Quality Culture, Academic Practices and Mechanisms: A Case Study of Vocational Education in Hong Kong

Thesis submitted for the degree of Doctor of Education at the University of Leicester

by

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By Lee Ming Cherk

Abstract

In line with current trends in education both locally and abroad, the Institute of Vocational of Education (IVE) has embarked on a Total Quality Improvement programme. The IVE (Tsing Yi) campus was one of the first to embrace this as it already had an established infrastructure for quality assurance which pre-dated this programme.

The purpose of this research is to study the academic quality culture in the IVE (Tsing Yi campus), and to determine factors that work for and against the implementation of Total Quality Improvement in a vocational education setting.

The research was carried out through a triangulation process involving documentary analysis, questionnaire surveys, and interviews.

To draw up an academic quality profile of the IVE (Tsing Yi campus), these areas were studied: staff values and beliefs in relation to TQM principles; staff perception of the college's quality-related activities and mechanisms; the structure and role, policies, practices and management of quality; the extent to which the academic quality climate effectively helps to deliver quality courses; and factors which can bring about a synergy between professionalism among staff and the current academic quality practices.

Major strengths in the academic quality culture at IVE (Tsing Yi campus) include staff's professionalism and personal commitment to quality, as well as an existing infrastructure for quality assurance. Weaknesses include the existence of balkanisation in the campus, the absence of active leadership in quality issues, and a one-way communication pattern.

To create a synergy between the quality culture, academic practices and mechanisms in the IVE (Tsing Yi campus), a TQM model has been proposed. Essentially, this involves creating a pre-condition for harnessing commitment and orchestrating changes, as well as allowing for better integration of staff.

Contents

Acknowledgements	2
Chapter 1: Introduction	
The Emerging Emphasis on Quality	8
Purpose and Focus of Research	16
Summary	19
Chapter 2: Literature Review	
Origins and Contemporary Significance of Quality Movement	20
Forces Encouraging the Adoption of Quality Management in Education	24
Applying Quality Concepts to Education	26
International Applications in Education	37
Hong Kong Applications	43
Culture	57
Summary	73
Chapter 3: Methodology	
Research Strategy	75
Documentary Analysis	78
Questionnaire Survey	84
Interviews	93
Summary	99

Chapter 4: Documentary Analysis

Overview	100
Documents Relating to the Official Stance on Quality	100
Monitoring of Academic Quality	110
Documents relating to the VTC Strategic Plan and Implementation	113
Quality in the VTC - Papers relating to Vision, Mission, and Strategy	117
Policy Documents relating to the Overall Organizational Culture:	
Factors that work for and Against a Quality Culture	122
Summary	124
Chapter 5: Presentation of Main Survey Findings	
Sampling	126
Parametric Tests	126
Presentation of Survey Findings	129
1. Values, Beliefs and Attitude Towards Academic Quality	130
2. Structure, Policies, Procedure and Practices for Academic Quality	146
3. Management of Academic Quality	156
Correlation between Variables and a Positive Inclination Towards Academic Quality	161
Differences in Mean by Rank	162
Summary	173
Chapter 6: Interviews	
Introduction	174
Profile of Interviewees	174
Academic Ouality	175

Working Relationships	180
Quality Assurance Mechanisms	186
Management of Academic Quality	190
Summary	195
Chapter 7: Analysis	
Defining Quality	197
Comparison between VTC Quality Management Initiatives and those in the	
Schools and the UGC Sectors	202
Quality Culture in the Tsing Yi Campus	203
Culture and the Successful Organization	220
Summary	225
	223
Chapter 8: Conclusion	
Preamble	226
Main Findings	228
TQM Model in the Tsing Yi Campus	231
Significance of Study	238
Recommendations	241
Summary	243

Appendix

References		258
5.	Interview Schedule	257
4.	Revised Questionnaire	252
3.	Questionnaire- Pilot Study	247
2.	Framework for Documentary Analysis	246
1.	Titles of Documents Analysed	244

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Chapter 1. Introduction

Emerging Emphasis on Quality

This section discusses how the industrial and service sectors' emphasis on quality has influenced education.

