

Wholistic interactive spiritual development of managers

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The growth of the concept of the learning organisation over the last forty years has created more interest than positive outcomes. Despite ambitious claims made by Senge and others, most attempts to create a learning organisation seem to have fallen short of their ambitions. In this paper, it is argued that a naïve conceptualisation of learning and development is a major contributor to this situation. In particular, failure to recognise that learners develop through a number of stages contributes to the application of inappropriate learning and development strategies.

Re-imagination and re-conceptualisation of learning and development based on contemporary knowledge and wisdom necessarily includes recognition of spiritual aspects of learning and development. Managers who are caught in a state of “arrested development” that does not embrace spiritual development are incapable of the kind of thinking and behaviour that is essential to create a learning organisation. A model of learning and development which integrates psychological and spiritual development is presented in the paper. This model is used to develop praxis for “wholistic interactive spiritual development of managers” (WISDOM). The application of this praxis is capable of transforming the concept of the learning organisation from a good idea to resilient leadership and management.

Keywords: learning organisation, learning and development, levels of consciousness, learning cycle, managers

INTRODUCTION

Contemporary organisations are beset by wicked problems (Kesavan et al, 2009) from within and without. Internally, continual changes in technology, complexity of processes and employee diversity create expectations of leaders and managers that are difficult if not impossible to meet. Externally, dealing with climate change, continuing global financial crises and rising expectations of social responsibility similarly challenge leaders and managers.

In response to these and other pressures, the nature of organisations is changing. Increasing complexity induced by rapidly escalating technological change, globalisation and ecological imperatives means that the military-church bureaucracy model espoused by Weber (1976) is of limited use as the basis for creating and operating business (or other) organisations. The principles of scientific management (Taylor, 1967) are still in common use in organisational practice, despite the clash between them and the demands of the contemporary organisational environment. Fayol’s (1987) functions of management continue to figure prominently in management texts but make less and less sense in contemporary organisations where roles and responsibilities are continually in flux.

Despite the discomfort that is experienced by contemporary organisations enacting the power and control paradigm that underpins these approaches to management, leaders and managers have been unable or unwilling to transcend the industrialisation paradigm represented by them. Nevertheless, there is a restlessness that cannot be satisfied without a better alignment between contemporary demands and organisational models.

In the search for new paradigms, one frequent and popular proposal has been for the transformation of the organisation into a learning organisation (Senge, 1990; Burgoyne, Pedler & Boydell, 1994). Despite the

enthusiasm with which the organisational learning paradigm suggested by Argyris and Schön (1978) was taken up by people like Senge and Burgoyne et al, and the consequent popularity of the idea in management theory and practice, it has failed to achieve the kind of traction necessary to entrench it as a successful practice.

In this paper, it is argued that a naïve conceptualisation of learning and development is an important factor contributing to the failure of the learning organisation to live up to its promise. In particular, lack of a clear developmental perspective for leaders, managers and organisations has hampered learning organisation initiatives. Leaders and managers need to reach higher levels of development, and the organisation needs to be transformed at the same time, if the potential of the learning organisation is to be realised (Fisher & Torbert, 1995).

It is further proposed that the re-imagination and re-conceptualisation of learning and development needs to embrace wisdom and spirituality as constituents of the leader/manager's developmental process. A model of learning and development which integrates psychological and spiritual development is presented in the paper. This model is then used to develop praxis for the "wholistic interactive spiritual development of managers" (WISDOM). The application of this praxis has the potential to transform the concept of the learning organisation from a good idea to resilient leadership and management.

THE PROBLEM

The value of learning organisations has been emphasised repeatedly in the literature. Ultrasound Coronary Systems (Albert, 2005), General Electric (Hurley, 2002), Arthur Andersen, Caterair International, Royal Bank of Canada (Marquadt, 1996), Royal Dutch Shell, Motorola, TRW Space and Defense Group (Redding and Catalanallo, 1994), Ford, Harley Davidson, Herman Miller, Federal Express (Kofman & Senge, 1993), Johnsonville Foods and Chaparral Steel (Watkins & Marsick, 1996) have all been identified as achieving transformation to the status of learning organisation and consequently enjoying significant benefits.

There have, of course, been critics of the whole idea of a learning organisation, many of them challenging the apparent reification of the organisation implied by the concept. A number of the challenges have been described by Easterby-Smith and Araujo (1999). Even the exemplary Shell learning organisation (de Gues, 1988; 1997) has been questioned (Boyle, 2002) regarding its success. The Arthur Andersen fall from grace is well known.

Given the enthusiasm with which proponents of the learning organisation have argued that the concept is essential to the success of organisations in the future and the popularity of Senge's *Fifth Discipline* (1990), it is somewhat puzzling that it has not been more widely successful. One part of the solution to this puzzle lies in recognising popular (mis)understandings of the concept of learning.

One of the most popular of those misunderstandings equates learning only with behavioural shaping mechanisms. Learning is perceived as a "black box" phenomenon that depends on the consequences of an action as the determinant of whether or not "learning" takes place. That learning is about whether repeating the behaviour that led to the consequence should be repeated (because it has been rewarded) or not (because it has been punished) (Skinner, 1976). The role of cognition is not regarded as important, one way or the other.

