Selecting and adapting an industrial quality assurance model to promote self-evaluation and continuous improvement in a higher educational institution

L R Brunyee
Border Technikon

ABSTRACT
Achieving organisational excellence requires commitment to a quality culture by all the sectors of an organisation. This article represents a senior management perspective on achieving organizational excellence and reports on some of the practical experiences gained and lessons learned in introducing a process of continuous improvement in an institution of higher education. In the past some technikons approached the issue of quality assurance in a “piecemeal” fashion. The external audit methods of the Certification Council for Technikon Education (SETEC) originally evaluated different academic subdivisions and functions of an institution somewhat independently of one another. This approach did not promote a holistic view of the area of quality assurance. To avoid this ad hoc approach the technikon, following a “benchmarking approach”, identified a number of umbrella models or frameworks that could be used to assess the overall quality of the organisation. The technikon was working with Mercedes Benz South Africa (MBSA) at the time and noted that MBSA had adopted the South African Excellence Foundation Model. This article highlights a number of factors that have influenced the selection of this systemic framework and focuses on the generic nature of this framework. This industrial model required modification for application in the higher education sector. This case study reports on the Technikon’s selection, modification and implementation of the model in its quest for organisational excellence through self-evaluation and continuous improvement.

INTRODUCTION
Achieving organisational excellence requires commitment to a quality culture by all the sectors of an organisation. This article represents a senior management perspective on achieving organisational excellence and reports on some of the practical experiences gained and lessons learned in introducing a process of continuous improvement in an institution of higher education. The article highlights a number of factors that have influenced the selection of a systemic framework to guide the process of improving organisational performance and focuses on the generic nature of this framework. This article also represents that stage in the action research process cycle that requires public reporting on observations and action learning experienced in bringing about change to a social system.

THE UNFOLDING PROCESS OF A NEW QUALITY ASSURANCE SYSTEM FOR HIGHER EDUCATION
One of the main factors influencing the decision to adopt a systemic quality assurance framework is the sustained high degree of uncertainty prevalent in our present higher education system. This uncertainty, due to the rapid and somewhat dramatic changes in the process of transformation, requires a holistic and systematic approach to managing the many factors that influence institutional performance. Set out here are some of the forces for change influencing the quality assurance domain.

Technikon perspective
According to the institutional planning guidelines of
the Department of Education (DoE) for the period 2000–2002, the 36 institutions which constitute the present formal South African higher education system must again each address and report on its processes of improving institutional efficiency (RSA DoE 1999:11-12). In the past some technikons approaches the issue of quality assurance in a “piece meal” fashion. The external audit method of the Certification Council for Technikon Education (SERTEC) originally evaluated different academic subdivisions and functions of an institution somewhat independently of one another. SERTEC’s main task has been the accreditation of technikon programmes based on a traditional notion of quality assurance. This traditional view of quality assurance is not limited to SERTEC. It forms the theoretical bases for many evaluation processes in higher education. This inspection methodology promotes the practice of pursuing quality by searching for deficiencies. Effort is used to identify individuals, units, programmes or institutions that show unacceptable behaviour relative to their peers or to some norm. Then action is taken to eliminate the offending behaviour or the offenders themselves. “This addition by subtraction approach to improving quality that dominates higher education is a recipe for mediocrity” (Seymour 1994:139).

However, SERTEC’s external audit process has evolved over the past ten years and SERTEC now also prescribes some form of self assessment prior to an external audit being undertaken. Institutional quality mechanisms that promote academic quality will be externally audited for the first time by SERTEC during 1999.

National perspective

Seen from a national perspective the present quality management system in higher education in South Africa is in a state of flux. This is due to a number of factors.

Firstly there is the closure of the Quality Promotion Unit (OPU), a non-statutory body established by the South African Universities’ Vice Chancellors’ Association. The OPU was set up in 1995 to facilitate an external audit process that would review the status of each university’s internal quality management system.

Secondly there is the uncertainty of the future of SERTEC’s functions and activities in their present form and the need for clarity on the systems to be adopted by the new Higher Education Quality Committee (HEQC), which is in the process of being established. There seems to be a sense of urgency as the Interim Higher Education Quality Committee must be formally established and must adopt and implement a national quality assurance system during the year 2000 (Singh, M 1999). The present debate seems to be focused on the various options that are available and on what to include in a founding document for the HEQC. The White Paper, however, clearly sets out the main functions of the HEQC and suggests the following three principles that should underpin an agreed operating framework:

- the formulation of criteria and procedures in consultation with higher education institutions;
- a formative notion of quality assurance, focused on improvement and development rather than punitive measures;

There is also the question of accreditation and quality assessment of private institutions offering higher education programmes. All private providers may apply for registration with the Department of Education on receiving accreditation from the South African Qualifications Authority (SAQA). However, it is not clear how the internal quality improvement and maintenance of standards at these private providers will be monitored. The South African HEQC could consider incorporating private institution registration and accreditation as an additional function under its control as is done by some HEQCs in other countries.

Finally one has to consider the debate surrounding the role of SAQA and the view that the control of accrediting bodies will contribute to continuous quality improvement at institutions of higher education in any form other than the traditional approach to quality control which still continues.