Major World Trends

In the face of world-wide corporate trends towards downsizing, flatter organizational structures, devolution of responsibility, cost reduction, doing more for less, and greater accountability in the deployment of resources, the issue of 'quality' in its many facets has been given greater prominence. The notion of 'quality' has been encapsulated in management theories and norms such as BS5750, Investing in People, ISO9000, Fitness for Purpose, Quality Control and Total Quality Management (TQM).

Total Quality Management (TQM) probably covers the widest spectrum of quality issues. It is an industrial management model first introduced by W.E. Deming after the war when Japan was rebuilding its economy. Two aspects were significant in this style of management: a statistical method of measuring quality and a focus on the worker. By the 1970s, Japan's industries developed significant market shares and in many sectors, took on economic giants in the west. TQM was credited for Japan's success. Soon, American industries began to suffer and became receptive to teachings by gurus like Deming (1986), Juran (1974) and Crosby (1979). As a result of this, American industries made an economic comeback by building a reputation for producing quality products.

The quality movement has also made an impact in Britain since the early 1980s where there have been a number of initiatives, notably the establishment of the British Quality Association in 1981 and the government White Paper on Standards, Quality and International Competitiveness, published in 1982.

In the education sector, there has also been a growing concern about quality. The World Bank Review 'Priorities and Strategies for Education (World Bank 1995, p.155) identified Quality in Education as one of its six areas of reform and devoted a substantial chapter to analyzing 'Improving Quality'.

Quality in education has been mainly externally driven. In America, corporations have lobbied for the introduction of TQM into the school system because they were dissatisfied with the quality of the products of the public school system (Capper & Jamison, 1993).

In Britain, schools and institutions of higher learning have been driven by various developments to introduce quality systems since the Education Reform Act of 1988. Growth of quality management has been fueled by the government's concern for greater accountability and for the rise in managerialism in higher education institutions (Lomas, 1996, p. 60). Consequently, higher education institutions are compelled to review the way in which they operate and control their physical and financial resources.

In Western Europe, governments' interest in reducing public expenditure and finding ways of publicly ascertaining institutional performance, output productivity and costs, have led to the establishment of quality assurance agencies, while in Eastern Europe, quality assurance in higher education has been given prominence to enable Eastern and Central European higher education systems to compete and cooperate with their international counterparts.

In Australia, due to a unified national education system, there has been growing urgency for universities to place emphasis on the quality of teaching with the rapid shift from elite to mass elite education. In New Zealand, moves on quality have been slower and more sporadic. However, quality has been given impetus because the workforce was less qualified than other economies, such as Japan.

The Hong Kong Context- Government and Business

This section discusses the background to Hong Kong's government and business sectors' interest in quality.

As in many Asian countries, the Hong Kong business sector looks to the West for management theories. In recent years, it has not been uncommon to see TQM as the panacea for all kinds of malaise, in the face of fierce economic competition from neighbouring countries like Taiwan, Singapore and Thailand. Certainly, with the economic crisis, phrases such as "improving productivity to increase competitiveness" have been often used in the propaganda.

Since the early 1990s, there has been a move in the public sector towards greater public accountability and concern for Quality has been expressed in such initiatives as Governor Patten's Performance Pledges. Consultants have been commissioned to carry out audits of public bodies, and to make recommendations for increasing productivity. In the wake of the Enhanced Public Productivity (EPP) drive, the public sector has also been told to reduce the use of resources by 5%, while maintaining its level of productivity. And since 1999, because of the poor employment situation, the civil service has been closely scrutinized for how resources are being used and the quality of results that they produce.

The Hong Kong School Sector

Like the rest of the Hong Kong public sector, the Education Department has been focusing on quality with the objective of maintaining Hong Kong's competitive edge as an international trade and financial center, in the face of fierce competition from work forces in mainland China, Taiwan and Singapore. All three areas have work forces which are not only comparable to Hong Kong's, but which are also computer literate and cheaper. There has also been a public concern about value for money. Against the backdrop of the Enhanced Public Productivity (EPP) drive, questions about whether government spending produced better quality teaching and products and educational outcomes were raised.