A variation of this view of learning is vicarious conditioning, which occurs when the learner observes the consequences for a second party from their actions. If the observer desires the kind of outcome experienced by the actor, they will copy that behaviour, otherwise they will avoid it (Bandura, 1977).

A second popular misunderstanding equates learning only with memorisation. In this conception of learning, the mind is an empty vessel into which new ideas are poured and hopefully retained. This version of learning theory can be represented by a new version of the three R's – receive, remember and regurgitate. This is the premise of cognitive learning theories in their simplest form.

Cognitive theories of learning are based on the belief that learning is an internal purposive process concerned with thinking, perception, organisation and insight (McFadzean, 2001). Cognitive theories propose that people learn by engaging memories and integrating them with incoming perceptions. Insightful learning occurs when past experiences or existing knowledge is adapted to a novel experience.

While each of these conceptualisations of learning is useful in explaining some kinds of learning, they are inadequate as the basis for creating a learning organisation. One step closer to that goal are humanist or experiential learning theories. Humanist theories of learning are extensions of cognitive theories, which also incorporate some aspects of behavioural learning, and are concerned with experiences and feelings, which

lead to individual fulfilment and personal growth. One of the best known humanist proponents, Maslow (1968; 1971) perceived the aim of education to be the assistance of learners to achieve self-actualisation, thus linking learning to development. The idea of self-actualisation also evokes Senge's (1990) concept of the discipline of personal mastery.

In the most popular version of experiential learning theories, learning is a cyclic process. Commonly beginning with a concrete experience of some kind, it moves through three other processes: reflective observation, abstract conceptualisation, and active experimentation to complete a cycle (Kolb, 1984). In a very real sense this cycle is a version of the scientific method, which provides it with some level of legitimacy not obvious with earlier theories.

The team learning discipline (Senge, 1990) supports the need for social learning theories to be acknowledged and incorporated in efforts to create learning organisations. Social learning theories build on both cognitive and humanist learning theories with the claim that learning is a social activity that happens in relationship. Much of the work in this area is derived from the socio-cultural (-historical) theory of the Soviet psychologist, Vygotsky (1978), and builds upon a foundational principle that all cognitive learning occurs at a social level, before occurring at the individual level. This principle carries with it several corollaries: that learning is mediated by others; that social dialogue is an important component of learning; and that cultural tools (beliefs, artefacts, systems) are accessed and acquire meaning in social contexts (Cullen, 1999: 45).

Arguably, the most important enhancement to humanist learning theory came from the work of Swiss psychologist Piaget (1950), who proposed that cognitive development unfolds in much the same way a logical argument unfolds, step by step in a logically necessary sequence of stages and sub-stages. It is this developmental aspect of learning that has been most neglected in the learning organisation scenario.

One notable exception was the Fisher and Torbert (1995) claim mentioned earlier, that leaders and managers need to reach higher levels of development, and the organisation needs to be transformed at the same time, if the potential of the learning organisation is to be realised. In the following section, the developmental aspect is explored as the foundation for a more useful model of learning in the context of learning organisations.

THE DEVELOPMENT OF LEARNERS

A significant amount of contemporary theory and research on adult development can be traced back to the late 1960s, when developmental theorists challenged Piaget. They questioned whether his highest stage of formal operations was the pinnacle of development for learners. The challenge was that further development was possible beyond formal operations, and that some people continue throughout their lifespan to transform their thinking and meaning-making into more complex and inclusive ways of knowing (Day & O'Connor, 2003: 14).

Bateson was one who extended the staged development theory of Piaget beyond children to incorporate stages beyond Piaget's formal operations. Bateson (1972: 283) defined learning as an action that denotes change, with change itself denoting, in turn, processes which are also subject to change. Implied in Bateson's categories of learning is a developmental process. Until the appropriate developmental changes occur in the individual, they are incapable of habitually incorporating the higher levels of learning into their repertoire.

Bateson proposed the following four categories of learning:

- Zero Learning: all acts that are not subject to correction.
- Learning One: revision of choice within a given set of alternatives.
- Learning Two: revision of the set from which the choice is to be made.
- Learning Three: revision of a set of sets.

Argyris and Schön (1978) redefined Bateson's Learning One as single-loop learning, and Learning Two as double-loop learning. They also took the giant leap of proposing the concept of organisational learning, one that remains hotly disputed to this day, amidst claims of reification of the organisation. Whether an organisation is capable of learning in the sense suggested by Argyris and Schön depends on the version of learning theory applied. Certainly, organisations have memories independent of human minds.

The fundamental cognitive-developmental assumption implied by Piaget, Bateson and similar developmental theorists is that basic mental structure is the result of interactions between certain organismic structuring

tendencies and the structure of the outside world, rather than reflecting either one directly (Kohlberg, 1969). This interaction leads to cognitive stages, which represent the transformations of simple early cognitive structures as these are applied to (or assimilate) the external world, and as they are accommodated to, or restructured by, the external world in the course of being applied to it.