From a statutory point of view (Act 101 of 1997 and the White Paper) it is the first time that this debate has included and addressed both external and internal quality assurance management. We must now ensure that both formative and summative resource based and performance based quality assurance systems are established. It is time to ask new questions and, according to Freed and Klugman (1997:4 5), of major importance and significance in the quality assurance arena today is the change in the questions asked: “To facilitate this much needed shift from a resource model to a performance model, new questions must be asked, new data must be collected. We must again ask different questions for different times”.

It is accepted that the practice of institutional audits and accreditation will extend to other areas within the higher education if only to ensure the maintenance
of minimum standards and accountability. However, it is not given that institutions will automatically introduce systems of self-assessment and evaluation that promote continuous organisational improvement. How to balance these two quality assurance components of control and improvement is at the centre of the present debate.

SELECTING A FRAMEWORK FOR ORGANISATIONAL EXCELLENCE

Given this present state of flux at national level, the traditional approach followed by SERTEC with its ad hoc resource based external audits, as well as the demands and challenges of the institution’s and the nation’s agenda for greater efficiency and effectiveness, the Border Technikon found itself in a quandary. The transformed governance structures and the democratised institutional culture were now confronted with another form of institutional transformation to a quality culture of continuous institutional improvement. This culture change would require a different approach to the activities, policies and practices of institutional governance.

After reflecting on the experiences gained of democratic transformation over the past five years, it became clear that a systemic approach to developing a quality culture, which would permeate through the entire organisation, should be adopted. This is also strongly supported in the literature and in other case studies (Freed & Klugman 1997:205 206).

Benchmarking

Given these circumstances, the technikon followed a benchmarking approach to identify a relevant, practical and proven system of managing the quality assurance process. Benchmarking is defined as a process of identifying and measuring products, services and practices against the toughest competitors or those companies recognised as leaders in their industry (Stalser 1997:302). Benchmarking is a useful quality improvement tool that can support an institution’s efforts to continually improve its processes by learning how others do things. One can generate information and comparative performance data or uncover “key learning” (Macdonald & Tanner 1998:91 92). The first step in most benchmarking techniques is to clearly define the area of practice and organisational activity that is to be compared. A collaborative and functional benchmarking approach was adopted with the main objective being to improve the process of continuously identifying those factors that will collectively have the greatest impact on the overall performance of the organisation.

Reflection

This required that the institution reflect upon the present practices of quality assurance and organisational performance. This practice of reflecting on the status of the performance management system is part of a study on the process of aligning the institution to the new Higher Education Act (Act 101 of 1997). The action research technique used is based on Kemmis and McTaggart’s (1988) action research process and is, in turn, part of an unfolding process of developing the institution towards the culture of a learning organisation. A number of the technikon academic and support staff are completing both Master’s and doctorate degrees with action learning and action research as methodology. According to the literature the change to a learning organisational culture is one of the institutional development alternatives that should promote an environment conducive to self evaluation and continuous organisational improvement.

In the first stages of reflection a rationale for change was developed and it became clear that the present ad hoc resource based approach required changing to a systems approach. The language and discourse or rhetoric, which included asking new questions in the area of quality assurance, was also noted as requiring change. Following the action research cycle, the planned and informed actions were based on the search done to identify which practices would be most appropriate in these given circumstances. A number of umbrella models or frameworks that could be used to promote self evaluation and assess the overall quality of the organisation were identified. Besides the literature reviewed, note was taken of the work by SERTEC, the QPU, other models at technikons, ISO 9001 and the classic and seminal Deming approach.

THE SOUTH AFRICAN EXCELLENCE FRAMEWORK (SAEF)

Having worked with Mercedes Benz South Africa (MBSA) at the time, the Technikon noted that MBSA had adopted the South African Excellence Foundation Model (SAEF). It was also noted that other well known organisations had adopted this model, eg South African Breweries and Honeywell South Africa. This South African Excellence Model was the culmination of the work of a “think tank” formed by 12 organisations and facilitated by the South African
Quality Institute (Kopke 1998). The model is largely based on the experience of the Malcolm Baldrige National Quality Awards (USA) and the European Foundation for Quality Management (EFQM). The SAEF model has been recognised as being of international standard. SERTEC was also directly approached and presented with the model for their opinion.

To benchmark non educational enterprises is not unusual and institutions of higher education are responding to both internal and external pressures by adopting continuous quality improvement principles that have been developed for business and industry (Freed & Klugman 1997:10). This is an industrial model but, because it is also a generic model, it could be modified for application in the higher education sector.

The SAEF model itself is an assessment framework that enables an organisation through self assessment to examine its policies and practices. It is a constructive way to focus and prioritise the continuous improvement efforts and to measure progress. Self assessment using this framework is not seen as an initiative in competition with existing improvement activities. The framework covers most elements of an operation and helps to co-ordinate and link together the present improvement activities as part of the more effective systemic approach. This feature has been applied to ISO 9000 criteria and it clearly shows that all of the ISO initiatives can be accommodated within the framework (Kopke 1998). The technikon has applied this feature in preparing for SERTEC’s next audit and located these ad hoc activities within the SAEF systemic framework.