Since the early 1990s, various quality improvement schemes have been piloted. These include the School Management Initiative (SMI), Quality Assurance Initiatives (QAI) and the Quality Education Development Fund (QEDF), all of which have been dealt with in the Education Commission Report No. 7.

The School Management Initiative (SMI)

The School Management Initiative (SMI) was introduced in the early 1990s following a government-wide movement towards greater public accountability, especially for the use of resources. As the name implies, this initiative is targeted at school based management and administration, as well as decentralization.

Quality Assurance Initiatives (QAI)

The Quality Assurance Initiative (QAI) involves external inspection in schools and promoting continuous improvement (PTU News, 1998).

Quality Education Development Fund (QEDF)

The 5 billion-dollar Quality education Fund was set up to "cater for non-profit making initiative within the ambit of basic education, i.e. pre-primary, primary, secondary and special education" (Quality Education Development Fund Secretariat, 1998). The main purpose is to provide one-off funding for projects to promote a quality culture in the schools. Funding is directed to projects that promote the quality of teaching and learning, all-round Education, school-based management, and educational research.

The Education Commission Report No. 7

The Education Commission Report No. 7 on Quality School Education sets out the blue-print for implementing quality measures in Hong Kong. The Report is very comprehensive and covers a wide range of areas in education.

The report aims to enhance the community's appreciation for the need for quality school education, and to inculcate a quality culture in the school system to contribute to the personal growth of students, and the pursuit of education. In addition, it provides a practical framework for key players in the school system to achieve the aims of education in an efficient, cost-effective and accountable manner, recommends an integrated strategy for quality assurance and development, and provides incentives for quality performance. It also aims to assist and remedy under-performing schools to encourage initiatives and continuous improvement. Lastly, it recommends a framework for raising the professional standards of principals and teachers and enhancing their professional education and development (Education Commission, 1997; Mok, 1998).

In addition to these, by the end of the academic year 2000/2001, all school teachers in Hong Kong should possess basic skills in information technology. Benchmarks will also be set for assessing teachers' language ability (Pun, 2000).

The Hong Kong Tertiary Education Sector

In Hong Kong, all the universities come under the purview of the University Grants Committee (UGC). The UGC advises on the academic development and funding of the universities. An added responsibility of the UGC is to ensure that quality lies within the institutions.

The local situation in Hong Kong has called for greater scrutiny of the universities and for quality assessments. This need has arisen because the role of higher education has evolved over the years. Hitherto, the schools' and universities' main function was to sort and select (Leung, 1998), mainly for the civil service. However, because of the changing political and economic climate, the tertiary education sector expanded rapidly from 1989 onwards to 18% of the relevant age group. The job of schools and universities became more complex: it was to educate (Leung, 1998). Coupled with this expansion was an increase in the unit cost of higher education by 24%. As a main funding body, and playing the planning role, The University Grants Committee (UCG) has repeatedly emphasized the importance of excellence, innovation, cost-

effectiveness and public accountability in running higher education in Hong Kong. The UGC's role in quality assurance lies in reviewing, maintaining, developing and enhancing the quality of the institutions' provisions, and monitoring them through well-established mechanisms. Towards this end, it has been measuring the quality of output (i.e. graduates), and 'value-addedness' (i.e. the quality of the output minus the quality of the intake as well as input), which the UGC believes can form the basis of a quality assessment exercise (UGC, 1996). One Teaching and Learning Quality Process Review (TLQPR) was conducted between 1996 to 1997, and two Research Assessment Exercises (RAE) have been conducted since 1994. Management Reviews were also conducted to ensure that each institution had in place processes for resource allocation, planning and financial planning and that such processes were readily observable, and could cope with the pressures on the general reduction in resources (Mok, 1998).

