Academic Knowledge Management

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Abstract
Many corporate firms, although operating within this age of information and the knowledge economy, still rely on the skill and expertise of individuals to the extent that the 'organisational memory' can be severely weakened when that individual's store of knowledge (skill, know-how, individual memory of corporate behaviour) ceases to function as an input. This highlights a parallel lack of system in organising collective and strategic knowledge - to collate and retain the most valuable and necessary units of knowledge. These circumstances will be compared to the general technikon situation, in which a related, academic, lack of knowledge management is all too evident. The DET emphasis on strategic planning for institutions of higher learning will position technikons as either vocational training colleges or as research oriented technical universities. The issue of 'research' thus becomes key to academic knowledge management as well as the means of institutional survival.

Information separates people, while knowledge can bring them to a mutual meeting place of reciprocal understanding. The lack of vision that the corporate world (Argyris 1996:83) and technikons suffer from is due not to the inability to apply knowledge but to the inability of distinguishing between information and knowledge. Information - data - is easy to obtain, while the acquisition of knowledge takes time, effort and insight. It also presupposes a willingness to allow for the existence of the 'other'. Lack of communication is thus too often due to reasons other than mere ignorance, although that plays an extremely significant role in the management style, especially, and surprisingly, in the 'world-out-there' of 'big business'. Ignorance of the processes of accessing knowledge is hidden under the cloak of accessing information. Information can simplistically be seen as the self, easily accessible and therefore wrongly thought to be as easily understood. Knowledge is 'the other' of information, the more problematical aspect that requires insight. Ease of access (information) is not the problem; knowing what to do with knowledge *is* a real problem, the more so because we have only data (information) that, even given the direction afforded by 'vision', still has to be *transformed* into what can properly be called knowledge. It is the process of transformation that produces knowledge from information, which helps find the vision that companies seek. The 'we' vision of the company necessitates the change from self to other. Sveiby (1999) speaks of 'the new world' that a manager has to deal with, and the difference between the 'classical' and the new management style.

> Classical management theory assumes that leaders make decisions and the led carry them out … that leaders are always better informed than the staff … because they control the flow of information. It assumes, in short, that the bosses are in charge.

> But suppose that classical theory is wrong. Suppose the staff know more than their bosses, have a better feel for the market and are closer to customers … suppose staff value the approbation of their professional peers more than the approval of their leaders. (Sveiby, 1999)

According to the new scenario, managers do not manage their staff nor do they manage knowledge (since that is manifestly impossible), but manage instead the "space in which knowledge is created" (Sveiby, 1999). Is this not why technikons, on the whole, lack a clear and unambiguous vision of their contemporary roles, because they do not know how to manage this particular and all-important 'space'? This lack of vision emerges above all in relation to the role of traditional universities and whether or not technikons should compete with the older institutions, and if so, on what level? What is the definitive character of this new institution called a 'new university of technology'? Moreover, it is felt that top management do not connect fully with their middle managers, much less the rest of the academic staff – and consequently there appears to be too much confusion and uncertainty as to 'the way forward.' At this point we may look to the corporate world, in which Argyris (1996:82) describes a scenario that he calls 'skilled incompetence' in the sense that it comes perilously close to a 'skilled and applied' incapacity to manage a postmodern knowledge-based organization. "By avoiding conflict with co-workers, some executives eventually wreak organizational havoc" (Argyris, 1996:82). Even admitting that management motives are 'decent,' that the executive group's reactions are those of skilled communicators does not invalidate Argyris' comment; he is at pains to point out that his 'incompetence' attribute is not personal but refers to the unintended consequences ('by-products') of old habits of management style used in these undoubtedly new circumstances. Meetings between executives and middle managers exhibit a pattern of failure due to an unwillingness of the executive to say what they really mean, an unwillingness to loosen control by admitting to less than watertight assumptions, while their skills at communicating the executive viewpoint inhibits the possible emergence of the very opinions and staff viewpoints they profess to seek – a built-in counter-productive strategy. Argyris' comments lead to this inescapable conclusion, that in too many organizations of all kinds we see that "people's tendency to avoid conflict, to duck the tough issues, becomes institutionalised and leads to a culture that can't tolerate straight talk" (Argyris, 1996:84).

Instead of really managing knowledge, managers tend to manage people and information, meanwhile indulging in Sending Mixed Signals as well as creating Organizational Defensive Routines – "any action or policy designed to avoid surprise, embarrassment, or threat. But they also prevent learning and thereby prevent organizations from investigating or eliminating the underlying problems" (Argyris, 1996:86). If management really values the opinions, suggestions, indeed the potential knowledge that staff may contribute, then existing 'knowledge patterns' of how to deal with the organization on a practical level must be put to the test of fallibility – the existing system must be open to question – via channels of communication that actively seek out new sources of organizational knowledge creation. What we do not need is the defensiveness of managerial mixed messages, or as Argyris (1996:85) puts it, *four easy steps to chaos:*

1) Design a clearly ambiguous message, such as ‘Go, but go just so far’ without specifying how far far is.
2) Ignore any inconsistencies in the message. To acknowledge these would be to defeat the purpose of maintaining control.
3) Make the ambiguity and the inconsistency in the message undiscussable. The whole point is to avoid dealing with the situation head on. The executive renders the message undiscussable by the very way of sending it. To challenge the innocence of the sender is to imply that the sender is duplicitous – not a likely thing for a subordinate to do.
4) Make the undiscussability also undiscussable. One of the best ways to do this is to send the mixed message in a setting that is not conducive to open inquiry.

