

Technical Education Revisited

Business management is essentially applying the knowledge of how to use knowledge (Drucker, 1993). Knowledge is the key business resource. In this context knowledge is defined as justified true beliefs, something which relates to commitments and leads to action. There are knowledges which are specific to different actions and go beyond simply skill and information. However the most precious knowledge cannot be taught or passed on (Nonaka and Takeuchi, 1995). Gaining knowledge is essentially an experiential process - a process of personal change and self assessment which results in specific justified true beliefs which are both explicit and tacit. Concepts derive meaning through use (Wittgenstein) and this meaning is articulated in the form of routines which match procedure to situations (March, 1999).

This model of business knowledge generation is practitioner led and it is the practitioner that originates what is justified and true. On the other hand, the traditional academic process seeks to understand this knowledge creation in ways that are technically rational. This body of technically rationalised experience become theories rather than practice and taught in the classroom. This particular form of technical education (Theory?) is however not simply practical knowledge of procedures. In fact the business world procedures are becoming increasingly embedded in the company computer systems and form a body of knowledge which is increasingly organisationally specific. For some the teaching of business procedures has thus moved to the domain of in-company training and software specific courses. Where then does this leave the role of higher level technical education in the world of business management?

Technical education as a specific social institution began when techniques had reached a certain level of complication and sophistication.” This gave birth in Europe to the apprenticeship system, with its overlay of secret knowledge and mystique. In spite of the printing press, the computer, and communications technology, the restrictive practices of these medieval guilds are still with us – known today as professional bodies or associations such as the General Medical Council, the Law Society or the Institute of Civil Engineering. This concept of technical education as a social institution has often been distinguished from vocationalism; “a vocation is a calling, and the highest vocation, certainly in Europe, is to the priesthood and the European universities were invented to deliver vocational education in the strictest of senses. They were set up by the Church to train clerks, i.e. clerics. Indeed, all the great civilizations of the old world had similar institutions with an identical purpose” (Waterhouse, 7, 2002). These origins are still evident today in the oldest universities. They were essentially the technical colleges of their day. The whole purpose was vocational, with the degree as a licence to practice and the doctorate as a licence to teach.

However, much of this seems to have been forgotten. During the industrial revolution, industrialists found it easier to establish new institutions of higher technical learning than to change the power structures of the universities. So, for example, England in the mid-19th century saw the foundation of the University of London and the first of the civic universities, often driven (for reasons of public health) by the medical school. Elsewhere in Europe colleges of mines, engineering, and commerce were being established. Later we had the development of technical schools and colleges; these were specialised

professional schools for teachers, nurses, artists and designers, all of which eventually went to provide the heritage of the English polytechnic system.

None of these types of institution had degree-awarding powers, though various professional diplomas were created. Throughout the course of this development the word “vocational”, like the word “professional”, was used to give dignity and status to practical, socially useful, and in some cases technical, activities. The next stage of evolution, suggested by Waterhouse (9, 2002), requires universities to re-conceptualise themselves as a service industry, not a priesthood of occult technology, or a restrictive academic guild. In place of the student and teacher come the customer and facilitator of learning. Replacing the campus is the distributed system which technology enabled institutions to extend into the workplace. Consequently, the ultimate value proposition for universities, Waterhouse argues, “is not that they can teach, nor even that they can sell research, but that they can assess: they accredit learning [wherever it takes place] and are awarding bodies. It is this social certification of successful learning that individuals, employers and ultimately society pay for.”

The question that presents itself is ‘can universities establish themselves as the certifiers of professional standards in the business world? In the professions with the greatest mystique such as medicine there is the setting, clear management and policing of standards. These standards are a ‘brand’ assurance that practitioners meet certain quality criteria and a process for dealing with failure to meet these quality criteria. It is a means of protecting the reputation of the club and its members, so that they can continue to practice and benefit from the remuneration, akin to a cartel. However it is evident that the professions with the brand value are those that have long established partnerships between the academic fraternity and the practitioner. The professional association forms the relationship with the practitioner and owns the standards while the academic fraternity provide teaching and assessment. The professions with this model appear to be the early ones that gave rise to the first universities. There is a sense that during the 20th century universities developed a role of knowledge creation which was independent of experiential knowledge creation in the business world. The consequence was they failed to develop a role in relation to professional standards.

For most of the 20th century this did not matter. The undergraduate degree and the MBA held a mystique of their own. Only the most able students gained access to courses that led to these qualifications. The entry processes into academic institutions were sufficiently competitive that they provided an accreditation of worth. University and Business School places were constrained and the competition for entry provided the mystique that guaranteed a management job in the business world. The individuals leaving these establishments were not assessed as being able to do anything in the workplace. They were viewed as people who had the potential to learn once they had entered the workplace. Ownership of professional standards (competency frameworks) thus developed within the workplace, and often companies sought to differentiate themselves by having different (ie somehow better) standards (competencies). The fact someone had achieved in the employment of a ‘blue-chip’ company was sufficient accreditation of their professional competence.

More recently the massification of higher level education has removed much of the elitism from entry to most universities and the outsourcing and deintegration processes in large companies have undermined the role of the blue chip companies as the gold standard of professional skills.

Where does this leave the assessment of professional standards. As the national skills agenda migrates from a level 2/3 issue to a level 4/5 issue the question of professional standards comes to the fore and the role of universities and business schools in this agenda is in the spotlight.

Sadly, what becomes glaringly obvious from the 1980s onwards is the failure of successive governments to connect meeting employer need with the coherent provision of quality learning and research at all levels including further and higher education. This in part may be due to the artificial public policy split since the 1950s between training and education provision. This is compounded by continuous structural change even though our social and economic imperatives have remained largely consistent throughout this period. We have continued to alter the structures, arranging the deckchairs syndrome, but not addressed the basic fault line, a failure to understand training and education as an integrated 'learning continuum' that takes place in work, at home as well as college or campus. This is perfectly illustrated with the New Labour Government introduction of Sector Skills Councils (SSCs), the Sector Skills Development Agency (SSDA)ⁱ and the Skills for Business network (all of which are expected to resolve the UK skill and productivity gap) around 2000 onwards replacing the earlier National Training Organisations (NTOs) and National Training Organisation National Council (NTONC) expected to do the same, a 1990s model, which in turn were born out of industry training organisations/industry lead bodies and even earlier industry training boards established in the 1964.ⁱⁱ These organisational gymnastics are mirrored with technical colleges becoming polytechnics and polytechnics then emerging as the new universities in 1992. Further education colleges have followed their own path too.

Today the government has substituted technical education with 'the skills agenda' and is applying it relentlessly across the whole education system including schools which in turn is leading to confusion, overlaps and needless competition. What we need is not more organisational solutions but an informed debate on an integrated approach to practical learning wherever it takes place whilst recognising liberal education has its place in a developed society. This is very unlikely as it requires engagement with the purpose of learning in our society.

ⁱ The SSDA strategy suggests a greater interest in up-skilling the existing workforce, rather than entry provision as the vast majority of those who will be in the workforce in 10 or 15 yrs time are in work now.

ⁱⁱ National Skills Task Force concluded in its final report, 2000, 'The work over the last two years to rationalise the number of NTOs and raise their capacity has been very welcome, but we do not believe it has gone far enough. There are still in our view too many NTOs leading to confusion for employers and to organisations that are in some cases still too small to undertake the full range of responsibilities we believe is necessary'. There is also a useful paper on the origins of the NTOs, Time to Overhaul the National Training Organisations, Martin Jones, Working Brief 120, December 2000.http://www.cesi.org.uk/_newsite2002/publications