In his book, Senge (1990a: 10) used the idea of a discipline to describe "a body of theory and technique", which has to be studied and mastered before it can be put into practice, and is "a developmental path for acquiring certain skills or competencies". When all of an organisation's employees study and master these disciplines, an organisation becomes a learning organisation.

In the discussion on the background to the learning organisation concept, the researcher touched on the three organisational paradigm shifts organisations went through. As most organisations find themselves today in the third organisational paradigm, the researcher felt compelled to include a discussion of the five disciplines of Senge (1990a). These disciplines give a good idea of what it is that members of a learning organisation have to learn. A discussion on these disciplines follows in the next section.

# 3.3.3 DISCIPLINES AND LEARNING ORGANISATIONS

As mentioned in the section on the background to the learning organisation (see Section 3.3.2), Peter Senge (1990a: 10) promoted the idea of a discipline to describe the main components of the learning environment, where a discipline is "a body of theory and technique" that has to be "studied and mastered before it can be put into practice". According to Senge (1990a: 11), practising a discipline requires one to be a "lifelong learner", in other words you never reach the goal, but "spend your lifetime mastering disciplines". These disciplines can be differentiated from normal management disciplines by their personal character. "Each deals with what we think, what we really want, and how we interact and learn from one another". A discipline thus has to be practised and not only learned. As you practice, you learn what you don't know; you grow and strive to master it (Senge 1990a: 11).

Senge (1990a) identified five disciplines:

#### 3.3.3.1 Personal mastery

"Personal mastery is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively". Personal mastery is seen as the organisation's "essential cornerstone" and its "spiritual foundation" (Senge 1990a: 7). The main principle of personal mastery is the principle of creative tension (Senge 1990a: 151, 154). In personal mastery, the individual develops his or her learning through a creative tension of future vision and current reality (Senge 1990a: 150).

Senge (1990a: 151) further stresses that a distinction should be drawn between emotional tension and creative tension, otherwise we predispose ourselves to lowering our vision. In other words, if we feel deeply discouraged about a vision that is not happening, we may have a strong urge to lighten the load, thereby lowering our vision. "The price we then pay is abandoning what we truly want, our vision" (Senge 1990a: 152). When holding a vision that differs from current reality, a gap arises (creative tension), which can only be resolved in the following ways: the fundamental solution: "bringing reality into line with the vision", which takes time and can lead to frustration and emotional tension; or the symptomatic solution: "lowering the vision to bring it in line with current reality" (Senge 1990a: 152). After reducing the vision, though, new pressures will arise to further lower the already lowered vision. This leads to a subtle spiral of failure to meet goals and frustration, which in turn leads to a further reduction of the vision (Senge 1990a: 152). Understanding creative tension, and allowing it to operate, enables it to become an active force (Senge 1990a: 153). This is where the discipline of personal mastery comes into play. "Mastery of creative tension transforms the way one views failure. Through mastery, failure is seen as simply a shortfall, or evidence of the gap between vision and current reality", and an opportunity to learn (Senge 1990a: 154).

Mastery also encompasses the concept of deutero-learning (see Section 3.2.2.3). This is the process of "learning to learn", and becoming more skilled at problem solving.

Hosley et al. (1994: 7) regards "the outputs of the learning process as the acquisition of knowledge, skills and a change of attitudes of the individual learner", which also links up with personal mastery.

Without vision, personal mastery cannot be attained. Therefore Senge (1990a) identified building shared visions as another discipline that has to be present in a learning organisation.

#### 3.3.3.2 Building shared visions

This is the discipline where people in an organisation hold a shared picture of the future they seek to create. "The practice of shared vision" according to Senge (1990a: 9) "involves the skill of unearthing shared pictures of the future that foster genuine commitment and enrolment rather than compliance". When a group of people come together "to share a vision for an organisation, each person sees an individual picture of the organisation" (Senge 1990b: 13). Each represents the image from a different point of view. When people come to share their individual pictures of the organisation with one another, the vision becomes more real in the sense of a mental reality that people can truly imagine achieving. Now they have partners or co-creators, in other words the vision no longer rests on individuals alone (Senge 1990b: 13). "Shared vision", according to Senge (1990a: 206), is "vital for the learning organisation, because it provides the focus and energy for learning".

"Many shared visions are extrinsic in character, in other words they focus on achieving something in relation to an outsider", for example Pepsi's vision is to beat Coca-Cola (Senge 1990a: 207). The problem with these types of visions is that they are transitory. A shared vision that is intrinsic, though, uplifts people's aspirations. Work becomes part of pursuing a greater aim, embodied in the organisation's services and products (Senge 1990a: 208).

Shared visions can be exhilarating and can help to lift organisations out of the mundane. Shared visions also change people's relationship with the organisation and create a common identity (Senge 1990a: 208). Shared visions furthermore provide necessary mechanisms to keep the learning process on track; they promote risk taking and experimentation, and foster long-term commitment (Senge 1990a: 209).

But how does one build shared visions? Senge (1990b: 13-14) lists the following ways: encouraging personal visions, communicating personal visions and asking for support, blending extrinsic and intrinsic visions, and distinguishing between positive and negative visions. Hosley et al. (1994: 7) however criticizes Senge's idea of a shared vision. Shared visions, according to them, might be unachievable in large organisations. It might also be an insufficient response to a continually changing environment, and will therefore not provide the necessary competitive edge.