The deep structure of our meaning-making systems involves the distinction between self and other or between subject and object. Development involves a process of re-differentiating and re-integrating relationships. “The internal *experience of developmental change can be distressing*. Because it involves the loss of how I am composed, it can also be accompanied by a lack of composure” (Kegan, 1980: 374, italics in original).

It therefore follows that there will be a degree of inertia regarding developmental change. A reluctance to engage with the distress of transformation can lead to “arrested development” as a barrier to learning. Even though the appearance of adulthood is physically manifested, it may not be the case that ideological, psychological or spiritual adulthood has been attained.

In a wide-ranging analysis based on sixty to seventy theories from Eastern as well as Western traditions, Wilber (2001) concluded that “all developmentalists, with virtually no exceptions, have a stage-like list, or even a ladder-like list, a hierarchy of growth and development... – even the contemplative traditions. ...These stages are the result of empirical, phenomenological, and interpretive evidence and massive amounts of research data” (p. 135).

At each stage of development, there is an expansion of consciousness or awareness, so that “there is a different view of the world – a different view of self and others – a different world-view” (Wilber, 2001: 132). Not only is there a *different world-view*, different worlds (e.g. learning organisations) are created by the evolution of consciousness. At each stage of development “you get a different type of *self-identity*, a different type of *self-need*, and a different type of *moral stance*” (Wilber, 2001: 132, italics in original).

This is a significant claim by Wilber, and is the launching point for a re-imagination of the learning and development process. As demonstrated above, the learning and development process is much more complex than is usually acknowledged. One way of dealing with this complexity is imaginative variation, a process aimed at producing a “structural differentiation among the infinite multiplicities of actual and possible cognitions that relate to the object in question and thus can somehow go together to make up the unity of an identifying synthesis” (Moustakas, 1994: 35). This involves seeking all possible meanings, seeking divergent perspectives, and varying the frames of reference about the phenomenon.

Applying imaginative variation to the phenomenon of learning has resulted in the development of a new model of the learning process, which integrates Wilber’s levels of consciousness (2001), Kolb’s (1984) learning cycle and Allee’s (1997) knowledge archetypes. It is also consistent with principles from each of the four schools of thought regarding learning and with some of the findings of contemporary brain research (Rock & Schwartz, 2006). Each of these components is described briefly in the next section.

THE COMPONENTS

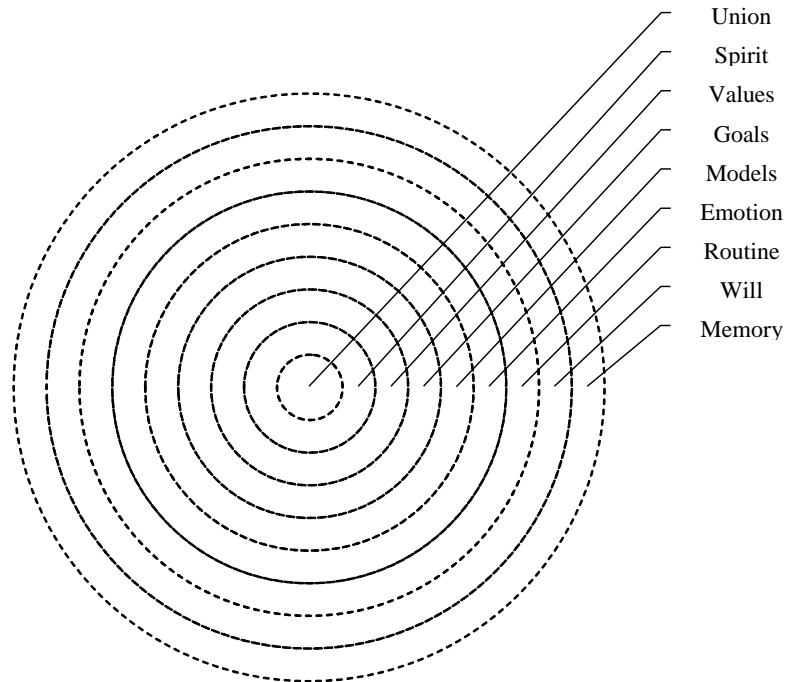
The concept of levels of consciousness is an integration of cognitive development theories with theories of mind (e.g. von Eckartsberg, 1989; Wilber, 1998). There are many variations regarding the number of levels of consciousness, however, the majority of theories contain between five and ten levels, with the most common number being seven. For the purpose of this paper, it has been convenient to propose nine levels, but this is not definitive (Figure 1).

