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Developing Self-Directed Learning

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ABSTRACT

None.

INTRODUCTION

There is a growing emphasis on life-long learning at national, institutional and company levels in Singapore. Prime Minister of Singapore, Mr. Goh Chok Tong, said recently in one of many speeches on the topic: " Therefore, everyone must have a mindset of lifelong learning, not just willingness, but eagerness to constantly learn new things and upgrade oneself." (Prime Ministerial Speech, May, 1999). The Singapore Committee on Competitiveness established by the Singapore Ministry of Trade and Industry in 1999, recognised the importance of life long learning in a knowledge based economy. Comprising senior representatives of industry along with senior civil servants, the programs they have initiated include " measures [that] would also help inculcate lifelong learning as a shared responsibility of the government employers, unions and workers." (Public Report EDB Singapore, 1999). This program assumes that individuals will buy into their own life-long learning program. Defining the factors for success of self-direction in learning will help companies and training managers to support this important form of learning and development. This paper identifies the impact and value that self-directed learning can have as a form of learning strategy. By reviewing the current experience of self-directed learning, this paper will show that self-directed learning is an important avenue for staff training and development as well as organisational learning. We will scope the organisational frameworks needed to support this form of learning to work effectively.

LEARNING ORGANISATIONS - CONTEXT FOR INDIVIDUAL LEARNING

Increasingly, companies are moving to become ' learning organisations' after Peter Senge' s seminal work on learning organisations (Senge, 1990; Ryan, 1995; Rubenson & Schultze, 1995). Consequently, they are moving to develop a framework for learning at work (Pedler et al., 1991, 1997). Harrison & Leitch (2000) note the importance of increasing awareness of knowledge and learning as an intellectual response of business to its rapidly changing environment. The motive for companies to pursue this seems to be both externally as well internally driven.

Nonaka & Takeuchi (1996) found that few companies in their survey of the West know how to manage or exploit knowledge hidden in their workforce. A company that favors the importance of learning and knowledge is more adaptive to its market and environment. Dovey (1997) noted that creating a learning organisation was a process not a goal with a predefined end-point. Companies he surveyed, found success to depend on individual self actualisation (internal individual change) rather than external prescription. He found that companies successful in creating learning organisations had developed an organisational culture that encouraged collaborative as well as individual learning. Easterby-Smith (1997) and Wenger (1998) both support the roles of national culture, organisational culture and work context as mediating variables of learning by a company and it' s employees. Sadler-Smith et al. (2000) also noted that self-directed learning projects are

not as well recognised by managers as a valid learning mode, in their sample. This is not surprising, if age of the managers is considered, older employees preferring social interaction as a primary as a means of work validation and style. They are more likely to look for socially recognised forms of learning rather than initiative based, self-directed learning. One may also argue that this situation is reinforced by national cultural values here in Singapore. Importance of hierarchy, power distance and collectivism are recognised features of the national Singapore culture (Trompenaars, 1993). These may impact negatively on the willingness of individuals to initiate their own work-related learning. To build a strong self-directed learning context in their company, local managers and senior managers will need to build a strong and consistent organisational culture that promotes life-long and self-directed learning (Pedler et al., 1997; Wegner, 1998).

Elliott (2000) found in a recent study of the British Police Force, that although the organisational context called for self-directed learning projects, officers would not start them due to their belief that the Chain of Command must approve their actions before they could do so. This contrasts with industrial and commercial settings where the pressure to continuously learn is a positively reinforced organisational demand (Willis, 2000).

Work norms and work context appear to mediate self-directed and perhaps all forms of learning at work, according to Popper & Lipshitz (2000). A learning organisation, with a strong culture that seriously values learning across all levels is needed to support the generation of individual learning and transfer of this to organisational learning. In such a context, self-directed learning becomes another important and valid pathway to individual learning and organisational learning (Popper & Lipshitz, 2000).

Creating a positive learning culture calls for the company to define a framework for learning by all levels in the company (Pedler et al., 1997) as well to define systems and processes for transfer of individual learning to organisational learning (Nonaka & Takeuchi, 1996). Before detailing these frameworks let's consider the individual perspective for self-directed learning to gain a better insight into the processes at work here.