The researcher agrees with Hosley et al. (1994) that it might be difficult to attain shared visions in a large organisation, but Communities of Practice could be the ideal mechanism to overcome these shortcomings. Communities of Practice offer safe and trusting environments in which shared visions can be built.

#### 3.3.3.3 Mental models

This discipline looks inwardly, and is where one learns to highlight and to examine the internal pictures one has of the world. These are deeply rooted assumptions, generalisations, or even images/pictures that influence the way we see the world and the way we act (Senge 1990a: 8). It influences our language, what we believe, our ideas of what is right or wrong, and what is possible or not possible. The discipline of working with mental models starts by learning to unearth our internal pictures of the world, to bring them to surface and to hold them meticulously to scrutiny. Through learningful conversations, balanced between inquiry and advocacy, individuals reveal their own thinking effectively and expose their thinking to the influence of others (Senge 1990a: 9).

Very often the best ideas in organisations never get put into practice because they are in conflict with established mental models. Leaders then have the task to challenge assumptions without invoking defensiveness, which requires leaders to be able to reflect, inquire, see leaps of abstraction, balance inquiry and advocacy, and recognise and defuse defensive routines (Senge 1990b: 14-15).

Nonaka (1991: 99) on the other hand regards the use of figurative language, symbolism and metaphors (mental models) as a powerful management tool to help managers articulate their intuitions and insights and convert tacit to explicit knowledge.

#### 3.3.3.4 Team learning

"Team learning is the process of aligning and developing the capacity of a team to create the results its members truly desire" (Senge 1990a: 236). It builds on the discipline of developing shared vision and also on personal mastery, because teams are made up of individuals (Senge 1990a: 236). According to Phipps (1993: 23-24), team learning differs from teamwork in that it focuses really on the team and not on individual contributions. It consists of real thinking together, dialogue, joint insights, and the ability of its members to suspend assumptions (Senge 1990a: 10). In other words, shared growth becomes the aim. When teams are really learning, it leads to extraordinary results and their members grow more rapidly than would have been possible otherwise (Senge 1990a: 10).

According to Senge (1990a: 237) "the discipline of team learning also involves mastering the practices of dialogue and discussion. In discussion, different views are presented and defended and there is a search for the best view to support decisions that must be made at the time. In dialogue", on the other hand, "there is the free and creative exploration of complex and subtle issues, a deep 'listening' to one another and suspending of one's own views" (Senge 1990a: 237). Dialogue and discussion are seen as complimentary, but most teams fail to discern and move consciously between them.

As Hosley et al. (1994: 9) rightly points out, Senge's idea of team learning is based on man's capacity for conversation. In *discussion*, different views are presented and defended, but in *dialogue*, different views are presented as a means towards discovering a new view. *Discussions* are seen as useful in decision-making situations, whereas *dialogues* allow complex issues to be explored.

Nonaka (1991: 99-100) takes this notion of conversation further by focusing on the use of slogans and metaphors to express the inexpressible and articulating the team's tacit knowledge based on hunches and intuitions. This links up with the idea of sharing and capturing tacit knowledge by means of Communities of Practice.

Team learning also involves learning how to handle the forces opposing productive dialogue and discussion in teams, of which *defensive routines* as identified by Argyris (1990), is foremost (Senge 1990a: 237). Team learning, according to Senge (1990a: 10), is vital because teams form the fundamental learning units in modern organisations. When teams learn, the organisation also learns.

#### 3.3.3.5 Systems thinking

Systems thinking is the fifth discipline that Senge identifies, and is the discipline that integrates the other disciplines and fuse them together into a cohesive body of theory and practice (Senge 1990a: 12). Without systems thinking, there is no motivation to investigate how the disciplines interrelate. Systems thinking however also builds on the disciplines of building shared visions, mental models, team learning and personal mastery to realize its potential (Senge 1990a: 12). Systems thinking constitute the core of the learning organisation, and is the process whereby one looks at the world as a whole and not just as a series of happenings, and this is done by using intuition as well as logic in order to solve problems (Phipps 1993: 22). It focuses on the identification of spheres of influence, and not cause-result-linear-progression (Phipps 1993: 22). This type of thinking sees organisations as giant networks of interconnected nodes. Changes intended to improve performance in one part of the organisation can have an impact on other parts of the organisation (Stata 1989: 65).

This discussion on disciplines provided a good overview of what it is that has to be learned (studied and mastered) in a learning organisation, but what makes an organisation a learning organisation? In other words, what are the characteristics of a learning organisation? To gain a better understanding of this, a discussion on each of these characteristics follows in the next section.