The nine levels of consciousness proposed for the purpose of this exploration, which are more or less correlated with Wilber’s levels of consciousness (1998: 64), are:

1. Memory (for items of data) – Wilber’s sensation
2. Will (conscious decision) – Wilber’s impulse
3. Routine (habitual actions) – Wilber’s perception
4. Emotion (conscious awareness of self) – Wilber’s emotion
5. Models (abstract representations of reality) – Wilber’s symbols
6. Goals (conscious intention) – Wilber’s concepts
7. Values (conscious choice of moral intent) – Wilber’s con-op

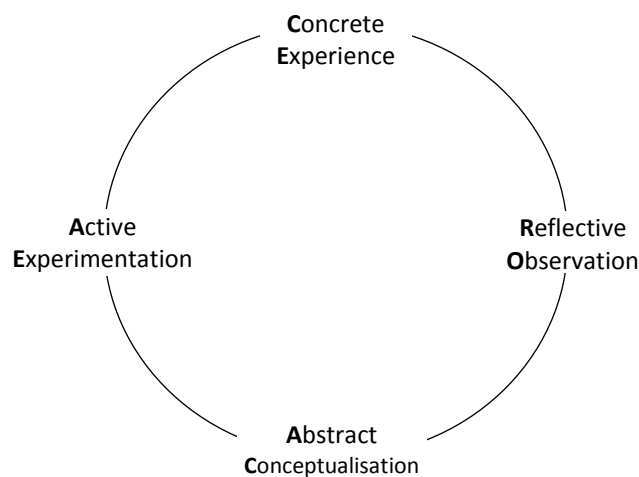
8. Spirit (personal unconscious) – Wilber’s form-op
9. Union (collective unconscious) – Wilber’s vision-logic.

Figure 1: Nine levels of consciousness



David Kolb's (1984) learning theory is an adaptation of Piaget via Lewin, which combines Piaget's learning (Kolb's active experimentation and concrete experience) with Piaget's development (Kolb's reflective observation and abstract conceptualisation). Kolb proposed a cycle through which individual learning progresses (Figure 2). He suggested that there are different ways of learning depending on intended outcomes of the learning, as well as the learning preferences of the learner. The process of learning will therefore be contingent on these variables and more.

Figure 2: Kolb's Learning Cycle



Source: Kolb, 1984: 21.

At its most fundamental, the learning process is one that accepts “data” from the learner’s environment, and transforms that data into a form of “knowledge”. Just what is meant by the term “knowledge” is in itself an area worthy of investigation.

Bierly et al. (2000) addressed this issue using the common framework of “data”, “information” and “knowledge” as distinct concepts, and added a fourth one that they called “wisdom”. Using Bloom’s (1956) taxonomy of educational objectives as a reference point, they proposed four levels of learning, which align roughly with Bloom’s hierarchy, albeit by combining some levels of the taxonomy. Their position was that wisdom entailed the (successful) application of knowledge in action.

Allee (1997) addressed the same issue and proposed another three forms of “knowledge”. Two of these she interposed between knowledge and wisdom, using the terms “meaning” and “philosophy”, and the other, “union”, beyond wisdom. In effect, she redefined the Bloom taxonomy in its original form, and added union, to create what she called a “knowledge archetype”.

She claimed that the different modes of knowledge form a continuum of increasing complexity and integration. This implies that there are different learning, information processing and other dynamics for each one as was suggested by Bierly et al. (2000). The conversion of data into information is quite different from the conversion of information into knowledge, and so on.

Allee proposed that her knowledge archetype can be extended to incorporate different kinds of learning and performance foci for each mode of knowledge. These are summarised in Table 1. Interestingly, she made a distinction between double-loop learning and generative learning, which are often treated as synonyms by others. She claimed that:

[i]n order to be a high-performing learning organisation, work processes must incorporate conscious and deliberate attention to every aspect of knowledge. Unlike linear models that impose a particular order of activity, this framework helps illuminate the natural learning patterns that underlie work processes, human behaviour, and organisational systems. (1997: 70)

Table 1: Learning and performance framework reference chart

Knowledge	Learning	Action Type	Performance Focus
Data	Instinctual (Sensing)	Data	Feedback (Gathering information)
Information	Single-loop (Action without reflection)	Procedures	Efficiency (Doing something the most efficient way)
Knowledge	Double-loop (Self-conscious reflection)	Functional (Doing it the best way)	Effectiveness
Meaning	Communal (understanding context, relationships, and trends)	Managing (Understanding what promotes and impedes effectiveness)	Productivity
Philosophy	Deutero (Self-organising)	Integrating	Optimisation (Seeing where an activity fits in the whole picture)
Wisdom	Generative (Value driven)	Renewing	Integrity (Finding or reconnecting with one’s purpose)
Union	Synergistic (Connection)	Union	Sustainability (Understanding values in greater context)

Source: Adapted from Allee, 1997: 67-8.

