

# Developing a Model for Quality in Higher Education

**G.Srikanthan**

*Centre for Management Quality Research,*

*PO Box 71, Bundoora West Campus, Bundoora, Victoria 3083, Australia*

*Tel: ++ 61 3 9925 7211, Fax: ++61 3 9925 7696 E-mail: [sri@rmit.edu.au](mailto:sri@rmit.edu.au)*

## **Abstract**

The historical background to the origins of universities hold a clue to their current value system and management. The advent of 'knowledge age' is providing a strong impetus for change. Research in education is clarifying the required changes in direction for an effective learning in universities. Hesitance of universities in embracing change is moving a number of governments to evaluate their performance in order to persuade them to adopt changes. The universities, in turn, are looking at adopting some industrial management systems. All such attempts have not been generally successful. More suitable models for universities are explored and a composite 'Learning University' model is proposed as suitable. Some glimpses of the model are provided.

**Keywords:** Quality in higher education, Performance of higher education, Learning Organisation, University of Learning.

## **1.0 A Perspective on Quality in Higher Education:**

The origin of universities of the modern times lies in the middle ages in Europe which marked the struggle among many religious groups to gain control over the society. The religious centres wanted the universities to be seen as 'Ecclesiastical Colonies', which sparked dramatic struggle by the universities for autonomy against the establishment eg. between university of Paris and Cathedral of Norte Dome in early thirteenth century (Van Vught, 1991). Oxford University, founded in the late 12<sup>th</sup> Century was under such a powerful sway of the Church of England, that Adam Smith, the well-known Scottish economist of the late 18<sup>th</sup> Century described it as 'a sanctuary in which exploded systems and obsolete prejudices find shelter and protection' (Wilson, 1996b).

Hence, when the foundation of a modern university was laid in Berlin in 1809, it was firmly believed that autonomy should be an essential ingredient of excellence (or quality) of universities. The founder, Wilhelm von Humboldt proclaimed the guiding principles to be 'independent status of staff' (*lehrfreiheit*), and 'free choice of subjects' (*lernfreiheit*) (Bowden and Marton, 1998, pp3). This was zealously guarded by a system of

governance called a **collegial process**, promoting a wide consultative style of management. This was supposed to create a stimulating, but supportive environment where the academics have a considerable degree of autonomy and creative space to develop curricula and conduct research (Bessant, 1995). The main purpose was to safeguard and guarantee the institutional autonomy and the search for knowledge for the sake of itself (Bleike, 1998).

The claims of unlimited autonomy for the universities have traditionally been the common rhetoric of university funding bodies (mainly the governments). But it has invariably been more emotive than rigorous. In the more recent past there have been a number of public reports in many countries, e.g. in Australia, about 7 between '57 and '92 (Cannon, 1994), criticising management aspects of the operation of universities. Over the past years, because of the perceived inefficiencies of universities, pressure is being applied on the universities to institute strong managerial modes of operation on the lines of a corporate enterprise (Lynn Meek, 1995). The thrust of many debates can be summarised as attempting to place the universities on a dynamic scale ranging from '**cultural precincts**' to '**corporate enterprises**'. The thesis is that the 'corporate enterprise' definition is gaining ground, not by replacing the other, but somehow, by incorporating it! (Bleike, 1998)

Thus, the quest for autonomy by the academics and the moves for accountability by the authorities form the eternal dichotomy defining the organisational reality within educational institutions. While it is true that the freedom to govern and manage is at the heart of institutional autonomy, it is equally true that the discharge of duties and obligations relating to the use of public funds is the best means of securing that autonomy. Indeed, these obligations include regular and public demonstration that the affairs of the institution are being governed and managed properly. The only role a university can play in a community is as a provider of learning. Any other descriptor of its role (cultural or corporate) can only be earned by the degree of fulfillment (or quality?) of its core function: learning. Public interest in establishing this has brought about the close scrutiny of the operation of universities in the last decade.

## **2.0 Changing Environment:**

Prior to 1980s the management of performance in universities were controlled by fairly routine procedures. Professional associations (e.g. engineering, medicine) performed the tasks of carrying out accreditations. Universities had their own committee systems (eg. Course Advisory Committee) with a generally distributed participation, to oversee performance standards. All the reports emanating from these various bodies, generally kept the governments happy about the functioning of universities.