#### 3.3.4 CHARACTERISTICS OF A LEARNING ORGANISATION

In the discussion on the characteristics of learning organisations, the elements of learning as identified by Marquardt (2002: 15-16) are used as a framework. Learning organisations were found to have the following characteristics in common:

### 3.3.4.1 Learning dynamics

- A learning organisation has "different levels of learning, types of learning and learning skills" (Marquardt 2002: 15);
- "They provide continuous learning opportunities" (Rowden 2001: 12);
- A learning organisation practises action learning, in other words it "takes action, reflects, and adjusts course as it goes, seeking to enhance the speed and effectiveness by which it learns how to change" (Rowden 2001: 16);
- "They use learning to reach their goals" (Rowden 2001: 12);
- They learn from past experience, in other words they take time to reflect on and evaluate their experiences and successes (Osland, Kolb and Rubin 2001: 64);
- They learn from other organisations, in other words they benchmark excellent organisations and learn from best practices of other organisations (Osland, Kolb, and Rubin 2001: 49).

## 3.3.4.2 Organisation transformation

- Learning organisations "are continuously aware of, and interact with their environment", in other words practice "environmental scanning" which produces the "input for changes that are needed within the organisation" (Buhler 2002: 20; Rowden 2001: 12);
- A learning organisation exists in a constant state of readiness to handle change (Rowden 2001: 15);
- A learning organisation is in a state of continuous planning (Rowden 2001: 16);
- In a learning organisation, management uses a learning map (plan) to help them plot a course of action (Hitt 1995: 21). Planning gives the members of the management team the opportunity to come together to share their individual mental models and to arrive at a collective mental model (De Geus 1988: 70-74). In other words, planning is seen as a learning opportunity (De Geus 1988: 70);
- A learning organisation encourages experimentation, improvises change, rewards small wins, and institutionalises success throughout the organisation (Rowden 2001: 16);
- A learning organisation "embraces creative tension as a source of energy and renewal" (Rowden 2001: 12);

- A learning organisation strives for excellence, in other words the highest standards in everything it does (Hitt 1995: 20);
- A learning organisation focuses on "self-renewal", in other words "creating a framework within which continuous innovation and rebirth can occur" (Hitt 1995: 20);
- A learning organisation has a clear-cut vertical structure for stability, but also dynamic networks for flexibility. These networks "reshape how, and by whom decisions get made; it integrates decisions horizontally at the lowest managerial levels, at the highest speed"; it identifies the "small organisation inside the large organisation" and empowers it to make appropriate decisions; it enables the right people in the organisation to converge faster and in a more focused way than the competition (Charan 1991: 105);
- A learning organisation uses measurement systems to measure performance (Hitt 1995: 19, 23).

#### 3.3.4.3 People empowerment

- Leaders in learning organisations develop a shared vision, and provide the resources needed for achieving the vision (Hitt 1995: 20);
- Leaders in learning organisations also delegate authority and celebrate successes
   (Hitt 1995: 20);
- "Managers and leaders as learners carry out coaching, mentoring and modelling roles to generate and enhance learning opportunities for people around them" (Marquardt 2002: 15);
- Learning organisations "foster inquiry and dialog, making it safe for people to share openly and take risks" (Rowden 2001: 12);
- Learning organisations encourage their employees to experiment with continuous improvements to ongoing programmes, or to test innovative ideas. The results of these experiments then guide decision-making (Osland, Kolb and Rubin 2001; 49);
- Learning organisations "link individual performance with organisational performance" (Rowden 2001: 12);
- A learning organisation fosters team learning and collaboration (Confessore 1997: 5-6);

According to Hitt (1995: 20) it is essential that learning organisations have synergistic teams. These teams are high-performance learning teams (Hitt 1995: 20). Members of these teams "achieve a level of intelligence greater than the sum of the intelligence of the individual members" (Hitt 1995: 21). These teams have the ability to engage in dialogue. Members of these teams also have respect for one another, they share mental models, they have an open mind to opposing views, they hold a shared vision, and they are engaged in a quest for mutual understanding (Hitt 1995: 21). People empowerment links up with Senge's disciplines of personal mastery and team learning, which were discussed in Section 3.3.3.

## 3.3.4.4 Knowledge management

- A learning organisation is involved in "the management of acquired and generated knowledge (tacit and explicit), which includes the acquisition, creation, storage, transfer, and use of knowledge" (Marquardt 2002: 16);
- Learning organisations have the mechanisms to quickly share knowledge among their members (Osland, Kolb and Rubin 2001: 49);
- In a learning organisation, learning that has occurred in one division can be effectively shared with other divisions through knowledge management (Buhler 2002: 22);
- The Internet enables organisations today to learn from what other organisations are doing, and to use knowledge gained to benchmark best practices (Buhler 2002: 22);
- A learning organisation "can rapidly leverage its new knowledge into new products, new marketing strategies, and new ways of doing business" (Marquardt 2002: 16);
- A learning organisation practices competitive intelligence, which is not just the
  process of checking out the closest competition, but involves also the scanning
  of the environment for any knowledge that could be important to the
  organisation (Buhler 2002: 20);
- "By developing learning organisations that use the knowledge they acquire, can organisations continue to adapt and respond to their changing environment" (Buhler 2002: 22).

## 3.3.4.5 Technology enhancement

- A learning organisation has "the necessary supporting integrated technological networks and information tools that allows access to and exchange of information and learning". This includes "technical processes, systems, and structure for collaboration, coaching, coordination, and other knowledge skills", as well as "electronic tools and advanced methods for learning" (Marquardt 2002: 16);
- Woiceshyn (2000: Online) approach the topic from the point of view of technology adoption. According to her, the success of technology adoption depends on the organisation's ability to learn. In other words, a learning organisation has a better chance of adopting a new technology than an organisation that is not a learning organisation;
- Dodgson (1993: 384) on the other hand suggests that environmental uncertainty
  can create a need for learning. The adoption of a new technology might thus
  trigger an uncertainty and be a motivation for learning. In other words, the
  adoption of a new technology can help an organisation to become a learning
  organisation.