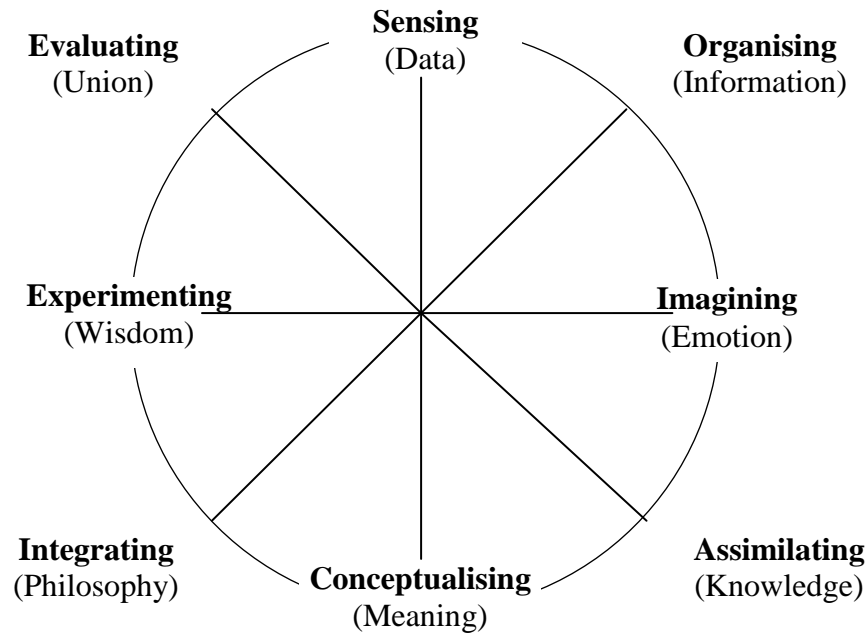
The integration of these three aspects of learning through a process of imaginative variation allows the development of a new model of learning and development, which is described in the next section.

THE MODEL

The idea that learners develop as proposed and verified by Piaget (1950) is a potent one, particularly when applied to the whole life-span, rather than just children. It implies that individuals at different stages of development as learners tend to use different approaches to learning. As they develop as learners they develop capabilities of habitually exploring deeper levels of consciousness that otherwise may lie dormant. The specifics of the model that is being proposed here are quite exploratory, and intended to stimulate further exploration rather than being definitive.

When Kolb's cycle is examined imaginatively in parallel with Allee's knowledge archetypes, it is possible to identify eight components in the cycle of learning, rather than the four proposed by Kolb. Although Allee proposed only seven categories of knowledge in her archetype, it makes sense to include emotional knowledge as an eighth category (Figure 3).

Figure 3: Modified Kolb learning cycle integrating Allee



THE EXPANDED LEARNING CYCLE

This integration suggests that the learning cycle commences with sensing data from the environment. The data is then organised into information, which to a large extent occurs within the perceptual process. The next step consists of imagining possibilities, which is where emotional knowledge is created, as the feelings created by the perceptual process are labelled by the learner. It is important to note also that imagination may be the start of a learning cycle, rather than an external sensing. The assimilation process occurs next, as the combined information and emotional responses to it are transformed into knowledge by assimilating it with pre-existing schemata. Meaning is extracted from that knowledge as new schemata are created by the mind. These new schemata are then integrated into the philosophy/paradigm/world-view of the learner. This is the "Aha!" moment in the learning process, the point where insight is likely to lead to release of endorphins (Rock & Schwartz, 2006).

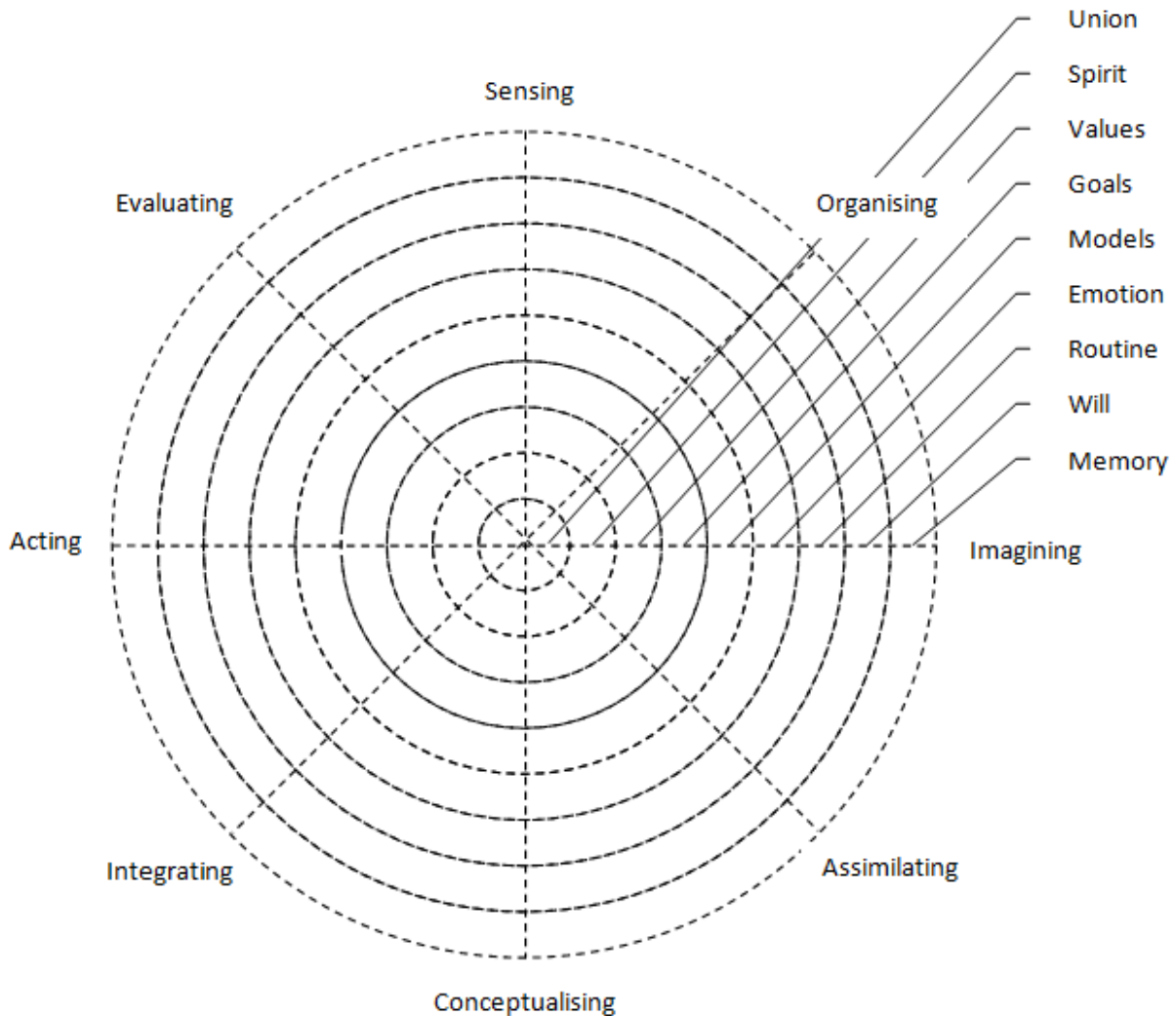
Again, a variation needs to be noted here. It may be that the new meaning does not sit comfortably with the existing philosophy. The accumulation of such discomfort can create a "strange attractor" leading to a developmental transformation in the learner. The next phase in the learning process comprises experimenting or taking some action, which is the point that Allee claims wisdom is encountered, which aligns with the position taken by Bierly et al. Finally, the experiment or action is evaluated and this creates the union within, which completes the learning cycle.