INDIVIDUAL LEARNING: THE PROCESS OF SELF-DIRECTED LEARNING

Eliasson (1996) notes that by the late 80's to early 90's, detached, analytical thinking is out, according to his literature survey of management thought. This mode of thinking being replaced by experimental rather than planned behavior of managers and workers alike as they move towards a more adaptive individual learning style. The rate of change in the business environment is one explanation Eliasson proposes for this shift.

Self-directed learning is defined by Clardy (2000) as learning initiated and controlled by the adult. Senge (1992) defines individual learning as change of skills, knowledge and values acquired through self-study, insight and observation. Tough (1971, 1978) found that adults performed approximately eight self-directed learning projects per year on average. More recently, Cross (1981) found that most (9/10) working adults have at least four learning projects per year with professional having more than their skills based colleagues. Cross noted that adults use self-directed learning for job-related or vocational learning.

Explanations of self-directed learning at the level of the individual, have tended to show mixed results.

Tough (1971) noted that motive, curiosity and prior learning experiences were predictive variables. Sadler-Smith et al. (2000) latest research, support Tough's earlier findings that motivation is an important mediating variable, along with gender. Men and women were found in this and earlier studies (Curry, 1983) to have differing cognitive styles: females more intuitive, males more cognitive, this influencing their learning styles and their choice and participation in self-directed learning projects.

Steiner (1998) notes that individual learning needs to be integrated with team and organisational learning, if it is not to become a barrier to learning by the organisation through inequity of power

sharing. Poell (2000) suggests that work-based projects can be organised flexibly: self-directed, but remain contextually bound and specific work-goal purposeful. He notes that " Employees are thus regarded as self-directed learners in the context of a group project." (p 179). Not surprisingly, individual learning mediates organisational learning (Popper & Lipshitz, 2000).

Clardy (2000) notes that an individual's prior learning history is a good indicator of propensity to engage in self-directed learning. When this is matched to a supportive environment including opportunity, resources and commitment, it can create self-directed learning behavior in individuals and this can lead to organisational learning.

Self-directed learning calls for the learner to take increasing responsibility for their learning. It requires that the learner is able to travel some important tracks to achieve their learning (Poell et al., 1997). They must be able to identify their own learning needs. If externally identified they need to understand how their learning fits back into their context and work environment (Popper & Lipshitz, 2000). So they have to be aware of their role and performance in relation to say, a company's mission, strategies and performance objectives. They have to see how they and their learning will bring better business and performance results (Popper & Lipshitz, 2000). These characteristics parallel the characteristics of adult learners as elaborated recently by Caudron (2000). She reviewed the literature about adult-learning theory and coupled this with an informal inquiry into how trainers train, finding deficiencies in many traditional forms of training. Caudron found these deficiencies are explained by a lack of grounding in adult learning theory by trainers. This may also explain the lack of focus on learning (a need) by the recent ASTD 2000 report into training expenditure and resourcing and their persistent focus on training as the solution to learning needs. Caudron identified five important aspects of adult-learning theory:

- Adults learn best by experience – doing it, rather than just seeing it
- Adults learn by reflecting and evaluating on their experience and modifying their future performance accordingly, integrating their learning with their prior experiences
- Having a Mentor to guide learning is important (Possibly due to the Hawthorne Effect)
- Involving small group participation and support builds learning experience
- Reinforcement by connection with their context is needed to secure learning – setting clear objectives for the learning and giving real-time opportunities to put the learning into practice is essential for successful learning application and consolidation. She notes that practice refines performance but reinforcement anchors learning to context and increases transfer of learning.

Having a supportive and action learning environment are significant contextual factors to successful learning strategies (Caudron, 2000). The self-directed learner can be enabled or disabled by these factors (Popper & Lipshitz, 2000). Let's discuss the precepts to implementing organisational learning: the paradigms that frame our perspectives about learning at work.

WORKPLACE LEARNING - DOMINANT PARADIGMS

By reviewing the dominant paradigms existing in the workplace about learning, we can see what changes are needed to help improve learning and performance of our companies.