Criteria used to assess an organisation’s progress towards excellence

The model consists of 11 criteria as can be seen from the model in the figure below. For a sustained impact to be made all of these criteria must become entrenched in the institutional management system. These 11 criteria, which provide guidelines on elements of an institution’s operation, are divided into two groupings: Enablers (how things are done) and Results (what is being achieved). Each of these criteria has a number of criterion parts and self explanatory areas to address and consider.

---

**Enablers**

1. Leadership
2. Policy & Strategy
3. Customer & Market Focus
4. People Management
5. Resources & Information Management

**Results**

6. Processes
7. Impact on Society
8. Customer Satisfaction
9. People Satisfaction
10. Supplier & Partnership Performance
11. Business Results

---

**SOUTH AFRICAN EXCELLENCE MODEL**

---
The first grouping consists of six Enable criteria which describe how the organisation is run, how things are done and how results are achieved:

- Leadership: How the behaviour of the executive team and all other leaders inspires, supports and promotes a culture of institutional excellence.
- Policy and Strategy: How the institution formulates, deploys, reviews and turns policy and strategy into plans and action.
- Customer and Market Focus: How the organisation determines requirements and enhances expectations of customers and markets.
- People Management: How the institution releases the full potential of its people.
- Resources and Information Management: How the institution manages and uses information effectively and efficiently.
- Processes: How the institution identifies, manages, reviews, and improves its processes.

When the self assessment is being undertaken, each of the Enable criteria is given a score based on approach and deployment. The questions “How good is the approach?” and “How widely is it in use?” are asked.

The second grouping consists of five Result criteria which are concerned with what the organisation has achieved or is achieving as per set targets and how these results compare with others:

- Impact on Society: What the institution is achieving in satisfying the needs and expectations of the local, national and international community at large (as appropriate).
- Customer Satisfaction: What the institution is achieving in relation to the satisfaction of its external customers.
- People Satisfaction: What the institution is achieving in relation to the satisfaction of its people.
- Supplier and Partnership Performance: What the institution is achieving in relation to the management of supplier and partnering processes.
- Institution Performance Results: What the institution is achieving in relation to its planned operating objectives and in satisfying the needs and expectations of everyone with a financial interest or some other stake in the institution.

In assessing performance in each of the Result criteria the excellence of the results and the scope of the results must be addressed. These results should also, wherever possible, be benchmarked against the performance of competitors and the best in class institutions. This leads to performance stretching.

It can be seen from the criteria terminology that this is an industrial model and that it requires adaptation for the higher education sector. The educational purists often regard this initial problem as indicative of the negative influence of business on higher education. In a recent publication this somewhat incestuous view point was again expressed: “The world of business and a whole range of consultancy firms have jumped on to the quality bandwagon, hoping to carry with them the whole world of education. Educationists need to be wary of these assaults and retain their primary role as leaders and innovators in the field of education” (Singh, P 1999:5).

This viewpoint is quoted here to highlight the need for our sector to seriously consider the fact that there are some practices in business and industry that can add value to how we run the affairs of our institutions. In a survey on Total Quality Management (TQM) in higher education published by the American Society for Quality Control as far back as 1994, reference is made to the relative similarity of higher education institutional administrative activity to that of business (Melan 1998). To address some of these terminology and conceptual differences in the SAEF framework, use was made of terminology from other industrial models that had been adapted for the education sector, for example the 1995 Baldrige education pilot programme and the ISO 9001 Guidelines for the Education and Training Industry. On the Web there are also relevant benchmarks of organisations that have achieved excellence in organisational performance, which can be used in adapting the framework for specific circumstances.

Self assessment is central to the SAEF model and successful internal quality assurance is largely dependent on self assessment skills. These skills are developed by working through a fictitious case study specifically designed for a sector or industry. The Technikon is developing a higher education case study for in house assessor training. In the development of this process the Technikon has included further training of assessors which complements the standard training offered by the South African Excellence Foundation.

This additional training includes the development of skills and knowledge in the reflective learning processes as used in action research and by the “reflective practitioner”. The development of these additional skills is deemed as necessary in the process of institutionalising a quality culture at the Technikon. This assumption and subsequent practices are mainly based on the similarities that the three concepts action research, the reflective practitioner, and quality assurance have in their cyclical nature, which com
plement one another in the search for continuous improvement (Hatten, Knapp & Salonga 1997).

CONCLUSION

It is perhaps premature to predict the outcome of this specific quality assurance effort. However, the learning that has taken place to date has created a sense of hope in the present environment of uncertainty. There seems to be a greater drive for self determination amongst staff, a call for more information and a willingness to accept more individual responsibility. This, we believe, is the start to the development of a value system that is indicative of a culture of organisational quality.

In conclusion it must again be stated that it would be shortsighted not to accept the view that higher educational institutions can and should learn from the practices of the best non educational enterprises.

REFERENCES


Singh, M 1999. Presentation delivered by the Acting Director of the Interim Higher Education Quality Committee at an ordinary meeting of the Committee of Technikon Principals held in Durban on 4 June. (Unpublished.)