The Case Study: Vocational Education in Hong Kong

With a student population of 120,000, the Vocational Training Council (VTC) is Hong Kong's main provider of vocational education and training. Vocational education is offered through the Hong Kong Institute of Vocational Education's (IVE) nine campuses; training to prepare students to work in the industrial, commercial and service sectors is provided by 22 training and development centres, various apprenticeship and training schemes, and three skills centres for the disabled (Taylor, 2000). These are managed by the heads of the institutions and directed by a directorate, led by the Executive Director and supported by a central services division stationed at the VTC headquarters.

The Hong Kong Institute of Vocational Education (IVE) is a merger of the previous 7 technical institutes and 2 technical colleges, each which have since become a campus of the IVE. The Hong Kong Institute of Vocational Education (Tsing Yi) first opened its doors in 1993 under the name, Hong Kong Technical College (Tsing Yi). Together with its sister college, the Hong Kong Technical College (Chai Wan), they formed the then Technical College arm of the Vocational Training Council, offering sub-degree (higher diploma) courses.

When the author's research was being carried out, the then Hong Kong Technical College (Tsing Yi) had seven academic departments (Business Administration, Computing and Mathematics, Construction, Design, Electrical and Electronic Communication, Manufacturing Engineering, Mechanical Engineering) and a Language Centre (then known as the Centre for English and Communication Studies). The staff strength then was around 200, and the student population numbered around 3900. Most of the staff had worked in the commercial and industrial sectors, and were well-versed in quality issues in those contexts. A significant number of staff held master's and doctorate degrees, while many others were in the process of upgrading their qualifications. At the start of IVE in September 1999, one academic department was moved to another campus.

With the Hong Kong Technical College (Chai Wan), the Hong Kong Technical College (Tsing Yi) operated under a joint Technical Colleges Academic Board (TCAB). The technical colleges worked in lockstep, and often followed the same decisions made at the VTC headquarters level.

The mission of the Technical Colleges was:

'to deliver high quality tertiary level education and training, leading to satisfactory employment prospects for students and a foundation for their continued and professional development.

to establish a close working relationship with commerce, industry and the wider community, enabling the students and staff to help the needs of Hong Kong.'

(Hong Kong Technical Colleges Prospectus 1998/1999)

In 1996, under the aegis of the TCAB, the Academic Review Committee set down a quality policy paper (VTC, 1995a). Individual departments in both technical colleges then wrote their own departmental quality policies, closely following the framework laid out in the Paper. In addition, the paper laid down the blueprint for quality

assurance committee structures, as well as various quality assurance mechanisms. Such mechanisms included the award of quality grades, academic reviews, course monitoring and quality audits.

The Academic Review Committee's paper (VTC, 1995a) was based on the premise that the quality assurance of teaching and learning was its primary concern. Although there were references to harnessing staff commitment and empowering staff, these were mentioned in passing and treated as a means to assuring the quality of teaching and learning, and not as ends by themselves. In addition, the approach taken was quality assurance, with possible continuous improvement.

As the paper was typically a top-down edict to push a quality policy down the line, staff response to quality issues was generally apathetic (Lee, 1996). Given their previous working experience in industry, most staff were familiar with TQM concepts. However, they held reservations about applying them to an organization like the technical college because of the prevailing organizational structure and culture. Many of the staff believed that the implementation of quality policies would be just 'busy' work leading to no tangible or immediate results (Lee, 1996).

In September 1996, the Vocational Training Council underwent a management review commissioned by the Government. In response to the recommendations made in the management review report by the consultants, Segal Quince Wicksteed (Asia)

Limited, the two technical colleges and seven technical institutions were merged into one entity, known as the Hong Kong Institute of Vocational Education.

In the months leading to the commencement of the IVE in 1999, work was already getting underway. In response to the consultant's recommendation in the Report for a well-articulated quality policy, the Executive Director proposed a strategy which led the VTC to agree, among other things, to the following actions:

- (i) a clarification of the Council's mission; the development of key academic
 quality initiatives to support and enhance the quality of teachers and trainers,
 including teaching and learning, curriculum and staff development;
- (ii) the introduction of robust monitoring and reviewing systems and procedures as part of Total Quality Improvement;
- (iii) the introduction and application of a Total Quality Policy
- (iv) review of training effectiveness as part of Total Quality Improvement.

