

**Middlesex University Inaugural Professorial Lecture**

**Professor Clive Morton OBE, Ph.D., B.Sc., C.Eng, MICE, CIPD, F. Inst. Mgt, FRSA**

**Learning for the Knowledge-Driven Economy - 14 June 2000**

From *'who you know'* ... to *'what you know'* ... to *'where to go'*

The challenge of using emotional intelligence in the information age

We live in strange and interesting times. I was walking down Victoria Street, London just recently, hurrying between appointments, when I became aware of a one way conversation alongside of me. I turned expecting to see the usual, a detached member of the public speaking animatedly into a mobile phone. To my surprise it was an actual conversation in the open air between two individuals walking along together! What struck me immediately was my conditioning - that I should be surprised by a normal conversation between two people. I have no doubt that this conditioning was a function of being in a busy business street where speed of travel and stoic commuter like silence is de rigeur, however it just shows what we've got used to.

I left my full time role at Anglian Water in March this year and now have a portfolio existence. In some ways it doesn't feel any different. My schedule is just as crowded with meetings, travel, communications, teaching, learning, writing - however I am using the internet more - graduating to a life dominated by *'where to go'* without forgetting the functions of *'who you know'* and *'what you know'*.

Our education system was dominated by *'who you know'* prior to the establishment of right of universal access to learning. The public school system was and still is riddled with the ability of connections to gain access for children of the powerful to the best the system can offer.

Consistency started in 1902 with the Balfour Act which consolidated a national education system in England and Wales. The Butler Act in 1944 enforced participation in secondary education to the age of 14. The Robins Report in 1963 and subsequent reforms in the 1980's opened higher education beyond an elite. This was the progress of meritocracy in education, the enshrinement of *'what you know'*.

Today's children will rightly take that for granted as a stepping stone to *'where to go'*. The ability to access information instantly on any subject, via the net, without stirring from the PC screen.

The impact of this new method of learning, combined with other sources such as TV is showing itself in all sorts of societal ways. Clinicians concerned over the link between obesity and diabetes point out that the average TV viewing hours per week has risen from 11 in 1970 to 25 in 1999 - this doesn't take into account time spent in front of the PC or lap top!

There are beneficiaries from the lack of social interaction. Our nephew who suffers from Asperger's Syndrome and has extreme difficulty in face to face

communication, excels in computer based learning and is currently heading for an excellent honours degree in computer science - his development would have been strictly limited prior to e-learning.

### **What is the future world of work in the Knowledge-Driven Economy?**

The DTI Future Unit produced two scenarios in their report in 1999 on “Work in the Knowledge-Driven Economy”.

- **“Wired World** is comprised of a network of economic agents coming together, via secure and efficient Information and Communication Technologies (ICTs) on a project-by-project basis, held together by a web of contracts. Thus, self-employment and portfolio working are common and small, innovative and responsive businesses have become the dominant force in the economy over large, established companies;
- **Built to Last** starts from the basis that if knowledge is the principal source of competitive advantage then it will be in the interest of business to capture and internalise that knowledge. This can be done by offering comprehensive remuneration packages to retain the individuals in whom knowledge is vested. Consequently, we see an economic landscape dominated by stable and often large companies and extended families of companies. Self-employment and temporary contract work are therefore rare.

A successful Wired World is founded on:

- the development of trust-based communications networks underpinned by strong personal and business networks;
- the ability of individuals and small enterprises to build (or by-pass) brand identity on the Internet in order to compete with large companies;
- the creation of a culture and an economy in which individuals are willing and able to prosper outside the comfort zone of a stable company;
- the development of intermediaries able to provide the labour market and social ‘glue’ which would previously have been provided by large companies or Government;
- the development of demand-led systems of learning which support individuals and their need for a complex mix of adaptable skills and competencies;
- a secure system of intellectual property rights which incentivises individuals to develop ideas and products in a relatively open environment.

In contrast, Built to Last is a more familiar landscape of the late twentieth century - but bucks a recent trend toward growth in small businesses and more flexible forms of working. The foundations for Built to Last are:

- the use of comprehensive incentive packages designed to retain individuals within a company structure (for instance the development of education, share ownership, pension, healthcare and social benefits);
- the growing importance of brand in a truly global marketplace, with this brand forming a significant barrier to entry;

- a utilisation of networking technologies and a culture of networking within companies and between stable groups of strategic partners to achieve competitive advantage.

These two scenarios might also be characterised respectively as a ‘transaction’ and a ‘relationship’ economy.”

The learning routines in new technology are directly opposite to the necessary attributes required for today’s networked business - learning routines that appeal to the introverted mind when more and more the expanding network requires a high level of interpersonal skill and dependency on collaborative networks. However ‘transaction’ and ‘relationship’ economies need trust, ‘glue’ and networks. This is provided by ‘*Social Capital*’.

### **Why is Social Capital important?**

“Collaboration is the driving force behind creativity”.

*Charles Leadbeater in “Living on Thin Air”. (1)*

“Social Capital becomes more rather than less important as the complexity and technological intensity of an economy increases”.

*Francis Fukuyama in “The Great Disruption” (2)*

### **Education and Business**

Education and learning in the UK has reacted in response to social and economic changes over the years but often too late to give real economic advantage. The knowledge driven economy demands an almost instantaneous response and industry to date has not been very clear or consistent in what it needs.

Education and learning have not matured into being business led from the transition of being church led, to state led, to education for life.

Who is influencing education? The Church commenced the process and, although today not enormously influential in our schools, is resurrected as a key player whenever the issue of moral values rears its head. The State took over the debate of the separation of Church and State and teaching became a public service rather than service to God. Despite the transition, there is still the divide between those who see education as a repository and training ground for our moral and intellectual values and those who emphasise the practical reasons for education such as supplying a labour force prepared for enterprise and economic health. The former put social and academic ends before the goals of learning.

The American researchers Stan Davis and Jim Botkin in *The Monster under the Bed* (3) point out the transition for individuals in the USA in the past 30 years:

- The organisation man of the 1950s sacrificed flexibility for security.
- The individual entrepreneur of the 1980s was flexible but far from secure

- In the 1990s flexibility resides in both the individual (knowledge lies within) and in the organisation in terms of value added and cost.

Davis and Botkin define the role of business as an educator:

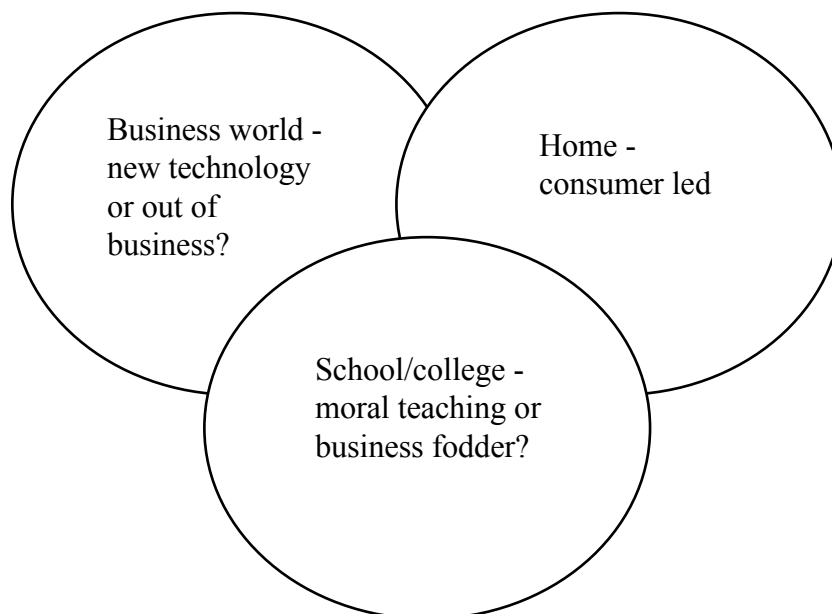
Business's primary purpose is to meet market needs with its production and distribution of goods and services. But as it increasingly produces and distributes knowledge in carrying out this function, it must also accept the social responsibility incumbent on an educator. Business should be acknowledged for its part in extending learning to life long learning.