The link between learning and company performance has been well established (see Popper & Lipshitz, 2000 for an excellent review of the relationships between learning processes, learning structures, work processes and work structures to see how learning can be positioned to improve work performance).

The ' knowledge based economy' is a language that conceptualises workers as knowledge based. In Singapore, the knowledge-based economy is the major lever to explain changes needed in management culture at work (see for example, the Singapore Productivity & Standards Board Website at <http://www.psb.gov.sg/aboutus/thrusts/thrusts.html>). Knowledge workers, according

to Peter Drucker (1999) are simply people who use their resident knowledge as the means of meeting the needs of their company. They are viewed as a resource available to the company to be tacitly mined. Workers are like data or memory chips that are simply plugged in to support the core business of the company. This model of workers tends to view workers (including management) as a passive storage of KSA's or experience that the company can directly access, as it requires. This American construct of knowledge workers is very different to the Japanese model developed so thoroughly by Nonaka & Takeuchi (1995). Our Japanese writers identify that knowledge creation is the main need of a company and this is done by the knowledge creating crew. This crew comprises three roles:

- Knowledge practitioners – who accumulate, generate, and update both tacit and explicit knowledge. There are two types of knowledge practitioners: knowledge operators (daily tacit knowledge developers, using both heads and hands) and knowledge specialists (mobilise and develop well-structured explicit knowledge like scientific, technical or other quantifiable data and methods, primarily use their heads and computers). Knowledge practitioners define 'what is' for and in the company.
- Knowledge engineers – convert new ideas and knowledge to reality, bridge top management vision with bottom level market knowledge to create new products and processes for the company. They are best at converting tacit images and perspectives into explicit concepts; they synthesise knowledge. Knowledge engineers define how to make 'what ought to be' into 'what is'. These are usually middle managers.
- Knowledge officers – top or senior management who produce and control the knowledge creating processes in the company. Knowledge Officers define 'what ought to be'. They define the value of knowledge created and developed by the knowledge creating crew.

In this 'new' paradigm it becomes clear that business processes are the key, as they help (or hinder) knowledge creation. In this model, workers are not data stores but information developers. Workers and management engage in specific interlocking processes that give rise to knowledge wealth creation for the company. It is these processes that create wealth for the company and constitute the heart and mind of the company, ensuring it's long term survival. Today, more than ever, the creation and development of intellectual capital is recognised as the most important paradigm needed by companies to survive and compete globally (Byrne, 2000).

Organisational learning is differentiated from individual learning by many researchers and viewed as interdependent by others (Popper & Lipshitz, 2000). Steiner (1998) notes that individual learning should be ideally integrated with team and organisation learning or change, if they are not become barriers to learning. For our purposes here we can differentiate individual and organisational learning by intent. Learning intended to lead to change in work performance or work context may be defined as a base ingredient for organisational learning (Hedberg, 1981). Learning not intended for specific integration within the current work context – could be career development based learning to facilitate job change for example, is not considered as an ingredient in organisational learning. Although such learning may practically lead to organisational change when the person leaves!

Traditionally, training has been something that someone else did to you (Caudron, 2000). Usually either because you asked for it or because someone else asked for you to have it. This is the reactive non-participative paradigm of training and development. This was how we learnt at work. Even on the job learning was called on the job training, and in certain cases was fully structured by the company or some other 'competent' authority. Today, we have knowledge creating companies as discussed above. Today, in the USA, they too have begun to identify learning organisations. Senge (1990) and other writers now draw on concepts developed by Japanese industry. These concepts have, as one of their common features, a focus on business process development.

In the case of the learning organisation and the knowledge creating company, such companies are