Having discussed the characteristics of the learning organisation, the question one can ask is how one develops an organisation that learns? The next section touches on this.

#### 3.4 DEVELOPING A LEARNING ORGANISATION

Traditional organisations develop into learning organisations through different processes and it is important that people take note of these.

# 3.4.1 PROCESSES THAT RESULT IN A LEARNING ORGANISATION

Learning in organisations, according to Schulz (2001: 663), takes place through a number of processes, which in turn create new knowledge or modify existing knowledge. These processes lead to the development of a learning organisation and could be described as follows:

#### 3.4.1.1 Acquisition of knowledge and insight

Huber (1991: 90) describes this as "the process by which knowledge is obtained". Formal organisational activities to acquire knowledge can include, for example, customer surveys, analysis of competitor's products, performance reviews, research and development activities, etc. Informal activities can include, for example, reading a newspaper, or listening to coffee break "news" (Huber 1991: 90). Acquisition of knowledge and insight links up with Schulz's (2001: 663) idea of exploration. According to him, exploration is about search, discovery, experimentation, play, variation, risk taking, flexibility and innovation, which generate new unsettled knowledge, with potentially high but uncertain returns.

According to Schein (1993: 86), *insight* brings a new level of understanding and also new direction. This occurs when an answer comes to one suddenly, after struggling for hours to find it. As soon as one has the answer, one can make the necessary cognitive changes. Insight is often very difficult to reach, and when the problem is not solved one becomes frustrated and fearful. Schein (1993: 86) calls this Anxiety 1, namely the inability to learn something new, because it looks difficult. If one wants to avoid Anxiety 1, one either have to ignore the problem or simplify it, even if this means that one has to distort the problem, or project it onto somebody else (Schein 1993: 86). *Insight*, though, does not change behaviour automatically, and until one's behaviour has not changed so that new results are seen, one does not know whether that which was learned cognitively is of value (Schein 1993: 86).

#### 3.4.1.2 Information distribution

Information distribution is described by Huber (1991: 90) as the "process by which information from different sources are shared", leading to new information and understanding. Units or sections in an organisation often develop new information by piecing together pieces of information they have obtained from other organisational units.

The problem is that many organisations do not know what they know and they often tend to have weak systems for retrieving a certain piece of information that is known to the organisation. However, by distributing information widely through an organisation,

more varied sources for it will be created, and efforts to retrieve it will be more successful. This in turn will lead to learning by individuals and units of organisation (Huber 1991: 100-101). Information distribution according to Huber (1991: 101) leads to a more broadly based organisational learning and not to a new organisational learning as put forward by other authors.

Eberhagen (2000: Online) brings another dimension to the fore. He makes a distinction between knowledge distribution and information distribution. According to him, the purpose with knowledge distribution is to promote learning and the purpose with information distribution is to reduce uncertainty and resolve ambiguity. Eberhagen (2000: Online) further identifies a number of methods to distribute knowledge, namely:

- FAQ (frequently asked questions) as a way to distribute knowledge to a community of knowledge workers within a specific area/field;
- How-to stories, which give good examples of how to go about doing something;
- Reviews: statements by an alleged expert on a topic within a specific knowledge field;
- Subscriptions: registering your needs at the source of the information/knowledge distribution, e.g. mailing lists;
- Bulletin boards: a public location where a person can post something that he/she
  wants others to take notice of, or a place where one can browse through what
  others have posted there;
- Discussion groups: Dialog plays an important role in these groups and forms a communication model for knowledge exchange.

Eberhagen (2000: Online) concludes that knowledge/information distribution cannot be studied as an isolated phenomenon, but should be studied in the context of other related concepts such as acquisition of knowledge and insight, knowledge/information interpretation and development of organisational memory. The researcher agrees with Eberhagen (2000: Online). None of these processes that lead to a learning organisation can be studied in isolation, as they are closely related and intertwined.

#### 3.4.1.3 Information interpretation

Daft and Weick (1984: 286, 294), define information interpretation as "the process through which information is given meaning", and also as the "process of translating events and developing shared understandings and conceptual schemes". Huber (1991: 90) describes it as the "process by which information is given one or more interpretations", in other words "information is given meaning, events are translated, and a shared understanding is developed" (Eberhagen 2000: Online). More varied interpretations changes the range of potential behaviours in the organisation and enhances organisational learning (Huber 1991: 102).

Schulz's (2001: 663) idea of "encoding" can be linked with this process of information interpretation. Organisations learn by encoding deductions from experiences into organisational routines that guide behaviour (Levitt and March 1988: 319). Sharing of knowledge among each other is thus made possible by codifying knowledge into certain formats (Schulz 2001: 663).