I am not suggesting that it is the job of business to run education but there needs to be a more engaged partnership so that education is a true foundation for life-long learning. There are fundamental lessons of rejuvenation to be learnt that do not necessarily require injections of money. For instance, a declining education system can learn much from business that has had to come out of decline and reinvigorate and redefine itself while continuing to work smarter.

Business is increasingly displacing school as the locus of learning due to the tide of information technology. This is not just about computer literacy which is only the access point.

Without intending it or realising it, by using information technology, by humanising it and advancing it to knowledge-smart products, business is coming to displace school as the locus of learning.

Davis and Botkin's argument is that both the business world and the home are clear about the drivers - technology and consumer led respectively.



Davis and Botkin however do not hand the baton to business schools.

“Employee education is currently better served by business than by business schools. Business schools, like the education system in general, are locked in the old paradigm. When customer education, the next great learning segment, is added, we have to realise that business is already a very significant educator and is on its way to becoming the major force in education.”

The conflict is here - many educationalists doubt the interest and ability of industry to give relevant advice and input which can influence the curriculum or future careers.

The 1944 Education Act was designed for a workforce output of 80% manual and 20% white collar. The work offerings today are the reverse of these figures. *Now 70% of company assets are in the brains of employees, customers, suppliers and communities* (4). Are we being any clearer about education and future? The conventional wisdom in education is faith in the National Curriculum and output related measures.

Charles Leadbeater writing in *‘Living on Thin Air’* (5) says:-

“As educational institutions have extended their scope, central government has extended its power to set a core curriculum, accompanied by a panoply of targets, tests, restrictions and regulations.

This approach to modernisation also reinforces a deeply conservative approach to education, as a body of knowledge imparted by organisations with strong hierarchies and demarcated professional disciplines. As Tom Bentley points out in *Learning Beyond the Classroom*, two traditions are reflected in this culture: the monasteries, which were closed repositories for knowledge in the form of precious manuscripts, and Taylor’s factory, which encouraged standardised, easily replicated knowledge. The result is a prison. Educational institutions inherited from the industrial age provide a safe and supportive environment for children, but they also seek to control and contain children and standardise the knowledge they acquire. The reforms of the last two decades have intensified these tensions, rather than resolved them or created an education revival in the UK led by the creation of new kinds of learning institutions, tailored for their times.”

To the ‘prison’ image add ‘fortress’ as all schools battle to protect themselves against vandalism - perpetuated by the excluded in education.

The view of industry is that output from the education system is high on left hand brain qualification measures and low on creativity, interpersonal skills, team working and *emotional intelligence*. Studies on employability support the same conclusions. The study by the Centre for Research in Employment and Technology in Europe with the Professional Development Foundation in 1999 (ISBN 898879 230 and 257) (6) found that the attributes needed for employability are a blend of:-

- personal attributes that help to obtain a job in the first place
- soft skills that help to work with others in a changing environment
- practical skills that help to cope with change and
- capabilities that help to stay ahead of change

The researchers view is that the current education system helps little with most of these areas, focused as it is on vocational and academic qualifications and obsessed with internal measures of performance.

Educationalists recognise the gap of course. The stunning NACCCE report *'All our Futures'* on Creativity, Culture and Education jointly sponsored by David Blunkett and Chris Smith in 1999 (7) concluded that there was "a need for a much stronger emphasis on creative and cultural education and a new balance in teaching and in the curriculum. Over a number of years the balance of education has been lost. There is an urgent need to develop 'human resources' and in particular to promote creativity, adaptability and better powers of communication.

The report admitted that a rigid national curriculum and over emphasis on qualifications and targets drove out development of creativity.

"We are throwing out the baby with the bathwater in this country if, in an attempt to have a standardised and demanding curriculum, we leave no room for teachers to exercise a little judgement and imagination in an excursion of the academic piste. If they are so focused on a fixed curriculum, so rigid that there is no time, literally, for anything as important as the human mind, then we are in for a very sorry future society. It could also be argued that the teachers themselves would benefit from a broader view. Surely a teacher who has become excited, and learnt a new angle on a subject, will import renewed enthusiasm and vigour back to the class".

Professor Susan Greenfield, Member of NACCCE.

On the employability issue the report continues:-

"We live in a fast moving world. While employers continue to demand high academic standards, they also now want more. They want people who can adapt, see connections, innovate, communicate and work with others. This is true in many areas of work. The new knowledge-based economies in particular will increasingly depend on these abilities. Many businesses are paying for courses to promote creative abilities, to teach the skills and attitudes that are now essential for economic success but which our education system is not designed to promote."

Charles Leadbeater (*Living on Thin Air*) (8) recognises that things are changing but that the foundations for life-long learning are not being laid.

"A new educational system is slowly developing, in parallel and outside the traditional state and private school system. This evolving system operates with a different definition of learning, and education. It delivers education through quite different mechanisms and funds it from private and public sources. Elements of this system include: the Open University; public investments in the National Grid for Learning and the University for Industry; home schooling, which involves 50,000 children in the UK and many more in the US; a plethora of corporate universities and a burgeoning self-help market involving books, digital television channels and interactive learning programmes. These new educational institutions are demand-led, use information technology as much as libraries and classrooms, and tailor learning to

individual needs. They are frequently financed by shared investments between pupils, employers and the state.

How can the old and the new educational systems evolve together to mutual benefit? The starting point must be a redefinition of the purpose of education. *We must move away from a view of education as a rite of passage involving the acquisition of enough knowledge and qualifications to acquire an adult station in life. The point of education should not be to inculcate a body of knowledge, but to develop capabilities: the basic ones of literacy and numeracy as well as the capability to act responsibly towards others, to take initiative and to work creatively and collaboratively. The most important capability, and one which traditional education is worst at creating, is the ability and yearning to carry on learning.*" (My emphasis).

At last both industry and education are valuing diversity - not something to be coped with but because of its links with creativity. It is one of the features that attracted me to Middlesex University - here diversity is positively revelled in!

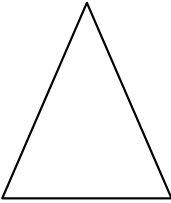
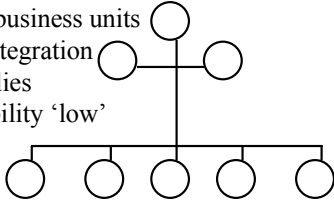
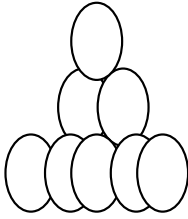
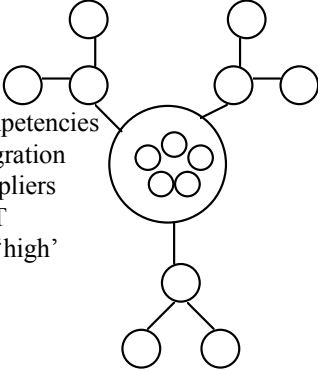
Professors Jonas Ridderstale and Kjell Nordstrom of Stockholm School of Economics (9) in their best seller '*Funky Business*' write:-

" $C = D^2$  where C stands for creativity and D for diversity. Lack of diversity often results in group think and intellectual constipation. We all know what the others think, so what's the use in talking to them. From the point of view of innovation, opposites attract. Novelty is the result of constructive misfits and tension."