Dramatic changes in the education scene began taking place in the 1980s. There was a striking growth, worldwide, of participation in higher education with the advent of 'information age' with its huge and rapid growth in knowledge. The growth of places in the universities increased at rates more than 10% per annum. A growing participation of 'non-traditional' students, e.g. those aged 21 and over, also increased at a phenomenal rate. With the galloping demand, the segregation that the governments had maintained – the great 'binary divide' – between technical institutions and higher education, came under enormous strain. Many countries caved in to the pressures and granted the same status of a university to all these institutions – a unified system of higher education. These dramatic changes in the composition of universities, prompted the governments to look more closely at the issues of control and at outcomes in terms of the employability of the graduates.

With the arrival of the knowledge based economy, universities were expected to play a part in the shaping of the new mould of education for the community (Klor de Alva, 1999). A poll among the 50 state governors of US (in '98) nominated encouraging 'life long learning' as the top priority for higher education. At the bottom of the list was the 'maintenance of the traditional faculty roles and tenure' (ibid). But studies of campuses revealed no such changed directions. 'A narrow definition of the client base for post secondary education,' continued 'encompassing primarily those recently graduated from high school' (Jone et al, 1998). There was also a prevailing 'presumption that education will be delivered predominantly on ...campuses..primarily through face to face interactions...'. Over the years there was a decreasing public confidence in higher education, e.g. in US 61% expressed confidence in 1966, which reduced to 36% and 27% in '81 and '95 respectively (Bowden and Marton, 1998, pp212).

This led to a demand for a greater degree of accountability of public funded education. The funding bodies, looking for new ways of control, came under the sway of the Quality movement sweeping the industries at that time. 'Quality' became the euphemism for the requirement of accountability from universities. For instance, things moved rather fast in UK. Higher Education Funding Councils (HEFC) with their key component Quality Assessment Divisions (QAD) replaced the University Grants Commissions in early 1990s. By the end of the decade, 'Quality agencies' of one description or other was reported in 49 countries for the purpose of assessing/monitoring higher education (Wilson, 1996a).

### **3.0 Ideal Quality System and Current Realities:**

Ideally, quality is achieved by carrying out the core function well. According to Bowden and Marton (1998, ch.1), these core functions, for a university, are teaching, research and community service. They argue that the core process in all these functions is 'learning'. When it is carried out well at all levels of participants: students, researchers and community, it becomes the defining element of quality in a university.

Learning prepares the students for handling the situation in unknown future based on the current knowledge. Effective action requires effective ways of seeing the current situation, and developing choices. We discern the aspects of the choices and decide on a judicious course of action. Thus, learning effectively implies, widening the range of possibilities of seeing the same thing. Our world grows richer, and we have more options for action (ibid.).

There are a number of compelling insights into learning from various research traditions (Ewell, 1997):

- Learning is about *transforming* the student into a flexible thinker,
- Learner is essentially an *epistemologist* – actively constructing unique ways of knowing,
- Students learn all the time; all situations are therefore a *learning opportunity*,
- Learning occurs best in the context of a *compelling present problem*,
- Frequent *feed back* reinforces already strong learning effects,
- Learning occurs best in an *interpersonal context*, working harmoniously with others, etc.

An 'ideal system' should incorporate these 'learning insights'. At the organisational level, a typical university in the world is not yet ready to respond to these requirements. Their pattern of approach seems to be characterised by the following (ibid):

- Academic programmes tend not to be student-centred, but are conceived principally as '*delivery systems*' to transmit knowledge.
- Lack of *systemic thinking*; development initiatives are *fragmented*, which ignores the *interdependencies* within the *whole* system.
- Lack of a consistent and constant *leadership* for change.