## 3.4.1.4 Development of organisational memory

Huber (1991: 90) describes this as the process "by which knowledge is stored for future use". Organisational memory is normally created by individuals, but the human components of organisational memories according to Huber (1991: 105) are often unsatisfactory and unreliable. When people move from one organisation to another, it causes great loss for the human components of an organisation's memory. Also, if people in organisations do not anticipate future needs for certain information, it can cause great amounts of information not to be stored, or to be stored in such a way that it cannot be easily retrieved. "Another problem is that organisational members with information needs frequently do not know of the existence or whereabouts of information possessed or stored by other members" (Huber 1991: 105).

The question is, how does one ensure that organisational memory is created and developed? Huber (1991: 105) suggests the processes of storing and retrieving. A great amount of organisational knowledge on how things operate or are done is stored in the form of standard operating procedures, routines and scripts (Feldman 1989: 121-123; Gioia and Poole 1984: 449; Nelson and Winter 1982: 99-107). Decision-making,

however, is not only determined by these standard operating procedures, routines and scripts, but "soft" (non-routine) information, which are routinely acquired and mentally stored (Mintzberg 1975: 51).

According to Huber (1991: 106), much of what an organisation learns is stored in the minds of its members. This links up with the idea of Communities of Practice, which is the focus of this study. That which is shared by the members of a Community of Practice can be resident in an electronic mail system, on an electronic blackboard, or bulletin board or artificial intelligence systems. Many organisations, however, grow their own experts, and use the knowledge of these experts to create computer-based expert systems or knowledge repositories, which are useful components of organisational memory (Huber 1991: 106).

Having these processes in place will result in the formation of a learning organisation. Learning organisations however develop through a process of different stages. These will be discussed in the next section.

## 3.4.2 STAGES IN THE DEVELOPMENT OF A LEARNING ORGANISATION

Mohr and Dichter (2001: 744-747) identify six stages in the development of a learning organisation and Kline and Saunders (1993: 24-218) suggest 10 steps to develop a learning organisation. For the purpose of this study, these steps have been integrated into six stages:

#### 3.4.2.1 Stage 1 - Honeymoon Stage

The Honeymoon Stage is the stage where the community comes together, where they clarify the method for making decisions, where they reach consensus early, and where they brainstorm possibilities. This stage can develop through the following steps: determining the learning culture, encouraging that which is positive, and making the workplace safe for thinking (Kline and Saunders 1993: 24-69).

## a) Determining the learning culture

The learning culture of an organisation can be determined by finding out what everyone thinks (institutional determination), by finding out if individuals' opinions are respected, and by individuals taking responsibility for their thoughts or actions (individual determination) (Kline and Saunders 1993: 24). This method is rather generalised and abstract, but it could be made more concrete and specific by doing a formal Learning Organisation Assessment (Kline and Saunders 1993: 37). Each employee in the organisation could be given a set of statements about the organisation, which they must read and make a judgment about (they must grade them from 1-5 where 5 = to a very great extend and 1 = not at all) (Kline and Saunders 1993: 37-38). The results of the assessment are then plotted on a matrix to provide an overview and to stimulate discussion about many of the major issues that must be addressed (Kline and Saunders 1993: 40). Another method is to compile an assessment inventory of the organisation's present strengths and weaknesses, with respect to it being a learning organisation (Hitt 1995: 24).

# b) Encouraging that which is positive

The purpose of this step is to change the attitude of people in the organisation, so that they can learn to think positive. Their behaviour towards one another and towards the world outside should be more positive and supportive (Kline and Saunders 1993: 46).

Kline and Saunders (1993: 48) further suggest reframing as a method to change attitude. Reframing is a way that allows you to see things in a new light, to sort out facts and ideas so the positive ones will come into clarity, while the negatives, though not forgotten, are placed on the back burner (Kline and Saunders 1993: 48). The assessment done in step 1 brings into focus those areas that need to change, and then the negatives found in the assessment can be reframed (not solved, but seeing in them the possibilities for advancement) (Kline and Saunders 1993: 48). This requires positive thinking that looks at the current reality and the positive outcome that can be developed from it (Kline and Saunders 1993: 48).

## c) Making the working place safe for thinking

There are lots of stories of innovative thinkers that were ignored or laid off by their employers, who started their own successful businesses and industries. A climate will have to be created where everyone will look at better ways of doing their work, and where employees are not penalised for new ideas. The thinking ability of all in the organisation is absolutely essential (Kline and Saunders 1993: 69).

### 3.4.2.2 Stage 2 - The Conflict Stage

During this stage, reality settles in and conflict arises. This conflict however results in good solutions being worked out, and is essential for the development of a healthy learning group (Mohr and Dichter 2001: 745). The leader's role in this stage is that of mediator and teacher of mediation and negotiation. The leader should also encourage shared decision-making (Mohr and Dichter 2001: 745). During this stage, the following step as identified by Kline and Saunders (1993: 89-107) can be taken:

## Reward risk taking

In the current environment, organisations find themselves in permanent white water, and taking risks is becoming a prerequisite for survival. To ignore risks will not cause dangers to disappear, and if one does not take moderate intelligent risks, success stays a far-off dream (Kline and Saunders 1993: 89). Organisations should adopt practices, which encourage boldness and enterprise. Each new risk presents an opportunity to learn about how to be more successful, and also about how to take intelligent risks (Kline and Saunders 1993: 93). These bold initiatives stand a greater chance of succeeding in an environment that is hostile to them (Kline and Saunders 1993: 93). For this reason, it is important that a culture that supports risk-taking is built in the organisation. This culture must allow the organisation/s members to make mistakes. To ensure that this culture takes hold in the organisation, it is important that it be modelled throughout the organisation, especially by management (Kline and Saunders 1993: 95). Through risk taking, members of the organisation also discover how important the others members of the team are, and how important each one's contribution can be (Kline and Saunders 1993: 107).