### **Radical Change in Industry**

Whether we focus on the 'old economy' or the 'new dot com economy' industry has had to cope with radical change.

The modus operandi has moved from mass production, to decentralised production, to lean production now to agile production - and the networked organisation applies whether it is manufacturing, service or increasingly the public sector. (See the following diagram and table).

<p><b>1970's: Mass Production</b></p>  <ul style="list-style-type: none"> <li>•Vertical integration</li> <li>•Few suppliers</li> <li>•Command and control</li> <li>•Labour flexibility 'nil'</li> </ul>	<p><b>1980's: Decentralised Production</b></p> <ul style="list-style-type: none"> <li>•Independent business units</li> <li>•Vertical disintegration</li> <li>•Remote supplies</li> <li>•Labour flexibility 'low'</li> </ul> 
<p><b>1990's: Lean Production</b></p> <ul style="list-style-type: none"> <li>•Delayed management</li> <li>•Horizontal integration</li> <li>•Self-employment mindset</li> <li>•Limited outsourcing</li> <li>•Labour flexibility 'medium'</li> </ul> 	<p><b>2000s: Agile Production</b></p> <ul style="list-style-type: none"> <li>•Focus on core competencies</li> <li>•Horizontal disintegration</li> <li>•Alliances with suppliers</li> <li>•Intensive use of IT</li> <li>•Labour flexibility 'high'</li> </ul> 

Source: Professor Amin Rajan, Create

### Transition from Industrial to Information Age Organisations

<b>Industrial Age Organisation</b>	<b>Information Age Organisation</b>
Focus on measurable outcomes	Focus on strategic issues using participation and empowerment
Highly specialised knowledge base resulting in single-skilling	Interdisciplinary knowledge base resulting in multi-skilling
Individual accountability	Team accountability
Clearly differentiated and segmented organisational positions, roles and responsibilities	Matrix arrangement - flexible positions, roles and responsibilities
Linear input-output thinking about programmes	Holistic perspective on programming
Reactive in solving problems as they emerge - a short-term focus dominated by the 'bottom-line'	Proactive: anticipate issues before they become crises; achieving balance between short-term pragmatism and long-term purpose
Local perspective informs programming	Global perspective informs local action
Hierarchical, linear information flows	Multiple interface, 'boundaryless' information networking
Attention to quantitative differences	Attention to qualitative differences
Plant and equipment targeted for investment	Development of people targeted for investment
Achieving effectiveness through methods	Achieving superior performance underpinned by shared values

Initiatives for improvement emanate from a management elite	Initiatives for improvement emanate from all directions
Present-oriented, doing what is known	Future-oriented, operating at the cutting edge

Source: Clarke C and Clegg S (1998) - Changing Paradigms: The Transformation of Management Knowledge for the 21<sup>st</sup> Century, Harper Collins Business

Rightly the use of ICT network skills have accelerated and industry and education have linked in well - after all this is a cognitive skill which education ought to and can provide.

Education and training have been quick to see the user and provider advantages of E-learning - the fact that it can promote distance learning, interactive materials, instant access, unlimited potential for connection; however for many the experience can be more one of isolation.

The development and use of interpersonal and social networks has not kept pace with accelerated e-application either within industry or between industry, education or communities at large. We are in danger of creating yet another elite based on 'where to go' just as elites were created by old boy 'who you know' and the meritocratic 'what you know'. This time the elite is well and truly introverted, nerdish and even more individual in outlook than before - in addition feeding the lottery instinct of 'winner takes all' with dot com personal fortunes for the few.

	<b>Was</b>	<b>Now Should be</b>
WHO YOU KNOW	'Old Boy' Net	Social Capital Networks Collaboration Relationships
WHAT YOU KNOW	Elitism Meritocracy 'Knowledge is Power'	Universal Know yourself & others 'Knowledge is to be shared'
WHERE TO GO	Libraries	Technology E-applications 'Data search'

History and Possibilities of Learning for the Knowledge Driven Economy (Morton C)  
It seems that just when industry and government had learnt the lessons of past failure; - recognising that distance management, adversarial relationships and individualism undermined group effort and emotional commitment; that the challenge of the e-revolution can appear to reverse that progress.

The challenge is how can we gain synergy of systems that need to show results but at the same time espouse values that gain the emotional commitment of people involved rather than the feeling of isolation, anomie and further social divide?

### Paradox

1. Can industry and education learn from each other? Are educational institutions designed to learn for and about themselves? Is the traditional educational ethos

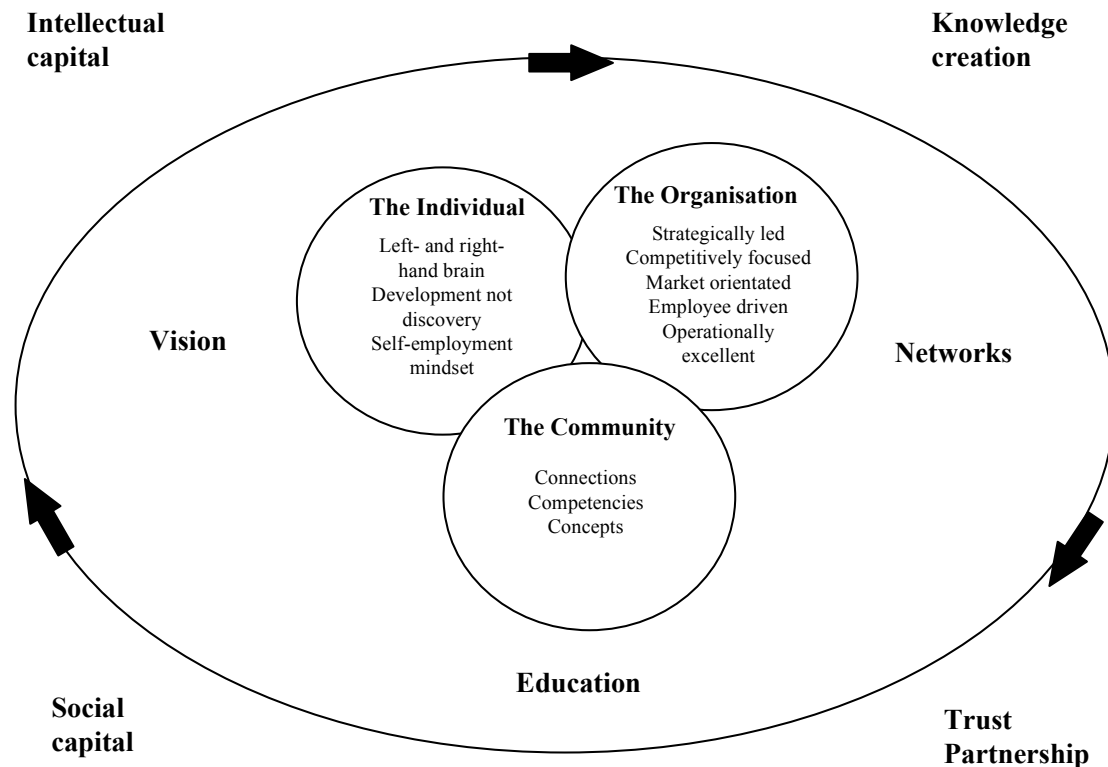
valid today? Are ‘proper’ universities about to be sidelined by corporate universities? Or can education be ‘business-led’?