concerned with developing learning systems and processes at the macro level. In the Japanese Literature, writers like Masaaki Imai (developer of Kiazen Management principles – originator of TQM), and Kiyoshi Suzaki writing about management development at shop floor level in Japanese manufacturing industry reflect the significantly deeper focus of Japanese management theory and practice on process management. From the shop floor to top management, the Japanese have learnt and defined more about learning in their companies than their American (and Singaporean) counterparts (Mayuma, 1984). One can trace this back to the different cultural and epistemological focus of the Japanese on context, relationships and holistic viewpoints. Unlike the Americans who prefer to analyse rather than integrate people and learning. Perhaps some of the accepted cultural differences here such as contextual priority and relationship focus (Trompenaars, 1993) mediate these differences. The Americans only recently began to consider the human cost/benefit as an integral element of the business success equation and sought to maximise it by learning about it in lasting ways. An individualist culture doesn't promote or reward knowledge exchange; hence it does not learn very well over time. Rather it tends to repeat the learning process as each new individual goes through their company. Hirschhorn (1995) identifies that new learning opportunities arise as technology and social structures in response to that technology change. He identifies that learning organisations are ones that are responding to the pressures of change in these dimensions. Rylatt (1994) defines 'double-loop' learning as a desirable learning strategy for permanent change in organisations: change in the underlying business systems. In their recent review of organisational learning, Popper and Lipshitz (2000) define several factors that appear to mediate success in this area. They are continuous learning culture, a high level of external environmental uncertainty, costly potential errors, a high level of intra-firm professionalism, and strong leadership commitment to learning.

To summarise these conceptual frameworks, we learn that modern companies seek to create and support development of intellectual capital. This responsibility calls for companies to alter their views of workers as tools or even assets. They are now better viewed as dynamic learning units that must be motivated to learn (Tough, 1971, 1979; Cross, 2000), and their leanings integrated into their team, company and society (Popper & Lipshitz, 2000). Models like the Japanese model, work for the Japanese but seem more difficult if not impossible to translate directly into Singapore workforce and management systems. There appears to be little motive to do so, and insufficient support to translate the 'knowledge based economy' concept into newly specified roles at workplace level. This scenario poses strong challenges to human resources and others trying to develop life-long learning into organisationally useful modes. Self-directed learning is just one of those modes that suffers accordingly. Given these cultural constraints, any framework for self-directed learning needs to have superior framework supports built by the company. These can start with basic programs like mentoring, access to coaching, establishing a register of self-directed learning projects and creating avenues to get 'soft-support' such as access to special knowledge, specialist staff and time-off to pursue the projects. In my experience, companies here are still stuck in the 'QC' model, where all learning that takes place is organisationally directed and team delivered. Attitudes to organisational learning will need to be changed, beginning with human resources and training and development staff. Even elsewhere, there is a problem of these participants and framework developers having such narrowly defined perceptions of learning at organisational, team and individual levels that they are severely hampering the growth and development of the learning in their company (Caudron, 2000; 2000 ASTD International Comparisons Report).

SINGAPORE SITUATION - APPLYING THEORY TO CONTEXT

In this macro-social context companies in Singapore and the region are seeking ways to innovative their learning needs to build upon the best that the east and west have to offer. Increasing local emphasis is being placed on a knowledge-based economy as the dominant paradigm today. The implications for learning strategies are to encourage workers and management to learn more about learning. In other words, to learn more about their roles as knowledge workers. Support for the

learning organisation as an emerging paradigm and embracing self-directed learning comes from newer American writers such as Blanchard and Thacker (1999). Writers, Davis and Davis (1998) state: " Perhaps the most important goal to accomplish in the re-framing of training is to shift the emphasis from training to learning." p.52/53. This statement coming from their book titled: " Effective training strategies: a comprehensive guide to maximising learning in organisations" . Robotham (1995) notes that learned helplessness can result from trainer lead training, this phenomena explaining at least some of the lack of transfer of training to the workplace. Baldwin & Ford (1988) note that transfer of learning is inhibited by poor work environment-learning fit, mismatch between learning styles and learning situation and personality of the trainee and trainer. Many of these problems can be minimised or even eliminated by a proper self-directed learning paradigm operating in a fully resourced environment such as Motorola, Safeway and other major companies have sought to create (Davis & Davis, 1999). It can be argued that allowing the individual to mediate in his own learning enables him to impose or select learning opportunities that best reflect his own preferences (Caudron, 2000).

A learning organisation is one where everyone knows their learning needs (or at least how to access them and does so) and is facilitated by various processes and menus for prioritising and meeting their needs. Everyone is at some stage or other of meeting their learning needs i.e. everyone is somewhere along various learning curves and has structured learning activities or programs that they are working on, maybe solo or in groups or teams, in a self planned but fully supported way. They may be working with clients, suppliers or vendors in a structured or contracted learning situation that may be visible to the other parties involved or hidden from them according to the needs and circumstances involved (Popper & Lipshitz, 2000).