COMBINING LEARNING CYCLE AND LEVELS OF CONSCIOUSNESS

When this expanded view of the learning cycle is combined with the levels of consciousness, a learning grid is created that can be used to trace out different kinds of learning (Figure 4). This grid allows a simplified representation of the pathways through the learning cycle and levels of consciousness that different kinds of learning are likely to take. It should be remembered that what is actually occurring is the excitation of networks of neurons in the brain (or perhaps in the spinal cord). The energising of different pathways brings about different kinds of learning. It should also be understood that while all pathways are potentially possible, developmental theory and brain research suggest that it is less likely that the higher (or deeper) levels of

learning will take place in an individual who has not progressed to the appropriate stage of development.

Figure 4: Learning grid



WHOLE-OF-LIFE DEVELOPMENT

A whole-of-life developmental perspective begins with the learning process that takes place before the infant is born. Even before the embryo develops a proper brain, it can be observed responding to stimuli by reflex. This *Reflexive Learning*, then, forms the most basic level of learning. Throughout life, unless impaired in some way, Reflexive Learning remains an important characteristic of the human person, vital to its survival. It is a learning process that requires no recourse to conscious thought, and hence involves only the memory level of consciousness. It consists of just three steps: sensing, evaluating and acting.

At the next level of development, *Impulsive Learning* begins to take precedence over reflexive learning. Impulsive Learning requires the learner to make a conscious decision to do or not do something in response to a stimulus. It can be seen to be a form of behavioural learning, with the data acquired from the senses organised into an appropriate framework, before evaluation and action take place. The kind of evaluation that takes place is predominantly one of impulse, not involving nor requiring any deep thought. The baby senses hunger or pain and decides to cry as a survival mechanism.

Opportunistic Learning accesses the emotion or conscious awareness of self level of consciousness, and is very much concerned with the perception of possibilities. The imagination is engaged, but at a quite superficial level. There is no clear distinction between self and other – what is good for me is good for the universe. However, the engagement of imagination means that decisions are now more complex. A learner operating at this level will sense, organise the sensation, including emotional aspects, imagine possibilities, evaluate those

possibilities and act.

According to Fisher and Torbert (1995) when the learner reaches this stage of development needs are beginning to outweigh impulses, but there is a focus on the outside world and its effects – the need for Security begins to become stronger than the need for Survival (Maslow, 1968). Fisher and Torbert indicated that 2% of the senior executive population in USA and UK were at this level of development when tested by them.

As the learner develops further, they move into the realm of *Relationship Learning*. Now there is a clear distinction between self and other. “I am not my mother and my mother is not me”, for example. The interaction between the learner and the other, whether a human other or an inanimate object, facilitates the development of models of relationship, deeply entwined with emotion. The typical learning process at this stage is one of sensation, organisation, imagination of possibilities, comparison with existing schemas created from previous learning activity, to conceptualise, integrate and act upon. There is not a great deal of evaluation occurring, except on an emotional level.