2. Do we value learning? There is no shortage of rhetoric from government, industry and education but the efforts of learning are not given any value in the Treasury, or other governmental models for forecasting economic and socially beneficial outcomes. It seems the City, and albeit fleetingly, has put a value on intellectual capital in dot com companies but not in the ‘old’ economy. Has industry moved from ‘cost’ to ‘investment’ when valuing learning?
3. Do we make the link between learning and change? How can the rate of learning of government and educational institutions be made equal to or greater than, the rate of change in the external environment?
4. How do we turn the rhetoric of life-long learning into a reality? Can we get off the hook of *learning equals certification*? Is the individual in control of self learning. Can we understand and exploit the difference between tacit and explicit learning, the value of life skills and relationships?
5. How can we construct social networks that encourage a climate of open critical review, debate and subsequent conscious learning in our organisations? We know that for double loop learning to work that socialisation is vital. Can we turn the ‘*who you know*’, ‘*what you know*’ and ‘*where to go*’ into a virtuous cycle not a vicious one?

### Some Solutions

I offer the holistic model or framework (below) to demonstrate the win-win of a virtuous cycle that links together the individual, the organisation and the community. Each envelope for the three partners enclosed a ‘personal’ or organisational agenda.

## THE BEYOND WORLD CLASS MODEL (10)



Morton C : Beyond World Class, Macmillan 1998

The linkage between is Vision, Networks and Education. None of this will happen without the vision of key players, the networks or oxygen of connections between, and Education - our subject for tonight being the key aspirational common interest factor - which leads to sustainability. The products of this set of relationships are shown outside the elipse Trust & partnership: Social capital: Intellectual capital: and Knowledge creation.

The components for **THE INDIVIDUAL** can answer some of the areas of paradox I have identified:-

### ***Left and right hand brain.***

This can inform the question of balance between the rigid, curriculum based, qualifications centred approach of left hand brain and the holistic, creative, personality based right hand side which includes concepts of emotional intelligence.

Some brilliant work in the 1990's in Rolls Royce IPG resulted in the evolution of the 'stick of rock' model for competency development, linking continuous professional development for engineers and specialists through to experiential competencies required for top management, giving a perspective of competency development for the individual with a constant relevance throughout his or her career of those personality factors both inherent and capable of development.

The 'stick of rock' model for competency development: Morton C

This showed to us in Rolls-Royce that we had to revise our ideas on learning - concentrating on right-hand brain development from an early point in parallel to the traditional CPD effort of left-hand brain development.

Development not discovery

The distinction between Development and Discovery could from my experience of working with the Japanese who have a totally different starting point from us in most things - particularly in education.

'Discovery' epitomises the origins of learning and knowledge in classical Greek philosophy - the foundation of Western epistemology (the theory of knowledge): Plato, who thought that human beings aspire toward the eternal unchanging and perfect ideas that are known only through reason, versus Aristotle taking an empiricistic perspective in valuing experience in building knowledge.

The 'Cartesian split' was continued later by Rene Descartes, a continental rationalist (I think therefore I am), and John Locke, the founder of British empiricism, who compared the human mind to a *tabula rasa* or 'white paper, void of all characters'. (I wonder whether this is the origin of the expression 'a blank sheet of paper'?)

This is not the time to trace the latter philosophical development of the Western concept of knowledge, but suffice to say that Western education is inevitably rooted in these origins which value reason and logic above all else and have an intrinsic aim of fulfilment through the realisation of individual potential towards an eternal unchanging summit (while playing down the role of experience in building knowledge).

For the British, aspirations of mirroring ancient civilisations have run deep in the past, as beautifully put by Correlli Barnett in *The Lost Victory*, p. 124: ‘a belief in the British Empire as a civilising mission in the Greek and Roman mould; and a high minded “liberal education” inspired by classical literature and philosophy ... the public schools and the universities of Oxford and Cambridge with their chapels and their games and their codes of manners constituted not only brewing vats for this heady stuff but also the jugs by which it was slopped out to successive generations of youth emasculating the sons of manufacturers and merchants into “gentlemen”.’ The Plato/Aristotle divide being perpetuated throughout by the ‘practical’ man rejecting liberal education.

Japanese intellectual tradition starts, as we would expect, at a totally different point. Whereas Western roots point to the potential and progress of the individual, Japanese traditions, stemming from Buddhism and Confucianism, talk of:

Oneness of humanity and nature  
Oneness of body and mind  
Oneness of self and other

Contrasts that this throws up include that the Japanese see time as a continuous flow of updated ‘present’ in contrast to Westerners’ sequential view of time, grasping the present and forecasting the future in a historical retrospection of the past.

The Japanese on the other hand place a high value of being flexible in accordance with the flux and transition of the world in the ‘here and now’ as the ultimate reality. Samurai education placed a great emphasis on building up character and attached little importance to prudence, intelligence and metaphysics. Being a ‘man of action’ was considered more important than mastering philosophy and literature. Hence Japanese epistemology values direct personal experience; in contrast to Western epistemology which values abstract theories and hypotheses.

Final contrast:

While a typical Western individual ‘conceptualises’ things from an objective vantage point, a Japanese person does so by relating her or himself to other things or persons.

For the Japanese to work for others means to work for oneself. The natural tendency for the Japanese is to realise themselves in their relationship with others.

In summary, the ultimate reality for the Japanese lies in the delicate transitional process of permanent flux and in visible and concrete matter rather than that for the Western philosopher in an eternal, unchanging, invisible and abstract entity; that is, the thinking self sees the eternal ideal as a detached spectator.

In essence, the difference in examining management practice between the West and Japan is between ‘discovery’ and ‘development’.

If your system tells you that knowledge is about discovering what already exists in perfection somewhere, that is, following Plato, then the route to education is through absorbing current knowledge and using reason and logic.

If on the other hand you have no perception of eternal, unchanging and perfect ideas; you can argue that human beings can actively *create knowledge* (that is, develop) to change the world rather than merely discover what is there.

To bring us down to earth, this can provide an explanation of why, in the West, all learning has to lead to a piece of paper, a qualification, a means of personal entry and security where knowledge is not naturally shared and where education doesn’t necessarily lead to competence in employment or working with others and where invention is left to the eccentric Nobel prize winner in the back room.

In contrast, the Japanese salaryman has no system of professional qualifications, sees learning as on-the-job related to employer needs, is enthusiastic about continuous improvement (Kaizen), shares knowledge with his group of fellow workers and innovates in little and big ways every day (Hoshin).

Small wonder that in the UK we have historically 43 times as many Nobel prize winners as Japan - but who develops products in global industry?

Charles Leadbeater points out that Western companies tend to focus on knowledge as a stock to be located, captured, measured, manipulated and valued. Japanese manufacturing companies have a continual cycle of knowledge and learning, involving a large majority of the workforce. Knowledge creation is a collective endeavour which usually involves sharing, borrowing and publicly testing ideas; it is rarely the act of an individual genius.

Professor J. Ridderstale and Nordstrom in ‘Funky Business’ add a dimension to this (12). Lego apparently did market surveys a few years in both the UK and Japan on what 5-12 year olds wanted for Christmas. The difference in the wish lists is illuminating:-

### **The UK**

Bicycle  
Clothes (general)  
Books  
Clothes (sports)  
Games (computerised)  
Watch/clock  
Lego  
Computer  
Sports equipment  
Nintendo

### **Japan**

Electronic Diary  
Cordless phone  
Wordprocessor  
Personal phone  
CD/radio/cassette player  
PC  
Fax  
Telescope  
CD mini-stereo  
Keyboard

The question asked in Funky Business was ‘who do you think will develop the customer offerings of the future - companies located in the UK or Japan?’