This example represents an entirely fluid, continually adjusting learning organisation akin to that described by Popper and Lipshitz (2000). Allowing for corporate cultural constraints (this example is unlikely to apply in non-industrial highly regimented organisations like the military or police), the example draws resources and opportunities for the knowledge creating crew members to develop in their roles and even beyond them for achievement and innovation purposes.

LEARNING ORGANISATIONS TODAY - AN EMERGING PARADIGM

A learning organisation is one that comprises employees who understand their knowledge management role, are familiar with the roles and language of business processes. The members know how to structure the best learning opportunity for themselves and maximise their contribution to organisational learning and effectiveness (Nonaka and Takeuchi, 1995). Everyone becomes his or her own learning manager. In an ideal situation employees, managers, everyone could access any range of relationships and situations that will help them and their company to learn. They are motivated by their need to contribute to the profitability and effectiveness of their organisation. Action coaching, strategic mentoring, and other developmental alliances are just some of the modern self-directed learning facilitation methods available. These methods appear to be increasing in their application by modern companies in Singapore. Dovey (1997) noted that creating a learning organisation is a learning process in itself and not an end-point. Success relies on self-development and self actualisation of the members of the organisation (rather than external prescription). Singaporean managed companies may take longer to adjust to this new mind-set given their preference for bureaucracy and control rather than empowerment as a mental-model. Pedler et al. (1991, 1997) identify two important elements of a learning company framework impacting self-directed learning: Learning Climate - where managers see their primary task as facilitating members experimentation and learning from experience, their strong acceptance of differences as essential for learning. Self-development opportunities for all members of the company. Self responsibility for learning is facilitated by making available self-directed learning materials as well as traditional courses and support for external course also. Along with these will come non-traditional opportunities including development groups, one to one coaching and mentoring, peer level one to one counseling and even 360 degree feedback. Singapore managed companies are just beginning to address these matters. Other avenues such as on line learning and

computer based training will have their applications too. On-line learning in the USA offers short courses in customer service as well supervisory skills and generic work skills such as time management. This is in addition to the Universities who are increasingly putting their programs on-line, supported with virtual classroom teaching. Computer-based training is already in use by many companies, especially for skills training. Companies like BHP use it to provide many of their short technical courses to staff in remote locations, indeed anywhere they have an office or site. Flexibility and a higher degree of self-directedness result, suggesting that motivation will be stronger to learn (Clardy, 2000; Tough, 1971, 1978). If you are planning to improve your technology it is worthwhile to keep in mind that technology is meant to be enabling of your people rather than a magic bullet that will solve all of your problems (Malhotra, 1998).

The seeming freedom offered by this new paradigm, is a false impression. Roles created as members of knowledge creating crews, line reporting structures and staff support functions like HRD all have important roles to play. These include setting clear guidelines and ensuring efficiency as well as creativity in managing the learning environment.

Indeed, as Motorola prove, simply asking for it cannot create innovation – management commitment and leadership are essential to its success (Nonaka and Takeuchi, 1995). Rubenson and Schutze (1995) in a major review of training and development from an economic value-added perspective note that “ In order to make such integrated learning possible and meaningful, work has to be organised in a way conducive to learning. Thus, the workplace has to be seen and organised as a learning environment informal learning (everyday learning) is the most important setting for continuous learning” . p.115.

Integrated learning is learning that takes place at every level of the company and within all work groups, and teams. In this paradigm all interactions in the company are learning opportunities, even if they are simply to practice a pre-existing skill, such as doing the monthly sales reports – all such work is open to continuous improvement. There are two basic improvement platforms: the things that are done (goals-objectives-tasks) and the ways in which those things are done (structures-methods).

We can always improve and seek to do better things and do things better. Both can lead to continuous improvement, however the first is more transformational in effect and therefore more likely to lead to better outcomes for the company. Both are needed on a continuing basis, however, to protect against just making changes for their own sake, driving improvements rather than just changes only.