The most debilitating effect of this type of management style is the lack of staff ‘buying into the programme,’ since the “only relevant learning in a company is the learning done by those people who have the power to act” (De Geus, 1996:94). Since so many members of Technikon staff feel disempowered by the rapidly changing circumstances that they find so difficult to assimilate into their daily teaching routines, it can be appreciated that what they actively need is a new style manager as leader, and “‘The first responsibility of a leader,’ writes retired Herman Miller CEO Max de Pree, ‘is to define reality’” (Senge, 1996:295). The reality of managing the micro systems that constitute everyday teaching is too often the very reality that many managers have no knowledge of, and appear to have no great interest in acquiring.

This state of affairs comes about when, instead of really managing knowledge, managers only ‘manage’ people and information. If these systems can be described as linear, isolated (inward looking?) and of a ‘steady state’ type, then these systems are being deprived of the vital ingredient necessary to a dynamic learning organization. As Dimitrov (2001) says, this vital ingredient is the potential for *emergence*, “the most powerful manifestation of the unique self-organizing ability of complex dynamic systems.” The academic world should be this type ‘changing state’ or dynamic system wherein academic knowledge management may be truly possible by managing the space within which knowledge is created. Unfortunately, the way that too many corporations and academic institutions ‘manage’ their businesses – and worse still, their proposed futures – is to ignore Polanyi’s (1962:120) four stages of discovery: 1) Preparation, 2) Incubation, 3) Illumination, 4) Verification. Far too often what really happens, and the way the command structure seems to work, is that some kind of decision is made without proper consultation with academic staff (for ‘consultation’ cannot be done afterwards, even when those dreaded words “Now, this is not cast in stone” are used). The first Preparation stage seems to happen without due academic input, and the management style is to force a decision past Polanyi’s second and third stages to an accelerated but emasculated Verification stage. In this sense the fourth stage becomes essentially meaningless and is rightly considered by academics to be quite dangerous, for no one is capable of verifying an unknown quantity, which the preparation work of others often is for academics. In a nutshell – the manager (who has not kept up with developments on the shop floor) is asking the worker to verify (with a view to implementation) a plan of action that the worker has not studied, and had not had the time to put to the test under

working conditions. “An effective learning cycle consists of plan, act, reflect, change, and plan again with the stage of reflection being critical to achieving learning [or change, or innovation]. But typically, production workers are limited to the ‘act’ part of this cycle …” (Ahanotu, 1998).

This is bad management. This is loss-making management, since “companies invest in a position where they lose, and do not improve competitive advantages, if they do not emphasize the entire knowledge base” (Johannessen, Olaison & Olsen, 2001), meaning that the focus is too easily on that part of the knowledge base that can be formalized, packaged and transferred as information, i.e. explicit (and mostly known) ‘knowledge’ to the detriment of the vast store of implicit or tacit knowledge of everyday (but not formalized) thought and action as embodied by the ‘workers.’ “As tacit knowledge is recognised as playing a key role in determining the extent to which companies are able to create and sustain competitive advantages, the consequences [of de-emphasizing tacit knowledge] may be devastating” (Johannessen, Olaison & Olsen, 2001). When both companies and academic institutions attempt to implement Knowledge Management Systems using old modernist ways of seeing the world, an imbalance between explicit and tacit knowledge is perpetuated. Takeuchi (1998) has this to say about ‘Western managers’ and the ‘knowledge management bandwagon’ – that although the newly admitted valuation of knowledge as something beneficial in itself is to be welcomed, it does not follow that the admission itself will suddenly make knowledge-managers of old-style control managers. Describing the new approach as a ‘blessing in disguise,’ Takeuchi emphasises that the Western focus has to shift from 1) explicit knowledge to tacit knowledge, from 2) evaluating and working with existing knowledge to creating new knowledge, and from 3) allowing only the elect to ‘manage knowledge systems’ to encouraging the active involvement of everyone concerned.