### How Japanese companies innovate - the difference between ‘Kaizen’ and ‘Hoshin’

Kaizen is now part of management speak in the West and where it has been rigorously applied it has worked well. Where no Western plant (irrespective of ownership and management) ever reaches Japanese standards is in the production of innovative ideas. The table below demonstrates the difference.

If this distinction and tool is available to the West, why isn’t it applied? Why are Japanese companies generally more innovative?

What the words mean in practice

	<b>Kaizen</b>	<b>Hoshin</b>
Translates as	‘...good change...’	‘...navigation/compass...’
Purpose	Continuous improvement	Breakthrough
Operates by	Incremental steps	Start-up/acquisition
Addresses	Existing products and services Existing systems and work processes	New products/markets New/unique systems and work processes
Achieves	Consolidation in existing markets Competitive advantage by product/service improvement or cost reduction	Entry into new markets Competitive advantage by being a new entrant or providing a unique or different offer
Requires	Attention to detail Problem solving Gaining consensus Cross-functional expertise	Innovative thinking Readiness to disrupt markets Risk taking Often speed of action

Source: Colenso, M. (1998) Managing in the 21<sup>st</sup> Century, Professional Manager, January 1998.

Instead of continually tinkering with our system at the edges hoping for a solution to this contrast isn’t it time for a *radical* rethink of the ethos and purpose of our education?

#### Self Employment Mindset

A study entitled ‘Tomorrow’s People’ by Professor Amin Rajan and Penny van Eupen (13) (1997) based on data from 350 organisations in the UK’s financial, professional and business services sector points out that ***by concentrating on new forms of working, the public debate on the flexible labour market has ignored an important requirement from the workforce of today and tomorrow: namely, mindset flexibility. This the authors describe as the ‘self-employment mindset’.***

Rajan and Eupen explain:

At an individual level, it is about coming to terms with three harsh facts of life about the employer-employee relationship in the sector covered here.

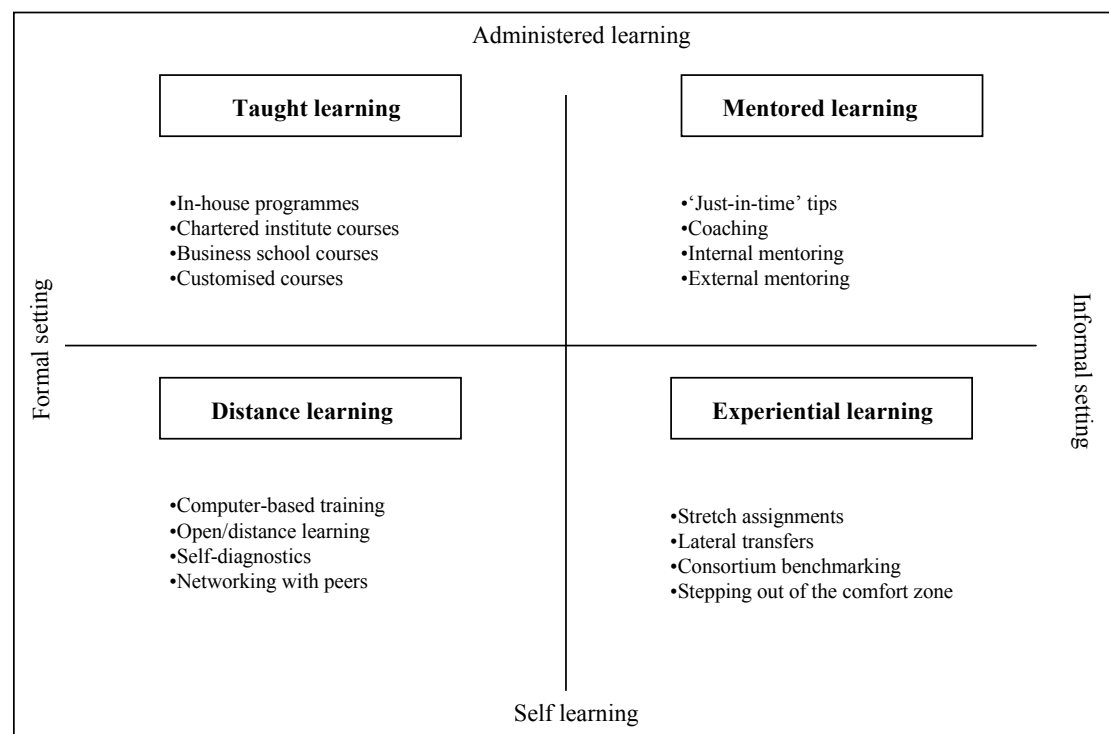
First, the culture of jobs-for-life has ended; yet many jobs still remain secure because *security is now based on performance not paternalism*.

Second, to retain their jobs, staff have to:

- treat their employers as ‘customers’ of their labour services
- provide these services when and where they are needed
- see themselves as ‘*self-employed*’ persons keen to retain their customer’s business
- be rewarded in accordance with their individual contribution
- acquire progressive skills that improve employability inside and outside their current organisations.

Third, although their employers will provide training towards acquiring progressive skills, *substantive responsibility for development will rest with the individual*. Different solutions have to be found by both employers and individuals to productive work based learning as the following table shows.

This self-employment mindset has to occur whether or not the context is ‘permanent’ full-time jobs, fixed-term contracts or temporary and part-time arrangements.



Suggested avenues for developing the self-employment mindset  
 The implications - far more ownership by the individual of development and more one to one contracts with the educators on a ‘what’s in it for me?’ basis. This has fundamental implications for how learning and education are organised.

The Institute of Personnel and Development in their Consultation Document ‘Success through Learning: the argument for strengthening workplace learning’ in March 2000 argues that:-

- the education and training system is doing too little to prepare young people for a lifetime of learning at work and managers with an understanding of the connections between workplace learning and performance; and
- leadership by employers is vital if the national training and qualifications infrastructure is to support and encourage the positive development of workplace learning.

International comparisons also suggest that the UK workforce is under-qualified and its potential is under-realised in comparison with other advanced economies. Too many people are in low-skilled jobs for which no qualifications are required. There is emerging evidence too, that graduates are not finding jobs that utilise their potential.

The IPD highlight the basic elements required:

- young people who understand how to learn as individuals and how to work in teams to share learning;
- an education and training system in which is embedded the concept of continuous development from school through to work and a qualification system that reflects the need for adult learning to include both off the job and workplace-based elements; and
- managers with a thorough grasp of the theory and mechanics of workplace learning and understand how it relates to short and long term organisational performance.

*What is Government Doing and does it help?*

New Labour has recognised that the offerings have to be much more accessible and holistic if we are to create a learning society.

The array of products and potential products - part inheritance from previous administrations, part rebranding and new offerings is stunning:-

University for Industry (Ufi)  
 Individual Learning Accounts (ILA)  
 Learning and Skills Councils  
 Investors in People  
 National Grid for learning  
 ICT Learning Centres  
 Connexions  
 Life long learning partnerships  
 Vocational Qualifications  
 National traineeships  
 Modern Apprenticeships  
 GNVQ's and Advanced GNVQ's  
 Foundation degrees  
 Learning and Work Bank  
 Adult & Community Learning fund

National Learning targets  
 National Skills Task Force  
 Small Business Service and Business Links  
 Life Long learning Development Plans  
 Sure Start  
 New Start  
 Youth Card  
 Education Business Partnerships  
 New Deal and Gateway projects

The desire and effort are laudable however many involved with delivery question the lack of ‘joined up thinking’, confusion and initiatives which leads to poor delivery.