#### 3.4.2.3 Stage 3 - The Confusion Stage

During this stage, the responsibilities of the members of the group are sorted out. According to Mohr and Dichter (2001: 746), the leader's responsibility in this stage is to prioritise and re-prioritise, to help the group keep focussed on what is important and also to:

#### a) Assist people to become resources to one another

Each individual has different talents, qualities and skills that he or she can contribute, that can be used by others in the context of the team. People are thus resources to one another. By sharing these resources in a synergistic manner, people can move easily from task to task in a project (Kline and Saunders 1993: 108-109).

# b) Exert learning strength

In this stage, everyone in the organisation from top to bottom are encouraged to learn for the improvement of the organisation, not just in formal ways, but anywhere at any time, without specific demands from managers or instructors (Kline and Saunders 1993: 130).

### 3.4.2.4 Stage 4 - The Messy Stage

During this stage things are even less clear, and people feel disillusioned and without direction. The role of the leader of the group in this stage is to help the group to be comfortable with messiness, to point out that it is a part of real life, and to help them feel safe enough to indulge in risk-taking (Mohr and Dichter 2001: 746). Mistakes are welcomed, examined and understood as natural phenomena, and a necessary part of learning. The leader should further strive to develop those systems and communications that will eventually bring order out of the chaos (Mohr and Dichter 2001: 746). To enable the group to get direction, Kline and Saunders (1993: 153) suggest the following steps: mapping out the vision and giving life to it.

## a) Mapping out the vision

To have a comprehensive vision of an organisation's resources and how they can ensure success, teamwork is essential (Kline and Saunders 1993: 159). The vision must belong to everyone, in other words it should be synergistically shared (Kline and Saunders 1993: 160). The tool that Kline and Saunders suggests to map out the vision is Group Mind Mapping, which helps to create synergy because they are a graphic reflection of connections made and relationships understood (Kline and Saunders 1993: 166, 167).

## b) Giving life to the vision

During this stage, the vision is translated into action. Kline and Saunders (1993: 181) suggest that we utilise the kinaesthetic intelligence (thinking with your body) of the people in the organisation. This could be done by acting out the process or system so that people can see how things could work. This is called kinaesthetic modelling (Kline and Saunders 1993: 186). Kinaesthetic modelling can be used as a tool for team building, as it can illuminate relationships (Kline and Saunders 1993: 189).

# 3.4.2.5 Stage 5 - The Scary Stage

During this stage, members of the group realises that somebody has to take responsibility for their actions. Participation in making decisions does not in any way ensure that the group automatically takes on real responsibility for what happens (Mohr and Dichter 2001: 747). At this stage it is important that the group build an accountability system based on information sharing and self-evaluation, so as to ensure that decisions are grounded in substantive information and data and not solely on the opinions and preferences of the group members (Mohr and Dichter 2001: 747). This stage is also the stage where the group begins to see itself as a professional learning community rather than merely a decision-making group (Mohr and Dichter 2001: 247). The group is moving into shared leadership and understands that what makes a community truly professional is a systematic approach to collective rather than individual accounting (Mohr and Dichter 2001: 247). Two ways to assist a group to determine authority and accountability is to connect the systems in the organisation to one another, and to synthesize everything and make it work (Kline and Saunders 1993: 203, 217).

#### a) Connecting the systems to one another

As discussed earlier in this chapter (see Section 3.3.3.5), Peter Senge (1990a: 12) identifies systems thinking as the fifth discipline of organisational learning, and a fundamental principle of a successful learning organisation. Kline and Saunders (1993: 203) see this too as vital to the success of an organisation. According to them, the learning organisation exemplifies systems thinking in two remarkable ways: first the human element as an essential component of any system within an organisation is emphasized, and secondly the learning organisation as an effective system (a system that learns) is emphasized (Kline and Saunders 1993: 204). The question is, what constitutes a system? According to Kline and Saunders (1993: 204), you have a system whenever a group of elements are so interconnected that a change in one part produces a change in the whole structure. To start connecting the systems, it is important to identify the different systems in the organisation, then according to Kline and Saunders (1993: 212), the organisation should build its own systems theory. This is done by ensuring that the systems keep track of themselves, by defining the purpose of each system, by articulating the rules according to which a system operates, by continuously revising the rules, by feedback, and by remembering that human behaviour is part of the system (Kline and Saunders 1993: 214).

#### b) Synthesize everything and make it work

The goal of this step is to internalise everything that have been learned, and to express it through the particular forms of action that have been chosen (Kline and Saunders 1993: 217). In this step, Kline and Saunders (1993: 218) propose that the organisation use drama as a guiding metaphor to focus and energize its internal activities and its approach to the world at large.