As a result, curriculum and instructions are not clearly conducive for producing learning gains, as characterised by (ibid):

- A visible '*aridness*' when it comes to '*experience*': when the subject matter the students acquire takes the form of 'ritual knowledge',
- A debilitating *fragmentation*, where learning experiences are neither integrated horizontally (in the same year) nor vertically (in successive years), leading to '.. a series of unconnected experiences....and graduating with a Bachelor of Bits and Pieces..' (Bowden and Marton, 1998, pp 234),
- Instructional paradigms which feature by and large only *individual work* – negating the overwhelmingly positive results on the effectiveness of *collaborative learning*.
- Minimal *feedback on performance*, usually only from a single source, the academic, exacerbated by its judgmental nature.

Based on all these Ewell (1999) concludes, that universities remain 'novice cultures in developing approaches consistent with the obvious insights' of a quality learning culture. '...(E)very system is perfectly constructed to produce the results that it achieves. The fact that higher education is under performing .....should (then) come as no surprise....' (Ewell, 1997).

#### **4.0 Effect of Evaluation on Quality in Universities:**

Lack of community confidence and rapid increase in the participation rates, set in train a trend by the governments in the late 1980s to devise ways of formally evaluating the performance of Higher Education. The movement for evaluation, came under the strong influence of the Quality Assurance movement which was sweeping the industry at that time. Many of the terminology and practices of Quality Assurance were applied to the evaluation process as well.

Invariably, all funding agencies acknowledge the need for autonomy of the institutions in order to perform effectively in their own circumstances. At the same time there is also the need for measures to evaluate the performance (i.e. the accountability) of the institution. Within these parameters the evaluating agencies tend to adopt a number of different approaches to monitoring quality in higher education. These were categorised and discussed by the author in an earlier paper (Srikanthan, 1999). In general, they can all be described as forms of external scrutiny conditioned by the prevailing political scene. 'At the root (the) governments around the world are looking for higher education to be more responsive, including ( Harvey, 1998):

- Making education more *relavent* to social and economic needs,
- Widening *access* to higher education,
- *Expanding* numbers, usually in the face of decreasing unit cost, and

- Ensuring *comparability* of provisions between institutions.’

Quality has been used as a tool to ensure some compliance with these concerns. The external quality monitoring agencies attempt to provide a pragmatic response to government mandates and the management systems in universities adapt and respond to changing situations depending on the political power play(*ibid*).

Quality Monitoring creates an initial shock reaction, but it rarely translates into a process of ongoing improvement. It may be effective in the short run in getting quality on the agenda, but it fails to ensure an on going response at the grass roots level(*ibid*). Overall, the effect of evaluation tends to be generally one of creating a reactive orientation on the part of the universities.

Ultimately, ‘..academic quality is best maintained and enhanced through the professional commitment of the faculty (academics), and should be viewed primarily as a professional issue’ (Gaither, 1998, Chap.7) To this end closer and closer to the academic coal face the and freedom to maintain quality is devolved the more likely the success of the program for quality assurance is bound to be. The quality assurance programs should, ultimately, succeed bringing about a transformation in learning on the lines discussed under ‘Ideal Quality Systems’.

## **5.0 Models for Managing Quality in Higher Education**

Based on the discussions above, ultimately quality in higher education can only be fundamentally changed by a deep rooted shift in culture at the academic level within the universities. Attempts have been made to adapt the models of quality management from industry. Two of the more well-known ones considered for implementation are (Harvey, 1995):

- Quality Assurance system to ISO 9000 Standards, and
- Total Quality Management (TQM) model,

### **5.1 ISO 9000 Standards**

ISO 9000 is an external standard which specifies a **Quality Assurance System**: a set of practices followed by the people involved in the delivery of the course/s to maintain the quality of the various activities related to the course. In order to do that it should ensure that:

- The course is designed to meet the needs of the customers (Students and Community),

- The process is effective and efficient.

Interest in adopting quality assurance systems to ISO 9000 to higher education is broadly confined to Britain, New Zealand and Australia. More popular sector for the application have been in training and further education, rather than in higher education. Lundquist's world wide survey in '97 revealed that only 16 universities were actively pursuing certification (Lundquist, 1997).

#### Advantages:

- Communication: The main advantage to the organisation stems from the amount of team work required to develop the quality manual which specifies the Quality Assurance System. There is a considerable clarity obtained by the members about their role and how to deal with any situation.
- External Recognition: The fact that the organisation has an accreditation is a sufficient publicity for the prospective customers of the organisation.