Roger Opie, Director of Education at Industrial Society says:

“The main problem is access. Learning, Development, Education and Training is aimed at the top 40% in the country, when it is the bottom 60% who need it”.

Overall the impression is of the introduction of more ‘remedial’ measures rather than a holistic approach that can radically alter the way learning works and delivers - particularly for the Self Employment Mindset.

The confusion of having too many initiatives is a familiar one. When I arrived at Anglian Water in 1996 a whole host of initiatives had been started, some still in place, others moribund or abandoned - all with their keen supporters (also those in opposition) and with the vast majority of staff in a ‘wait and see’ position, mostly thoroughly bewildered.

Following development and alignment of the top team with the establishment of a supportable Vision and Values framework, by Chris Mellor the Group Managing Director from 1998, these often conflicting and overlapping initiatives are now rationalised and ensured to be consistent with the values of being:

Effective  
 Competitive  
 Responsible  
 Responsive  
 and Friendly

- perhaps there is a lesson there for Government in, trying as it does, to meet the needs of population, industry, education and political power.

## **THE ORGANISATION**

### ***A framework for the world class company***

In 1994 I was introduced to a hierarchy of needs for a world class company devised by James Maxmin, ex-CEO of Laura Ashley.

He has argued that many companies get stuck at the first rung of this ladder, concentration on **operational excellence**. This is the stuff of business process re-engineering (BPR) but ends up as a qualification for market entry, not a differentiation with the competition. It can be seen as convergent philosophy because all competitors will emulate. Like the stuff of TQ - Quality, Cost and Delivery - it can only give advantage over the competition for the time it takes for the others to catch up.

What does 'world class' demand?

The company that is:

- Strategically led
- Competitively focused
- Market orientated
- Employee driven
- Operationally excellent

What is 'world class'?

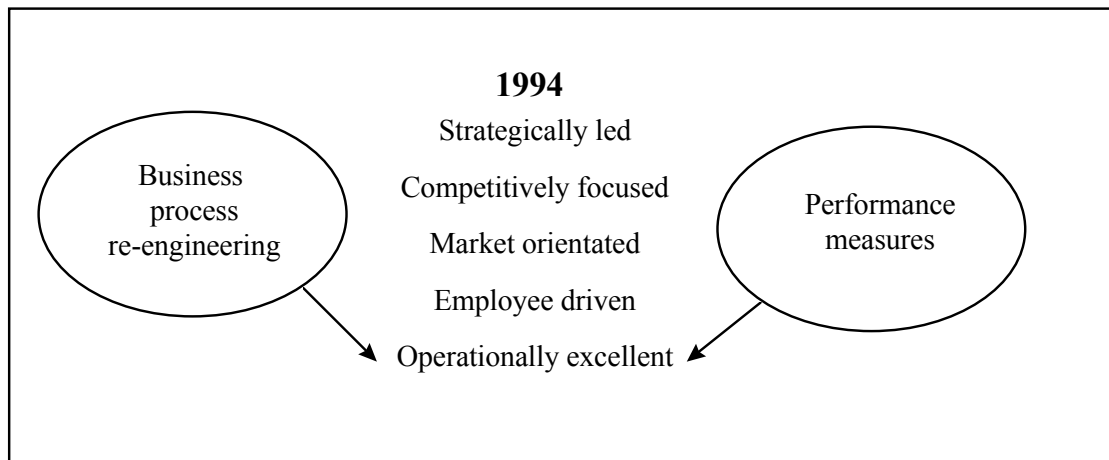
- Re-engineering not an end in itself
- Five attributes
- You know when you are dealing with a World Class Company
  - *Strategically led* - About not doing things as well as doing what we are good at - issues of strategic choice. Core competencies. Adapts to changes in market place. Sensitivity. Thinks globally and acts locally. Creates a compelling vision for people to follow.
  - *Competitively focused* - Looks outward, benchmarks against competition. Boundaryless/teams/anti-hierarchical. Looks at other World Class Companies. Concepts of strength.
  - *Market oriented* - Seeing business through eyes of customer. Does it create value to customer? Way of life. Way of thinking: actions never punished if designed to add value for customer.
  - *Employee driven* - Senses and embraces change. Own momentum. Training - Education. Reward system. Learning based. Access to information and authority to act. Exciting, fun, challenge, enjoys no complacency. Influences and contributes. Knows what's in it for me and how it affects me.
  - *Operationally excellent* - Usual start (and end) point. Stuff of re-engineering = fallacy. Rarely adds value - without and inside business. Qualification not differentiation.

James Maxmin's hierarchy of needs for a world class company.

The four rungs above, according to Maxmin, can potentially add value for the aspiring world class company (this is coincident with Professor Michael Porter's thesis that companies need to go beyond operational excellence to make strategic choices).

*Experience of Change at Rolls-Royce using the Maxmin framework*

Rolls-Royce Industrial Power Group, when I was recruited as Personnel Director, perceived itself to focus on operational excellence in 1994.

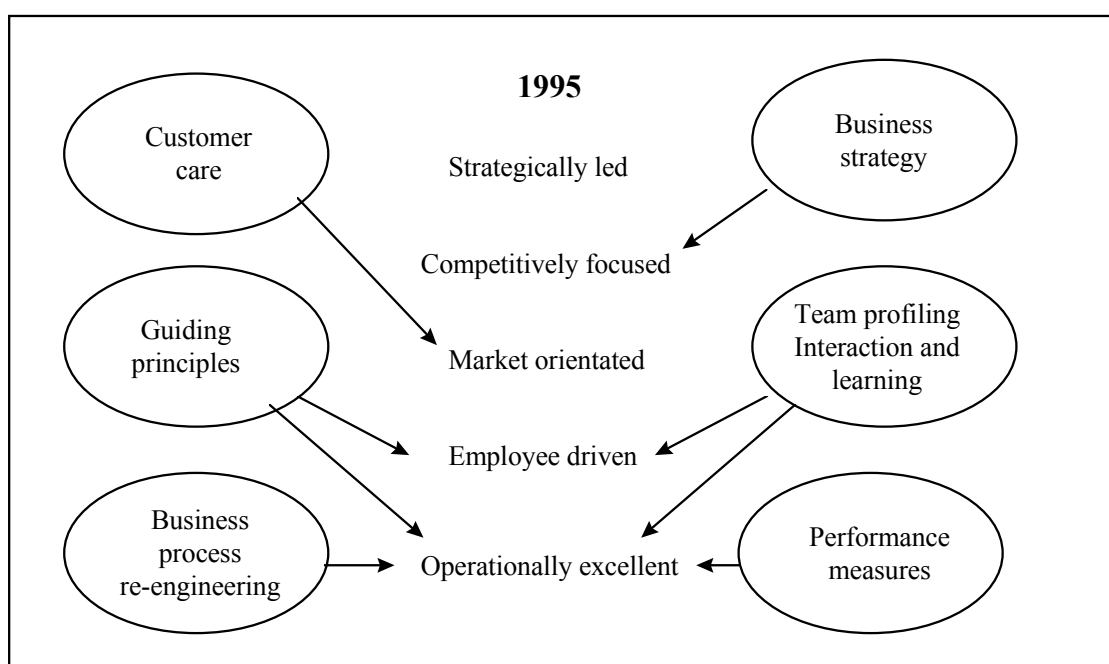


### The changes in Rolls-Royce IPG

By 1995 Rolls-Royce IPG had spread its mental wings and had embryonic policies in place two or may be three rungs up into the value added area.