### 3.4.2.6 Stage 6 - The Mature Group Stage

During this stage, the group acts proactively and inclusively, and make their own agendas, rather than reacting to those of others. In other words, a learning community is born. Decisions are rarely made before enough knowledge is acquired, and better decisions are made because the viewpoints of others are included. The meetings of the

group are used as opportunities for professional development rather than a contention over details. All members of the group now take responsibility for what happens (Mohr and Dichter 2001: 747).

Having discussed the concept of a learning organisation, the researcher decided to include a discussion on academic libraries as learning organisations in the next section, because of the focus of this study on an academic library.

#### 3.5 ACADEMIC LIBRARIES AS LEARNING ORGANISATIONS

Academic libraries, just as other organisations, are increasingly competing for services, facing new technologies, experiencing changing customer expectations, changing values in the workplace, and facing challenges of higher education (Fowler 1998: 223). These challenges could not be addressed by traditional libraries though, because: these libraries were inclined to be more reactive than proactive to changing circumstances; management forced down control and direction from above; librarians in these libraries saw themselves as unable to add something unique to the education process; management were slow to see the potential of new technologies; and the staff's contributions to the vision of the library were not taken into consideration (Phipps 1993: 24-25).

To face the challenges of a changing environment, academic libraries had to undergo radical transformations. In order to do this, these libraries were compelled to become learning organisations. The academic library as learning organisation differs greatly from a traditional library, and these differences as identified by Tautkevičience (2002: 107) can be illustrated in the following table in terms of their main functions, orientation, organisational structure, and understanding of a document, main principles, values, and approach to the users:

	FEATURES	TRADITIONAL LIBRARY	LIBRARY AS LEARNING ORGANISATION
1.	Main function	Acquisition, storage, classification, presenting for the user.	Acquisition, storage, classification, user education, creating learning environments, acceleration of information/knowledge.
2.	Orientation	To shelves.	To creation of a learning environment.
3.	Organisational structure	Hierarchy, bureaucracy.	Net (Matrix).
4.	Understanding of a document	Narrow (printed documents).	Wide (printed, audio-, video- and electronic documents, virtual spaces).
5.	Main principle	Everything for everybody.	Lifelong learning.
6.	Values	Obedience, carefulness, knowledge of the shelves and literature.	Activity, cooperation skills of the self-dependent learning, information literacy, permanent learning.
7.	Approach to user	Neutral.	Partnership.

Table 3.1 Difference between the traditional library and library as learning organisation

In chapter 2, the concept of knowledge management was discussed, but is there a link between knowledge management and learning organisations? This question is addressed in the next section.

# 3.6 THE RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT AND LEARNING ORGANISATIONS

A link between knowledge and learning has always existed, as illustrated by a myriad of examples in literature. Some examples are: Marcum's (1998: Online) description of learning as the process by which we move beyond information (explicit knowledge) to knowledge (tacit knowledge); and the researcher's own definition of learning (see Section 3.2.1) as the process whereby a person processes information, and by doing so obtain new knowledge, insight, experience and skills.

Knowledge gained through the process of learning were shown to be either in tacit or in explicit form, as confirmed by the discussion on Nonaka and Takeuchi's SECI model in Section 2.6.1, as well as the researcher's definition of a learning organisation in Section 3.3.1 as an organisation that can identify, develop and utilize its tacit and explicit knowledge capabilities, enabling the organisation to expand its capacity to grow, and to modify its behaviour to reflect new knowledge and insights, and in doing so to improve its performance and success.

Nonaka and Takeuchi's (1995) SECI-model (see Section 2.6.1) also makes a connection between knowledge and learning. As a person moves through the four processes of socialization, externalisation, internalisation and combination, learning takes place. During the process of socialisation (See Section 2.6.1.1), one individual shares his/her tacit knowledge directly with another, and in doing so, the other person learns his/her tacit skills through observation, imitation and practice. In the process of externalisation (see Section 2.6.1.2), tacit knowledge is converted into explicit knowledge so that it can be shared and learned by others (Nonaka 1991: 11). In the process of internalisation (see Section 2.6.1.4), explicit knowledge is converted to tacit knowledge, it is shared throughout the organisation, and other employees internalize it; that is, they use it to broaden, extend and reframe their own tacit knowledge (in other words, they learn) (Nonaka 1991: 11). During the process of combination (see Section 2.6.1.3), discreet pieces of explicit knowledge are combined into a new whole, for example a report (Nonaka 1991: 11). This means existing knowledge are re-used, but the existing knowledge base of the organisation according to Nonaka (1991: 11) are not really extended. The researcher differs on this point from Nonaka, and is of the opinion that the knowledge base is extended by new insights formed through the combination of existing knowledge. These new insights are formed through a process of learning.

The link between learning and knowledge also comes out clearly in the discussion on the different perspectives on knowledge in Section 2.2.1. The "representationalistic view" on knowledge relates to Senge's (1990a: 8) discipline of "mental models", which he identified as one of the main components of the *learning* environment. According to this perspective, reality resides outside a person, and *knowledge* is a mirror of that reality. Information from the outside is processed by the mind, and then used to build mental representations (knowledge) that can be stored in the mind (Aadne, Von Krogh and Roos 1996: 11). These internal pictures (mental representations) influence the way

we see the world and the way we act, but they can sometimes be major stumbling blocks in the learning process (Senge 1990a: 9). The discipline of working with 'mental models' operates further by *learning* to unearth these internal pictures and hold them up for scrutiny by learningful discussions with others. When new experiences are assimilated, resulting in the improvement of the representations (mental images), *learning* occurs (Aadne, Von Krogh, and Roos 1996: 11).