#### Disadvantages:

Harvey (1995) identifies a number of problems, which may outweigh the initial gains for the education sector. They seem to arise from the fact that the standard is fundamentally suitable for structured procedures required for rendering specific services e.g. banking, tourism etc. Such services have well-defined processes which could be managed and controlled. Education tends to be too subtle and far too extensive in the processes and delivery, to be specified and controlled by variables. In spite of attempts to revise the standards to adapt to education, e.g. attempts by BSI in 1991 (*ibid*), the adoption of ISO 9000 to education has not gained momentum (as mentioned above).

Probably another reason is that many of the quality monitoring procedures specified by various agencies, cover the same provision of quality assurance in education. This might somewhat reduce the attraction to the education sector of obtaining any additional certification.

### **5.2 Total Quality Management (TQM) model:**

Total Quality Management (TQM) is a synthesis of well-known management practices aimed at creating an organisational culture where every one will work contribute to overall quality of the products and services. Unlike ISO 9000, there is no single definition or approach to TQM. Although Deming's original 14 points tend to be an important

guide, many Western masters, like Crosby, Peters etc. provided a substantial slant in emphases, followed by a large group of Japanese masters like Ishikawa, Shingo, Taguchi etc. Hence TQM remains a very rich field for potential management practice. There is a broad field for inspiration and guidance. More recently, many countries have instituted national quality awards e.g. Malcom Baldrige Quality Award (US) which encapsulate these principles of TQM into measurement oriented frameworks of management practices, which are available for any organisation to seek some guidance from.

#### Generic Elements of TQM (Harvey, 1995):

There is no single definition or approach to TQM, although the following thrusts can be found in most of the approaches:

- *Constant improvement*: Quality improvement is a never-ending goal,
- *Management commitment*: TQM requires the senior management to provide a leadership by improving the system to facilitate quality,
- *Customer driven definitions of quality*: The outcomes of all processes should reflect customer requirements, needs and preferences,
- *Team work*: The organisation culture should be changed to one of mutual interdependence from individual competition, and
- *Statistical Techniques* must be deployed to monitor processes, and solve problems.

#### Application of TQM in Higher Education:

As far as application of TQM to higher education is concerned, there are serious problems identified with its adoption:

- In TQM the processes are supposed to be customer driven. In higher education the critical problem is identification of the *customers* or *products* to 'drive towards'. The customers can variously be students, employers, government etc. and in the same way the products can also be education, knowledge, research etc. This creates a considerable lack of focus for the groups involved with the processes.
- With its measurement and process focus, TQM makes an implicit assumption that the processes are amenable to measurement. On the other hand many processes in education are too subtle to be measured. 'The more important the knowledge is, the less likelihood there is of ever noticing it' (Bowden and Marton, 1998,pp16).
- In addition, the main tenet of effective communication required within a university for TQM implementation is rarely reached. There is rarely a shared vision, and the



academic managers in an attempt to retain power act as communication block. The participation in decision making at all levels rarely ever takes place. Those with power continue to retain it (Bramble, 1996).

Based on the general reasons stated above, the enthusiasm of the academics to TQM has never been very high. It is therefore not surprising that TQM in higher education has been focussed on academic support services given the relative ease with which customers can be identified e.g. in US universities as reported by Sims & Sims (1995).

### **6.0 Basis for Development of a Model for Quality in Higher Education:**

In response to expectations of the funding bodies the universities have attempted to adopt a number of measures to improve their operational effectiveness as seen in the sections above. These measures are not particularly successful, as they lack a fit with the educational processes. Being industrial in origin, the methods tend to focus on the processes with an implicit assumption that:

- The processes involved could be expected to be gross and tangible and their constant monitoring through measurement would lead to quality improvements,
- The product involved is of a small range with easily definable characteristics, and
- The customer serviced could easily be accessed to define the expectation.

As was argued before, in higher education **none of these assumptions** could be deemed to be valid. Lack of clarity on all those counts leaves the search for an appropriate model for educational quality wide open. By not taking an in-depth view, Piper (1996) sees that most of the activities in the area 'represent work which busies itself with minutiae rather than facing up to the issues of high quality in higher education..gentle ambles on the foothills..(not) an attempt on the heights'.