Guiding Principles for people strategy were in place; business strategy was very much on the agenda and the perspective on performance measures was widening. Added to which, customer care programmes were being added in various IPG trading companies (not easy in one-off capital programmes where repeat orders are unlikely).

Progress in Rolls-Royce from 1996 onwards was in the area of making hard decisions on strategic choices, for example withdrawing from markets where there is no future despite past investment and commitment. I would argue that the mindset is not free to progress to strategic choice unless it achieves in stages the fifth rung - *strategically led*.



## The changes in Rolls-Royce IPG

### **Do we work as a team?**

The 'holdings board' model of the IPG Board in 1994 saw itself more as a coalition of interests than a team. Distance and time militated against closer working - after all you don't bring the President of the Canadian companies to the UK too many times a year unless it's vital.

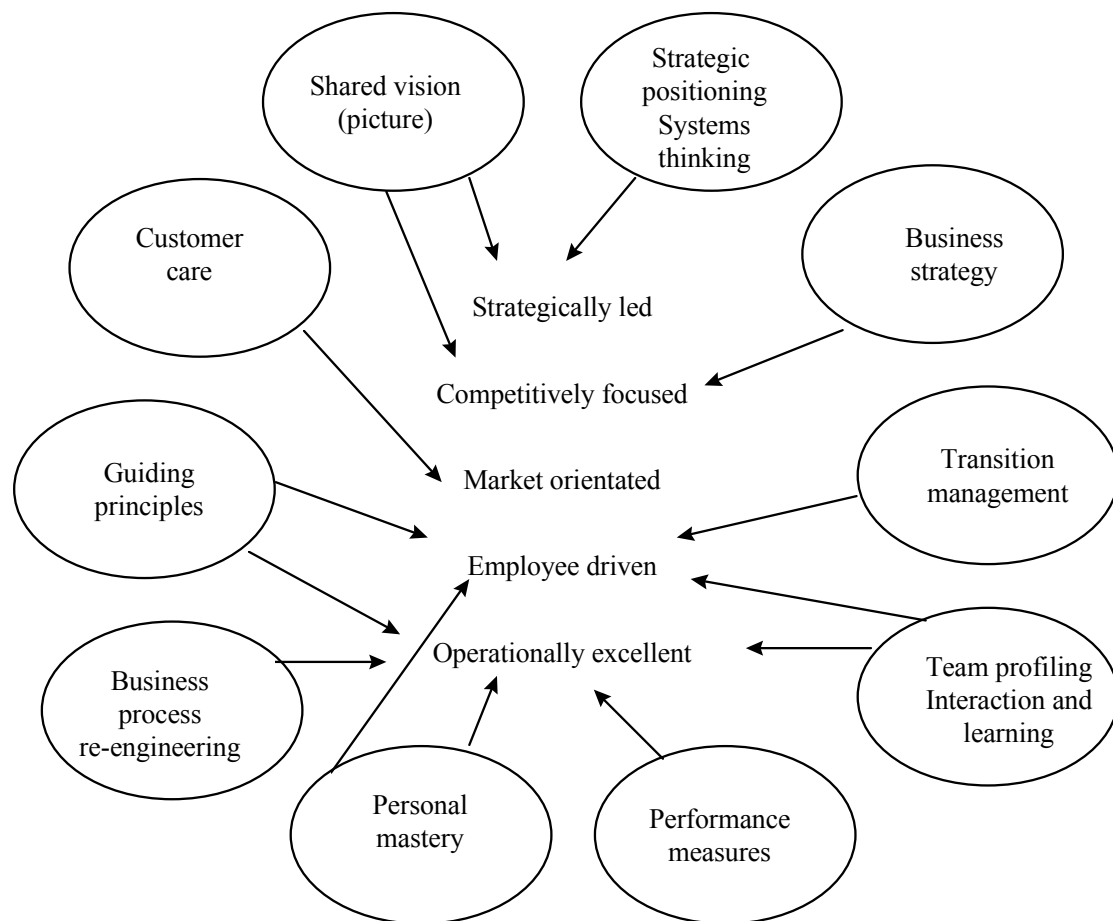
However, I had two problems in this context. First, we had agreed that to avoid mistakes in high-level recruitment, a range of psychometric and assessment tests would be used to aid management decision. Hence the users should understand personally what they meant. Second, it was my view that the biggest problem a board that wishes to develop has to deal with is denial - denial that prevents people facing reality, that gets encumbered by position, rank, speciality, history and in particular poor interaction between its members. I didn't have consensus on the last point but the Managing Director was certainly convinced on the former.

Hence I launched into a career-limiting (personal) initiative of encouraging the whole Board to go through team profiling in a similar fashion to any prospective candidate. Fortunately it went down well with the individual Board members who agreed to a collective feedback at the next Board away-day. This was a major breakthrough; it put team profiling on the map for the Board and it encouraged its use in trading companies. Myers Briggs personality preferences and Action Profile became part of the language and those with a different profile from the majority were encouraged to contribute where before they may well have 'kept their heads down'. Various layers of management started to appreciate the value of different profiles aiding decision making in a world that tended to be purely dominated by measurement of historical hard facts and undervalued intuition, feeling and perception. By 1996 it was heart-warming to hear the IPG Board describe itself as a team and visibly work as a team.

### **Getting from here to there**

The necessary measures were in place potentially to scale James Maxmin's ladder by adding some prescriptions from Richard Senge's Fifth Discipline in terms of shared vision, strategic positioning, systems thinking and personal mastery.

1996



The changes in Rolls-Royce IPG

### Corporate Universities

All organisations now recognise we are on a journey - the ultimate destination is never reached, there are no panaceas despite our addiction to single solutions. An illustration is the diagram

### Learning problems and their solutions 1950-2000 (14)

Source: Pedler et al 1996 *The Learning Company*

from “The Learning Company” by Mike Pedler, John Burgoyne and Tom Boydell. Each learning problem (P) leads to a solution (S) which leads to another problem (P). Such is life. The graduation from Learning Company to corporate university is an obvious one.

Should ‘proper’ universities and business schools regard corporate universities as a threat? The Funky Business authors say yes (15).

“In a world where competitive advantages can be found in soft-where, education needs to be continuous and lifelong. Education is a competitive weapon - for individuals as well as firms. The workplace has to become a campus.

The reality is that employee education isn’t growing 100 per cent faster than academia, but 100 times or 10,000 per cent faster. Companies such as Apple, Silicon Graphics, and Intel have already institutionalised sabbaticals for their top employees. You are allowed to retreat for as long as one year to further your skills.

Already companies are setting up their own “universities” to train tomorrow’s executives. There are now 1200 corporate universities world-wide covering virtually every industry. On the surface these are not institutions over which the denizens of Harvard are likely to lose sleep. McDonalds’ Hamburger University in Oak Brook, Illinois lacks academic *gravitas*. But, over 35 years it has produced more than 50,000 graduates and has 30 resident professors delivering programs in 22 languages.

Sceptics may shake their heads at the very idea of Hamburger University or Disney University, but the rate at which corporate universities are opening suggests that major corporations take them very seriously. Perhaps the best known corporate university is that run by Motorola. The Motorola University, “an instrument of renewal” according to the company, supplies 550,000 student days a year and costs \$170 million. Every single Motorola employee - and there are 139,000 - is expected to receive at least 40 hours of training per year. The company has also developed its

own international MBA program. Motorola calculates that every dollar invested in training reaps \$33.”

Corporate universities are not solely an US phenomenon. In April 1998, British Aerospace unveiled plans to create its own virtual university, called the British Aerospace Virtual University, in partnership with outside academic institutions. In the next decade, it pledged to invest more than £1.5 billion in building the company’s “knowledge base”.