Fisher and Torbert (1995) indicated that when the learner reaches this level, social norms and rules begin to become more important than needs – socially expected behaviours grow in importance. They found that 8% of the senior executive population had reached only this level of development. In Maslow’s hierarchy, at this level, the need to Belong becomes stronger than the need for Security (Maslow, 1968).

In *Expertise Learning*, the learner engages the consciousness level called symbols by Wilber. This is where Piaget’s (1950) level of abstract learning kicks in. It is the level of learning that supposedly underpins our secondary school and vocational education. Now the learner is truly engaging with models beyond the concrete, and incorporating cognitive evaluation in the learning process. However they are focused on “the one best way” (Taylor, 1967; Allee, 1997). Unfortunately, it is this level of learning that is most often identified as the generic of “learning”. It is this level of learning that is equated with occupational expertise and learning a body of knowledge.

In the context of the learning organisation, this level is about Bateson’s (1972) Level One Learning, or single loop learning (Argyris and Schön, 1978). Learning means solving problems in a highly structured environment. Internal craft logic overcomes societal norms according to Fisher and Torbert (1995). They indicated that 45% of the senior executive population had reached this level of development. The focus of awareness at this level becomes thought and internal logic. In the hierarchy of needs, the learner has developed to the level of Esteem. Status as a craftsman becomes a potent need (Maslow, 1968).

When the learner moves on to make *Achievement Learning* their favoured approach to learning, they are accessing the goals level of consciousness. No longer constrained by the context in which their models were developed (most likely at the expertise stage), they are able to apply those models to novel situations. The intention becomes more important than the craft logic of the models. In a sense, this level of learning is aligned with Maslow’s (1968) concept of Self-actualisation. From the Fisher and Torbert (1995) perspective systems thinking has begun to emerge and the interplay of plan, practice and effect is a focus of awareness. They indicated that 36% of the senior executive population had reached this level of development. The recent behaviour of Alan Joyce (Qantas CEO) suggests that he is an example of a leader who is operating at this level. His rather obsessive focus on goal achievement to the exclusion of other considerations suggests so.

This is the kind of learning most often identified as the primary requirement for the creation of learning organisations. Learning organisations are allegedly those which are capable of double loop learning. More accurately they are allegedly those in which a critical mass of the members is capable of double loop learning (Argyris and Schön, 1978). This level of learning does allow systems thinking and revision of mental models to take place. However, the reality is that this is necessary but not sufficient to deliver the kind of learning organisation portrayed in *The Fifth Discipline* (Senge, 1990).

Fisher and Torbert (1995) stressed the importance of aligning individual learning (and development) with organisational learning (and development). They indicated that unless the leaders of the organisation were at an adequate level of development, organisational learning was unlikely to occur. Further, they indicated that this adequate level of development was beyond that of Expertise Learning. It required access, at a minimum, to the level of Strategic Learning.

Strategic Learning occurs when the values level of consciousness is freely accessed. The “why” question starts to become more important than the “how” question. This where one finds or reconnects with one’s purpose –

the realm of wisdom (Allee, 1997). There is a conscious choice of moral intent (Wilber, 1998). The focus of attention expands both temporally and socially. Whereas at the Achievement level, the central focus was the self, it now expands to include a multitude of others, and the time horizon moves from short-term to long-term.

This level of learning incorporates Bateson's (1972) Level Three Learning with the learner revising the set of sets from which choices are to be made (triple-loop learning). It is the level at which personal mastery (Senge, 1990) begins to take shape, and at which a shared vision can be more than a platitude. Team learning now has the possibility of being based on dialogue rather than discussion.

A learner who has reached the level of Strategic Learner "organises people and resources toward the effective and efficient pursuit of pre-determined objectives" (Collins, 2001). In other words, s/he has become a competent manager. They have moved beyond Maslow's (1968) hierarchy of psychological development and moved into the realm of spiritual development, recognising interconnectedness as an essential characteristic of the universe. In the Fisher and Torbert (1995) scheme, they allow principles to overrule their perception of how the system works. The focus of awareness becomes a synthetic theory of system-environment development over time. They found that just 9% of the population of senior executives had reached this level of development. Ricardo Semler (1993) appears to be a leader operating at this level of development. By applying the principles he believed in, rather than following the conventional wisdom he was able to transform Semco into a very successful, yet unusual organisation.

Beyond the level of Strategic Learning lies the level of *Alchemic Learning*. At this level, the learner is consciously endeavouring to access their personal unconscious level of consciousness. Awareness of the underlying processes transcends the principles which were the guiding light at the level of Strategic Learning (Fisher & Torbert, 1995). There is interplay of awareness, thought, action and outside world in the Eternal Now. Less than 1% of the senior executive population had accessed this level of development according to Fisher and Torbert (1995), who labelled it the level of the magician. At this level, the learner catalyses commitment to and vigorous pursuit of a clear and compelling vision, stimulating higher performance standards among associates (Collins, 2001).