Opening learning facilitation processes up to learner initiated learning is needed to facilitate formal and social integration of individual learners into the “ mainstream” of the company.

BARRIERS TO SELF-DIRECTED LEARNING

There are some barriers to successful achievement of this model in a company. These barriers include individual and company characteristics and competencies. For example many learners or their companies may do any or all of the following:

- Choose not to learn
- May choose the wrong learning needs
- Place inappropriate priorities for learning
- Choose the incorrect method to optimise learning
- Fail to effectively learn
- Fail to evaluate the learning effectively leading to repeat mistakes of learning
- Stop learning for some reason

These are not reasons not to do self-directed learning since they apply equally to any form of

learning self-directed or not, they are simply issues to be planned for as much as possible.

Like any corporate strategy self-directed learning requires leadership, planning, resource allocation including time, expertise and support to ensure its effectiveness. It also needs to be measured in terms of deliverables for the company as well as in terms of balance sheet (Kaplan and Norton, 1996) comparing inputs, processes and outputs. Roles such as those of the knowledge worker, learning facilitator methodologies (coaching counseling and mentoring), line management and supervisory learning support roles all need to be defined, communicated and competency given to make the system work. Support systems like contract learning and necessary documentation for various learning activities to ensure they are approved, supported and evaluated properly are also needed to make this program work. Perhaps one of the starting blocks is to change the mindset of HR Practitioners. In a recent study of these professionals in the UK, Sadler-Smith (2000) found that they preferred traditional forms of classroom learning as their strategy for professional development. They are likely to translate this perception into their work context such that classroom instruction is seen as the preferred or ' valid' form of learning context. To the extent that this mind-set applies in Singapore, we need to improve the learning of adult learning theory by this professional group. Perhaps it could be done by infusion of suitable workshops and learning conferences with the Singapore Training and Development association (STADA). Treating the ASTD 2000 survey mind-set does seem a worthwhile professional development issue that mediates acceptance of self-directed learning in Singapore workplaces (per Caudron 2000).

What do we have to do to prepare the learner to play their part well in self-directed learning?

ADAPTING THE LEARNING TO THE LEARNER

Davis and Davis (1999) find that there is a set of rules that identify how to adapt learning to the learner. These rules include:

1. Adapt the selected training strategy to the life-cycle developmental needs and interests of the learners.

The Foreign Service of the USA for example trains whole families for overseas assignments and puts each age group through different learning activities so as to address both the learning styles and the learning needs of each learner. In a self-directed learning environment this aspect may be addressed by the approving authorities. Support staff including the learners' immediate supervisor and knowledge officers who must promote creative learning passages as valid learning pathways for everyone can also assist.

2. Adapt the training strategy to the level of complexity in thinking demonstrated by the learner.

This aspect considers the cognitive ability and functioning of the learner. Clearly, learning must be stimulating and interesting for the learner to motivate them to want to learn. It must be compelling and mentally digestible so that they can learn too, progress but not exceed their limits. In a self-directed learning environment the approval authorities can control this, especially the knowledge engineers that are responsible for converting new individual learnings into organisational learnings and, eventually, profit.

3. Adapt the learning to the range of intelligence, aptitudes and previous achievements of the learners.

Like the previous rule this one focuses upon the learner' s characteristics and aptitudes and it makes almost common sense to ensure that any learning activity involves challenge, likelihood of success and fail-safe modes within it. Self-directed learning is certainly no different. There are six different forms of intelligence (according to Gardner cited in Davis and Davis, 1999). These can be developed and utilised during self-directed learning: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and personal (interpersonal). Planning learning should seek to use more than one mode at a time to encourage diversity of development and contribution.

Adapting to the behavioral and cognitive styles and developing these is an important factor in all

learning including self-directed learning.

4. Take into account the motivation and emotional control of the learner.

Motivation is dependent upon locus of control (Bandura, 1977). Self-directed learning offers the best form of control: internal control and (importantly) provided that the external environment is supportive, then self-directed learning that is well supported has the greatest likelihood of successful learning. Better quality outcomes for the individual and the company are then equally possible. None-the-less, some learners will not be motivated to do self-directed learning. Noe (1986) has also emphasised the role of learner motivation and situational factors to the effectiveness of training.