On the other hand, the theories on 'learning organisation' as expounded by Argyris (1978) and Senge (1990) provide a comprehensive basis for quality in organisational processes. The model is essentially **organisation behaviour** focussed, in contrast to the **process** focus of the models discussed before. According to the Senge's model, typically an organisation changes from a 'Controlling organisation' to a 'learning' one by people mastering certain (five) disciplines. They are personal disciplines relating to how people think, what they want and how they relate to each other. As the organisation acquires the disciplines, culture in the organisation transforms by consistently empowering the employees. Through learning, the organisation attains a capacity to create its future (Senge,1990, ch1, pt1).

In a modern society, universities play the role of places of highest learning. In many ways the disciplines of a learning organisation appear as an ideal fit with the traditional value system of a tertiary institution. When one examines the functioning of an academic discipline in a university, it epitomises the core values emphasised as the basis of learning organisations. The academic pursuits are underpinned by 'Systems thinking' (discipline 1), where full pattern of events influencing phenomena are pursued and portrayed. 'Personal Mastery' (discipline 2) is a strong academic value expressed by 'pursuit of excellence'. An academic constantly queries the 'Mental models' (discipline 3) where by the current paradigm is constantly challenged to project new visions of reality. 'Building a shared vision' (discipline 4) is the purpose of all learned congregations where each one excels in a certain perspective. 'Team learning' (discipline 5) is the basis of academic activity to develop a holistic vision. 'What university could refuse to embrace that as an ideal?' wonders Piper (1996).

While the model is organisationally, argued and developed, it still lacks an educational rationale'. Bowden and Marton in their book 'university of learning' (1998) examine the organisational characteristics of higher education, from a pedagogical perspective. The characteristics derived for quality in higher education, coincide remarkably with those proposed by Senge (1990) in his learning organisation model, even though the authors (Bowden & Marton) have based their work entirely on contemporary education literature. This should surprise no one, as Senge himself admits that his theories are no more than a collection of principles derived by many individuals looking at excellence in human endeavour in different walks of life.

Bowden-and-Marton's model clearly allows us to understand the nature of core characteristics which should underpin a 'university of learning'. In table 1, these are viewed in comparison to the learning disciplines as proposed by Senge, as it would apply to the case of a group of academics involved in the teaching of a professional course (Srikanthan, 2000).

**Table 1:** Comparison of Senge's five disciplines of a 'Learning Organisation' with Bowden-Martons 'University of Learning' model.

<i>Learning Organisation (Senge,1990)</i>	<i>Univesity of Learning (Bowden &amp; Marton,1998)</i>
<b>Personal mastery:</b> each person has a clear goal and understand the current reality. As a result there is a creative tension which is directed to exploration of alternatives.	Academics commit themselves to a deep exploration of the subject matter from the learner's perspective to develop alternative patterns of understanding .
<b>Systems Thinking:</b> The group develops a	The academics develop a holistic view of the

holistic view of the situation and explore the interconnections and interactions. They visualise patterns of cause and effects	competencies created by the course experience in students. They explore the potentials for 'discerning variation'.
<b>Team Learning:</b> Synergistic involvement in the work group tasks by each one. Use of 'dialogue' and 'skilful discussions'.	Synergistic involvement in a course/research team. Developing, along with colleagues, a holistic view of student competencies.
<b>Shared Vision:</b> Alignment of objectives of all members of the group.	'A collective consciousness of what is common and what is complementary' (p276).
<b>Mental Models:</b> A balanced advocacy with inquiry, in clarifying intentions and assumptions. Awareness of 'leaps of abstraction'.	'Differences and complementarities brought into the open' (p201) to get a clear view of each one's position. Uninhibited communication.

A comparison of the models reveals clear basis for developing a 'University of Learning' through the use of the disciplines of a 'Learning Organisation'. It provides a basis for proposing a model for *Quality in Higher Education* through an integrated use of the two models. Let' call this as '**Learning University**' model (just to distinguish it very slightly from the two parent ones). Such a model gains an enhanced credibility, as Senge and his team have just released a field book (in Sept, 2000) on 'Schools that Learn' which gives a guidance to schools for applying the learning organisation model.