Changing educational needs will produce changing educational institutions. “Universities won’t survive. The future is outside the traditional campus, outside the traditional classroom. Distance learning is coming on fast,” says no less a sage than Peter Drucker. While futurists Stan Davis and Jim Botkin predict “the school house of the future may be neither school nor house”.

Technology is revolutionising education. Traditional institutions, such as universities and business schools, have done nothing while upstarts have stolen a march.

Also, as we saw earlier, Davis and Botkin in ‘The Monster Under the Bed’(16) do not hand the baton to business schools.

“Employee education is currently better served by business than by business schools. Business schools like the education system in general are locked in the old paradigm. When customer education, the next great learning segment, is added, we have to realise that business is already a very significant educator and is on its way to becoming the major force in education.”

The real challenge for business schools in future is not going to be between those who vie to produce the best MBAs but whether they can collaborate with in-company learning, such as what is termed the ‘University of Water’ at Anglian Water (see below) where a learning business encapsulated and recognised learning by all employees and associates towards individual and corporate growth.

David and Botkin conclude that the real problem is that the nature of learning in organisations is not understood. Learning, they argue, is a *consumer* good whereas teaching is a *producer* good. The former is received, the latter given. Few businesses set out to be teaching organisations - why?

Anglian Water’s University of Water

Anglian Water's University was not seen as competing with Business Schools, more a practical extension of them in workplace learning terms - the crucible in which it was evolved, the Whitwell Learning Centre on the North Shores of Rutland Water is now run as an outsourced training and development centre for Anglian and other clients by colleagues including Professor Amin Rajan, Mike Kinski and myself. Our aim is for Whitwell to collaborate deeply with Business Schools such as Middlesex to provide business led solutions with academic rigour - thus obtaining the best of both worlds!

### **Has Industry got its act together?**

Industry does not escape criticism. Productivity in the UK is some 30% below the levels in Germany and 40% below the US. Recent events at Ford and Rover highlight the lack of competitiveness and show how fragile our manufacturing base is. Professor Andrew Oswald (17) at Warwick University has concluded from his recent study on job satisfaction in industry that the UK has one of the lowest scores - a staggering 64% of UK workers get no satisfaction from their work. This contrasts with a high proportion of satisfied workers in Denmark (62%), Switzerland (53%), Spain (50%) and the US (49%). Eastern European countries had the most disaffected workers with only 23% contented in Hungary, 27% in Poland and 28% in the Czech Republic.

The challenge is the same for the 'new' knowledge-driven economy as the 'old' asset based economy. The assets for both are in the brains of employees, customers, suppliers and the community. Dot com companies need satisfied, committed knowledge workers too!

We are the most fortunate of industrial age generations. We have no excuses. We now know what works, and what works counts.

- people management practices can give 20 per cent productivity and profit improvement compared to 6 per cent from a combination of R&D, innovation and quality;
- maintaining effective trust relationships and communication (voice) with suppliers and employees flows through to consistently higher productivity and profits;
- agility of organisations is a function of a culture of learning and change within - *speed of response* going beyond Quality, Cost and Delivery;
- those companies that are 'inclusive' in their relationships inside and with their communities stay the course, are consistently more profitable and more able to make strategic choices for the future;
- those companies that exploit total quality systems to the full, outperform the market place in every sense;
- leading companies are those that live with ambiguity and deal effectively with dilemmas such as short term and long term, control and autonomy, and so on.

We also know what works for individuals. Education, of the right sort, for the right people can give anything up to a 40 per cent return on investment. We know that in terms of life-long learning, business-led education gives the best results for the individual, business itself and society.

In terms of individuals and companies we know that the best crucible for positive chemical reaction is the economic region - the links of education, networks and vision can have a virtuous circle effect.

The successful company needs the developed individual. The individual cannot develop effectively outside the world of work. The community needs the contribution and needs to contribute itself. *The implementation is up to us.* This is the challenge.

### **Double loop learning**

We have learnt a hard lesson in business. As Jack Welch put it for GE, "future business does not come with the face toward the boss and the ass to the customer." We now understand that in the diagram below:-

### Double loop of learning

(Source: Professor Bob Garratt, *The Fish Rots from the Head*, Harper Collins (17))

the operations loop (bottom circle) should not dominate the enterprise. The balance is required between that loop of internal measures and the reframing loop fed from the environment outside the organisation.

Education with its reliance on rigid curricula, external inspections, control from the centre looks awfully like an operations loop with a dysfunctional reframing loop. We need to listen to each other!

*Do we value learning in Industry?* As referred to earlier there is plenty of rhetoric but few put a value on Intellectual Capital except for the oft quoted example of Skandia Assurance.

### Skandia value scheme

Skandia say:-

“One of the principal tasks is to continue creating long-term, sustainable growth in shareholder value. This includes nurturing and developing Skandia’s intellectual capital - capital that is seen in the difference between the company’s market value and its book value.

A true and fair view of Skandia’s development requires a broader description of our business than what can be read in our financial accounting. This year’s Annual Report Supplement, *Customer Value*, therefore describes our undiminished commitment to creating a greater customer focus, developing a knowledge-sharing

organisation, and devising even more highly developed work procedures, services and systems.”

In the 1996 Intellectual Capital Report, Skandia has chosen to visualise its customer capital. (19).

### Visualising value creation

This logic needs to be accepted and acted upon by business, the City and the Treasury otherwise the investment in training will not be valued. If assets are still seen as buildings and plant not people and brains then learning and development will still be a cost and not an investment.

Do we make the link between learning and change in industry? Professor Reg Revan’s maxim still rings true:-

$$L > C$$

Learning must be greater than or equal to the rate of change for survival!

### **THE COMMUNITY**

This is the last and most crucial theme. I contributed to the production of the Futures Report series for IPTS the Joint Research Centre for the European Commission last year. Their report “Knowledge and Learning towards a Learning Europe (EVR 19034EN) showed that the issues we have focused on tonight are not peculiar to the UK. However differences were seen between Germany, the UK and France in terms of knowledge infrastructure. Their thumb nail summary of the UK was:-

“The UK is characterised by good universities, a low number of engineering students, sub-optimal workforce training levels; furthermore there are few “bridging” institutions” (unlike Germany which has the Frankofer Gesellschaft or the Steinbeis Foundation).

Small wonder that Gordon Brown worries about productivity levels! Mechanisms in the community that effectively link academe, industry, research and development and the individual are sorely needed in the UK.

The community represents both the crucible for learning and the glue to hold the system together. I borrow the 3 'C's from Rosabeth Moss Kanter (20):

- Concepts** we need between the individual, organisation, and community a shared vision of education and learning for life.
- Competencies** we need an agreed agenda between industry, parents, educators on competencies - including life skills and emotional intelligence factors.
- Connections** a two way traffic is required of ideas and shared values - not another bureaucratic or political link. Essentially our listening, awareness and flexibility skills must be razor sharp! This is socialisation.

If we can achieve this I believe that:

*Who you know*  
*What you know*  
 and  
*Where to go* will be a virtuous circle not a vicious one!

Dr. Clive Morton leads the Morton Partnership Consulting Group, is Chairman of Whitwell Learning Ltd., Chair of the Association of Management Development & Education, Chairman of Peterborough Hospitals NHS Trust, and Chairman of the Research Board for Centre for Tomorrow's Company and may be contacted on 01733 552535 (tel) and 01733 344076 (fax), e.mail [clive.n.morton@talk21.com](mailto:clive.n.morton@talk21.com).

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