Robotham (1999) notes four reasons learners may try to avoid self-directed learning:

1. Lack of belief in their own ability
2. Failure by them to recognise that self-direction is needed or preferable
3. Setting of an inappropriate learning goal that fails to act as a positive motivator
4. Prior learning and educational experiences
To this I would add:
5. Self-directed learning is not effectively supported in the organisation
6. The person is unable to complete the learning due to other work commitments

Controlling these factors partly resides with the learner who must be able to articulate his needs and wants for the learning in relation to his over all job situation. The company must ensure an effective balance between learning and doing (job performance and job learning). Readiness for self-directed learning can be assessed as a first step, using the Self-Directed Learning Readiness Scale developed by Guglielmino (1992). This can be an important first step in planning the learner' s transition towards full self-directed learning. Each learner can be moved along this dimension as fast as they can cope with it, and as they are ready for increasing responsibility for their own development.

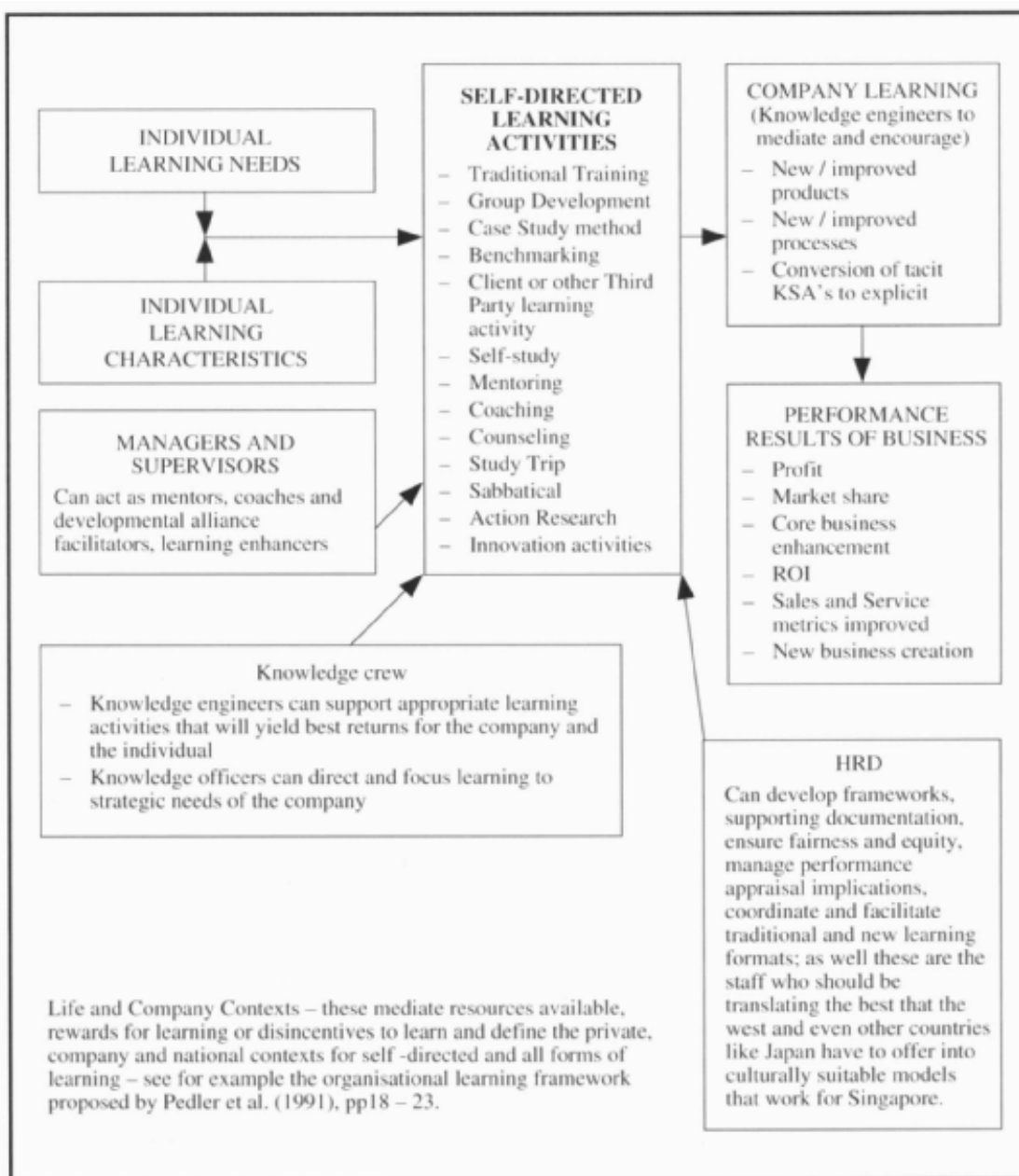
Learners are known to have different learning styles. Kolb (1984) identifies four basic learning styles: convergent, divergent, assimilation and accommodative. These styles can also be used to match learning activities to, with resulting design implications for self-directed learners.