## 7.0 Some Glimpses of a 'Learning University':

### Why Bother?

As a result of an aggressive pursuit of academic excellence based on competition among individuals and departments, universities have become places of fragmentation and isolation. Fragmentation comes from actions identifying with increasingly narrow segments of knowledge and group loyalties. Continued ad infinitum it leads to diminution of a sharing culture from academic community which is the very antithesis of collegial culture on which the universities are founded (*cf.* 'new collegialism' as described by Harvey (1995)). All the experts are now searching for an antidote to this fragmentation, to develop a harmonious culture (*ibid.*). Academic Community, as a social microcosm, will have to learn a new way of living based on the original ethos of collegial values. This can only brought about by a "Learning Universities " approach (Senge et.al., 1994, ch. 92).

### Starting off:

Management in a learning university is a challenging task. It is one of evolving an organisation capable of dealing with problems of today and develops its capacities to embrace tomorrow. The members are continually focussed on enhancing and expanding their collective *awareness* and *capabilities*.

There is no handbook of diagnostics and techniques for learning university, because the concepts are still in formative, experimental stages. Any practitioner of the learning concepts is a pioneer. A large interdependent group of academics and managers working in concert create the image of a 'learning university' (Senge et.al., 1994, ch.2).

The only guiding principles would be that:

- It should be effectively be integrating the "*The five disciplines*" of Senge (1990) with a predominant course/research team focus as advocated by Bowden and Marton (1998).
- 'Team learning' as opposed to the 'systems thinking' becomes the core discipline for the university (the 'Fifth Discipline' as Senge (1990) calls it). 'Learning' will gather significance both in cognitive and affective domains – the former as in knowing the theory in a pedagogical sense, and the latter as a value to hold in interacting with organisational situations.

#### **Features of a 'Learning University':**

- The central focus will be a **collective of course and research teams** which cut across traditional discipline/departmental boundaries. The senior management and services will essentially see themselves as supportive structures to facilitate their functioning.
- Students will play a considerably **proactive** role **in their learning**. They will be directing the learning in ways consistent with their vision in life.
- The current **boundaries** with the university and the other community structures will **become less rigid**. For instance, the transitions from schools will become more phased, so will be transfer of graduates to employment in industry.
- The number of **dedicated staff** and **resources** within the universities will **decrease substantially**, as more and more shared transitional arrangements are worked out with the community.

#### **Why a 'Learning University' is inevitable:**

The compelling need for learning university arises from the following considerations (Senge et.al., 1994, ch. 4&5) :

- ❑ Superior performance of the university by matching capacities and aspirations of staff to goals.
- ❑ Learning is the basis of consistent quality outcomes.
- ❑ Community responsiveness is built in through the learning orientation of the university.
- ❑ Competitive advantage: In the long run the only source of competitive advantage is the university's ability to learn faster than its competition.
- ❑ Committed staff: By acquiring a breadth of vision and depth of vision about own work, staff is able to contribute to university's goals.
- ❑ Management of change: As the vision is broad, adaptive skills of the people are high.
- ❑ Frank transactions: Reduced stress in the climate.
- ❑ Demand of times: People will be able to create instead of reacting to the new world that emerges.
- ❑ New order: Can provide a basis for a new order with harmony rather than fragmentation.
- ❑ Curiosity is a basic human nature; social learning is the fundamental source of satisfaction.

## **8.0 Conclusion**

With the advent of 'Learning University' concepts, higher education enters an area of leading rather than borrowing organisational concepts from industry as was the case in the latter part of the 20<sup>th</sup> century. By living up to the subtle value system of learning disciplines, higher education will become a beacon, not only in providing management knowledge, but in leading the practice as well.

## **Biodata**

G.Srikanthan is a Research Officer at the Centre for Management Quality, at the RMIT University in Bundoora, Victoria, Australia. His main area of interest is study of organisational excellence in Universities. Prior to his employment in the Centre in 1999, he was an academic in the Engineering Faculty of the same university where he held the position of a course leader of the Graduate Programs in Quality Management for a period of ten years.

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