Why should both companies and academic institutions take any notice of this ‘new’ trend? Because both entities, in dealing with knowledge as its primary source and production / outcomes as an end-result for a market, need to encourage innovation above all else. Both entities realise by now that they cannot continue as before, and that a paradigm shift is called for to deal with the ‘new realities’ of the ‘newly discovered’ knowledge era. To simply carry on within the old paradigm along explicitly well-known and visibly well-trodden managerial lines, in search of improvement necessitated by new circumstances, is but a short-term option. The implication, as Ahanotu (1998) puts it, is that as far as this type of ‘improvement’ is concerned, any advance “is relegated to progress within the confines of the overall existing production paradigm. An innovation alters the paradigm itself and introduces completely new production possibilities … Continuous improvement tends to be more deterministic while innovation is more stochastic.” ‘Continuous improvement’ is relegated to logic and reason, to a linear process that does not (cannot) take cognisance of changing circumstances that might fall outside the parameters set for it in the first place. Rules are deterministic by their very nature, while the creative stochastic process (which includes the notion of chance and contingency, and therefore *emergence*) is closer to a biological entity that grows *because* of the immediate and changing environment, not despite it – and is not an entity that declines *because* of the changing circumstances. “Long-term sustainability comes from

deftly combining innovation and subsequent continuous improvement with timely repeats of this cycle, and finally translating these cycles into evolving core competencies" (Ahanotu 1998).

In this respect, and to develop these much needed core competencies (especially in research) every academic institution needs to be a prime model for a 'learning organisation', which is why Lundberg (1999) suggested that corporations look at universities as models, mainly because of their research modelling process leading to knowledge management and dissemination. I would suggest that Lundberg's ideas be taken seriously, because although technikons in general, as learning and research organisations, are as yet woefully (wilfully?) under-equipped to properly fulfil this role, the DET emphasis on strategic planning for institutions of higher learning will nevertheless position technikons as either vocational training colleges or as research oriented technical universities, depending on their purpose and their strengths. Who among us can deny that the real strength of a learning organisation such as 'technical universities' lie with 'research' methods? We are not contemplating levels of academia that are out of reach of the average student. On the contrary, what is at issue is the positive and encompassing role of 'grass-roots' and/or 'practice-based' research that can ultimately be linked to what amounts to the accessing of 'Indigenous Knowledge Systems'/Prior Learning via a social constructivist approach to knowledge construction or knowledge acquisition.

In this regard Lundberg (1999) emphasises that the concept of organisational memory, as a number of 'retention bins', is important. These 'bins' or "individuals, culture, transformations, structures, and ecology" form the basis of the tacit knowledge of any organisation – or a society. What Lundberg is describing is virtually the model of social construction – of meaning, of 'reality', of the 'stock of knowledge' that any organisation/social construct cannot do without. 'Knowledge' is embedded in not only what can be assessed formally and through a type of system, but "also in abstract entities such as culture … and transformations (the concept of standard operating procedures)," which I would translate as the 'operating procedures' of social knowledge-in-action. This can be further translated as either the use of 'indigenous knowledge' or as 'the use of 'prior learning', leading to the use of so-called 'grass-roots research, which is nothing other than the accessing of this vast stock of social and tacit knowledge.

> The interesting point, here, is the socialisation process, i.e. the transfer of tacit knowledge from one person to another. The idea … is that a 'field' for interchange of knowledge should be created … [within which] one should strive for creative chaos, redundancy of information and requisite variety. (Lundberg 1999)

Not only does this 'field' describe some of the concerns of the social constructivist approach to teaching, but it more than adequately describes the scholarship approach to research, which, according to Lundberg (1999), "can supply the frameworks and methods to be used in building an integrated approach to Knowledge Management." The only way to do this with any certainty of social success is through fostering "a tradition of publishing the results in order to make them available for inspection, criticism and

replication (or, verification)" (Lundberg 1999). The issue of 'research', 'grass-roots' research and constructivist teaching thus becomes key to academic knowledge management as well as the means of institutional survival. In terms of Lundberg's comparison of Knowledge Management to academic procedures, the following is deemed to be quite important.

a) On the personal or individual level the organisational worker may be compared to the academic that publishes research results as a way of disseminating knowledge.
b) At the group level we encounter the arts of rhetoric and discussion in the form of academic lectures and seminars, which translate into the corporate equivalent of exchanging knowledge and learning. The corporate world also takes notice of the invaluable notion of "not as much of teaching as of training, which requires more time and effort, and the recognition of the student … as a learning subject instead of a teaching object" (Lundberg 1999). The Socratic notion expressed here is fundamental to a social constructivist teaching approach as well as to the notion of a scholarship approach to research.
c) At a systems or corporate/administrative level the peer review system of academic research is invaluable for transparency and openness. This would literally allow for participation by more personnel and staff, if they were to be put in the position of being able to change anything on the ground, or to put it differently, staff only 'buy into the programme' and learn from the experience when they have 'the power to act" (De Geus, 1996:94), and when they are taken seriously, as in a peer review of their work.

Conclusion

It should be clear, then, that knowledge > research > knowledge is the only real 'growth industry' we have today, and that we all and ultimately deal in knowledge and methods of knowledge creation/acquisition. To provide the 'space' for knowledge emergence one needs to look seriously at 'grass-roots' research that involve students and teachers alike: *Ground Zero Research* that starts at year one. This will necessarily incorporate all the Indigenous Knowledge Systems that the students bring with them, and which may be more easily accessed via a Constructivist Scholarship approach to teaching > research. In its turn this approach creates the necessary space for innovation in both teaching and research, but it will be a open system that needs a new Knowledge Management approach in which business may learn from academics, and teachers may manage their own systems of emergent and generative knowledge unhindered.

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