The question that arises though is whether indiscriminate knowledge creation or sharing will lead to the development of a learning organisation. According to Rowley (2000: 8), this is not necessarily the case, as knowledge is not a neutral tool in the learning process. According to her, 'to learn' is to acquire knowledge of a subject, or skill as a result of study, experience or teaching. She describes the relationship between information (explicit knowledge), knowledge (tacit knowledge) and learning in an organisation as follows: information flows "into an organisation from a range of different sources", and "the organisation then conceptualises that information in a way that is consistent with its norms, cognitive frameworks, context and cultures" (Rowley 2000: 9). She describes this conceptualisation process as learning, and this corresponds with single-loop learning (see Section 3.2.2.1), where errors that are detected, are sent via a single feedback loop, and then corrected within the set norms of the organisation. The learning that takes place then leads to knowledge, which may either be tacit (embedded in minds or activities) or explicit (stated in verbal communication or documents). This knowledge is then used to support and inform decisions, behaviour and actions, and feedback from those actions may in turn generate further knowledge (Rowley 2000: 9). When this knowledge leads to a change in the norms, cognitive frameworks and culture of the organisation, double-loop learning has occurred (see Section 3.2.2.2).

Having established that a link between knowledge and learning exists, the question remains whether the concepts of knowledge management and learning organisations are related. The answer to this question became clear when a comparison was drawn between the developmental stages of both the knowledge management and learning organisation concepts. It was found that the idea of a learning organisation (see Section 3.3.2) gained momentum at approximately the same time as knowledge management entered its second stage of development (see Section 2.7.3.2). During the first stage of knowledge management (see Section 2.7.3.1), many organisations went through a process of computerisation and process re-engineering, the focus being on efficiency

rather than effectiveness. Leanness and delayering was the order of the day, which meant the laying-off of people, resulting in valuable expertise being lost. This left organisations with little capacity to investigate potential business developments, it made them unable to deal with periodically occurring problems, and unable to deal with the ever growing amount of knowledge. Organisations thus became aware that to retain their competitive edge, they would have to focus on continuous improvement, which implied a process of continuous learning. This is where the idea of a learning organisation came to the fore. Learning organisations provided a means whereby individuals working together could increase the knowledge and skills of all their members, especially during times of rapid change, and in chaotic, often highly competitive environments (Confessore 1997: 5). Learning organisations are thus characterised by the management of knowledge (see Section 3.3.4.) which can include the acquisition, creation, usage, storage and transfer of knowledge, and the rapid leveraging of new knowledge into new products, marketing strategies and services, new ways of doing business, and the utilising of new knowledge to benchmark best practices.

#### 3.7 SUMMARY

The first part of this chapter touched on the concept of learning as introduction to the learning organisation concept. During the discussion, the different definitions of learning pertinent to this study as found in literature were investigated, and from these definitions the researcher then formulated his own definition of learning. Because learning can take many forms, the researcher then identified only those types of learning pertinent to this study and discussed each of them. The types discussed included singleloop learning, double-loop learning and deutero-learning. This was followed by a discussion of Wenger's social learning perspective at the hand of seven principles, namely learning being inherent in human nature, learning being fundamentally social, learning changing who we are, learning being a matter of engagement in practice, learning reflecting our participation in Communities of Practice, learning meaning dealing with boundaries, and learning being an interplay between the local and the global. Having dealt with the concept of learning, the researcher approached the concept of the learning organisation. Firstly, definitions of the concept pertinent to this study were listed, followed by the researcher's own definition of the concept as deducted from these. Next, the researcher investigated the background to the development of the

learning organisation concept, and followed this up by a discussion of the different disciplines that contributed to the idea of a learning organisation, namely personal mastery, building shared visions, mental models, team learning, and systems thinking. A discussion of the characteristics of learning organisations followed next at the hand of certain elements of learning, namely learning dynamics, organisation transformation, people empowerment, knowledge management, and technology enhancement. Having determined what a learning organisation is, the researcher felt it necessary to include a discussion on how to develop a learning organisation. This discussion first looked at processes that result in a learning organisation, namely acquisition of knowledge and insight, information distribution, information interpretation, and development of organisational memory. This was followed by a discussion of the different stages of development of a learning organisation, namely the honeymoon stage, the conflict stage, the confusion stage, the messy stage, the scary stage and the mature group stage. Lastly, an attempt was made to determine whether a relationship exist between knowledge management and learning organisations. It was found that the concepts of learning organisations and knowledge management developed around the same time period, and that learning organisations are characterised by the management of knowledge. Having addressed the concepts of knowledge management and learning organisations and their relationship to one another, it is important to find out what their relationship is towards Communities of Practice. To address this, a discussion on the concept of Communities as Practice has been included in the next chapter, which in turn includes a discussion on the relationships between knowledge management, learning organisations and Communities of Practice.