In conclusion regarding the learner, self-directed learning requires the learner to learn about themselves, their KSA' s, their personality and learning preferences and other factors that will intervene or contribute to their learning and ultimately improvement of their employers' performance. The learner also needs certain interpersonal skills, for example, to be assertive enough to state their needs and form learning relationships with others. These skills will need to be learnt – and will also require suitable organisational support for their successful development. Ryan (1995) observes that self financed learning lags behind employer training, likely to lead self-directed learners to traditional training rather than seeking wider learning activities (at their own expense in effort or other resources including finance) unless suggested to them by the learning process overseers. Self-directed learning can also be viewed as making the substantive decision about what and how to learn. Choosing traditional classroom learning by the learner themselves is also a form of self-learning.

A MODEL OF SELF-DIRECTED LEARNING

Let us try to picture a model of self-directed learning from various perspectives and try to see it as a practical reality for companies to consider.

Figure 1
SELF-DIRECTED LEARNING MODEL (©John Read, 2000)



This model also overlaps with the knowledge crew model. In the knowledge crew, each has a specific role relating to their treatment of knowledge for the company. Over the top of self-directed learning lies the program of building and developing these knowledge management roles for all employees and management. They will have to be well managed as they are related but separate programs, both impacting directly on work culture and profitability of the company. HRD can act as a coordinator and facilitator of such programs and improve the efficiency of delivery for all learning activities for their company. The need to support these programs effectively cannot be understated. Pepper (1992) shows the importance of management skills in supporting any training and development activities even those not directly delivered by them.

SUMMARY AND CONCLUSIONS

Self-directed learning is therefore partly an empowerment issue, an issue of choice by the learner. It is also about knowledge about, and means and awareness of alternatives. Such choices are definitely mediated by power and information in the learners context, as well as education and motivation of the learner to decide the best alternative (Harrison & Leitch, 2000). Facilitating learners is an individual issue, an organisation issue and a national issue. Each of these domains has their vested interests in supporting and perhaps directing learning. Such direction lies at the heart of the 'self' versus 'other-directed' learning debate. I hope here that it is clear that organisational interests can be best served by enabling and empowering the individual to have an increasing role in directing their own learning. Even to the extent of helping them to match their

needs, styles and preferences to the different types of learning possible, as research shows as important (Sadler-Smith et al., 2000). Promoting different types of learning is an essential part of organisational learning (Poell et al., 2000). Multiple ways of learning have been well researched and documented, see for example Poell et al. (2000). They identify learning modes such as 'learning islands' – physical places for work groups to engage in group learning, 'change laboratories' – where new work methods are developed and piloted, and the use of multi-media to facilitate self-directed learning as examples of modern methods of learning, drawing on new organisational management principles.

Finally, some brief words about the organisational climate needed to support self-directed learning. Focusing on innovation, accepting diversity as a valuable source of learning experience, management must be prepared to stand back and allow the individual the freedom to define and devise learning strategies, and to make mistakes. In Singapore SM Lee Kuan Yew has recently espoused the virtues of risk taking and experimentation. This must also be applied to allow self-directed learners to improve their own learning management. Organisations, teams and individuals stand to benefit from this kind of development.

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