The Alchemic Learner seems to be capable of "creating gold from base metal", particularly among their associates. However, as suggested by Collins, this is done by operating as a catalyst rather than as an interventionist. This is the true realm of wisdom, as the learner habitually accesses the personal unconscious – Wilber's (1998) spirit level of consciousness. Jan Carlzon (1989) is a well-known example of a leader who seems to have developed to this level. His emphasis on "moments of truth" at all levels in the organisation demonstrated how he operated as a catalyst.

Finally at the level of *Mystic Learning*, the learner consciously seeks connection with the collective unconscious. This is consistent with Collins' (2001) description of Level 5 Leadership – one who builds enduring greatness through a paradoxical blend of personal humility and professional will. Fisher and Torbert (1995) called this the ironist level, which emphasises the paradoxical nature of the person at this level. They have learned the irony of life – that nothing really matters and yet everything does. This is the home of sustainability for Allee (1997) – her archetype of Union, where the learner understands values in a greater context.

FACILITATING THE DEVELOPMENT OF LEADERS AND MANAGERS

It is one thing to identify levels of learning, quite another to facilitate the progression of one's own learning, or that of another, to the next and subsequent levels. Rock and Schwartz's (2006) findings regarding the resilience of neural circuits underlines the difficulty of such movements. This is consistent with Kegan's (1980) suggestion that the pressures of developmental change can be distressing. In some cases they may prove to be debilitating and lead to regression rather than development.

One important consideration in such schemes is the warning provided by Wilber (2001) that the culture in which we live will apply socialising pressure to conform to the expectations of that culture. In the case of contemporary Western culture, which is rapidly being adopted across the planet, this means that there is pressure to reach the level of Expertise Learning, but once that level has been achieved there are societal disincentives to move beyond. This is reflected in Fisher and Torbert's (1995) research findings that the modal level of senior executives in USA and UK organisations was at the Expertise level.

Thus, it is not difficult to specify socially acceptable ways to facilitate impulsive learning, opportunistic

learning, relationship learning and expertise learning. Behavioural learning models and processes are quite consistent with the first two of these, and have been used frequently in the process of socialising in educational and organisational settings. Although too often used beyond this level, behavioural processes are less appropriate for relationship learning and expertise learning.

Relationship learning is more appropriately facilitated by processes which incorporate caring and nurturing. This is consistent with the approach often used in lower primary schools but less so in upper primary. In an organisational context, it is the focus of many communication and team-building exercises.

Expertise learning has a long history of being based on the master-apprentice relationship, with the master providing a model for the learner to follow and gradually demonstrate their own expertise. This is consistent with ensuring that a particular body of knowledge and associated skills is transmitted without inappropriate distortion. However, it has permeated educational institutions (universities) that should be focused on the development of learners beyond the level of expertise.

A more appropriate process for the development of learners to the level of Achievement Learning is that of coaching. The coach provides the underlying logic of the field of endeavour, but the ultimate responsibility for exploration of that field and the creation of personal insights sits with the learner. So-called problem-based learning is one valuable tool in this endeavour, as are a range of group learning activities.

Fisher and Torbert (1995) suggested that the process of developmental action inquiry is one tool that can be useful generally in facilitating development as learners. However, their focus was quite clearly on moving Achievement Learners up to the level of Strategic Learners. What is important is the opportunity for learners to reflect on and validate or review their values. Barrett's (1998) approach to values recognition may be a useful tool as well. The role of catalyst can be played by a facilitator, but there is no place for a traditional teacher or trainer in bringing about this transformation.

The movement from Strategic Learner to Alchemic Learner is even more difficult. The further away from group and societal norms the learner moves, the more pressure there is not to progress. The educator's role here can be nothing but mentor – one to whom the learner turns in search of a sounding board off which to bounce their own thinking. The process of Community Building promoted by Peck (1987) can be an effective means of facilitating this movement.

Finally, the movement from Alchemic Learner to Mystic Learner is one that is somewhat shrouded in mystery. The only certainty is that the movement requires significant meditational practice, and the role of educator can only be that of servant or companion.

SUMMARY AND CONCLUSION

There can be little argument that contemporary society and hence contemporary organisations are facing unprecedented challenges. In the case of organisations, the precepts laid down by Nineteenth Century writers are proving to be no longer effective. One of the important responses to this problem has been the proposition that organisations need to transform into learning organisations (Senge, 1990).

However, the success rate for organisations making such a transformation is quite low. While the reasons for this are undoubtedly numerous, one important factor is the comprehension of the meaning of learning.

In this paper, the concept of learning has been explored, together with the related concept of cognitive development. The outcome of this exploration has been the proposal of a model of learning and development that recognises a number of developmental stages for learners. Each stage poses different challenges for the learner, and facilitates a deeper accession of the levels of consciousness identified by Wilber (1998; 2001) and others.

It is argued that the creation of learning organisations requires the aspiration of learners to become, at least, Strategic Learners. Similarly, it is suggested that educational institutions, particularly universities, need to refocus their efforts on providing appropriate levels of learning for their students, beyond that of Expertise Learning.

Some suggestions have been provided for appropriate interventions to bring about the desired developmental transformations. However, much work remains to be done in this respect. The recognition of stages of development for learners is necessary but not sufficient for the creation of learning organisations.

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