These points were subsequently encapsulated in the VTC Quality Policy (1997b). The ARC 1996 Quality Paper was subsumed under this paper.

The main aim of this policy was to map out a strategy to empower staff and win their commitment to the organizational changes through the creation of a support oriented culture. As this was a facilitating document, it dealt with the general principles of customer focus, process improvement and total involvement while encouraging local units to derive their own quality policies, within the framework of the Council's Quality Policy.

Purpose and Focus of the Research

The study begins with the premise that the mere existence of a set of mechanisms and activities is no guarantee for quality. Therefore, there has to be a quality culture which embraces all aspects of the policies, procedures and practices of the institution. This culture of quality requires more than policies, procedures and documentation. It requires an awareness of, commitment to, and involvement in quality principles and programmes of everyone in the institution.

Broad Statement of Aims

The author's research is a case study of the Hong Kong Institute of Vocational Education (Tsing Yi campus). The study aims to investigate the academic quality culture of the institution, and to find out areas which are conducive to the introduction of TQM and areas which impede quality developments. In particular, it studies the official stance on quality, as well as how staff view and react to official quality policies and mechanisms. It also studies how a true quality culture could be infused into all the activities of the institution.

What The Study will Cover

The study will cover these areas:

- the official stance on academic quality
- organizational culture
- staff's values, beliefs and attitude towards academic quality
- staff's attitude towards quality structures, policies and mechanisms
- staff's attitude towards management of academic quality

Official Stance on Academic Quality

A study of official policy papers and documents on academic quality is aimed at ascertaining the approach that is taken in quality management. Findings from documentary analyses of these papers are compared with reported staff perceptions on quality, and the organizational culture, as well as the background to the policies which have been introduced. The papers are analyzed and conclusions on the feasibility of carrying out the official policies are reached.

Organizational Culture

A study of the official reports on the VTC culture will be compared with survey findings on staff's values, beliefs and attitude towards academic quality, as well as with interview findings. A profile of the culture at the Hong Kong Institute of

Vocational Education at Tsing Yi is then drawn up. The areas which will be studied are staff's values and commitment to academic quality, the notion of external and internal customers, working relationships, communication, and deployment of resources. The issue of rank, and how it affects perceptions and attitude, will also be explored.

Management of Academic Quality

In this section, the following are examined: how staff perceive the effectiveness of existing quality mechanisms and how they perceive the way quality has been managed. Information will be drawn mainly from the interviews and the surveys.

Total Quality Initiative and Quality Culture at IVE (Tsing Yi campus)

Finally, the Total Quality Initiative as proposed by the VTC Quality Policy (1997) is then compared against the quality culture at TsingYi. A SWOT analysis is then done to determine areas which are conducive to implementing the Total Quality Initiative and areas which are not.

Specific Objectives

The objectives of the research are to:

- ascertain the attitudes, values and beliefs of staff
- ascertain staff perception of the College's quality-related activities and mechanisms
- establish the structure and role, policies, practices and management of quality
- assess the extent to which the academic quality climate effectively helps to deliver quality courses
- determine factors which can bring about a synergy between professionalism among staff and the current academic quality practices.

Research Questions

Broadly, the study seeks to answer these questions:

- 1. What is the senior management's definition of academic quality?
- 2. What is the rank and file academic staff's definition of academic quality?
- 3. What is the current academic quality culture of the Tsing Yi campus?
- 4. What are the current academic quality practices in the Tsing Yi campus?
- 5. To what extent does the current academic quality culture match the aspirations of staff, students and senior management?
- 6. To what extent do the current academic quality culture and practices bring about quality courses?

Summary

This chapter outlines the wider context of international quality movements, as well as similar quality movements taking place in various education sectors in Hong Kong. It then narrows down to discussing developments in the Vocational Training Council and particularly its move toward developing a quality system in the wake of economic and organizational changes. The chapter ends by outlining the purpose of this research, which is to study the academic quality culture of the Tsing Yi Campus of the Hong Kong Institute of Vocational Education.

Chapter 2. Literature Review

Origins and Contemporary Significance of the Quality Movement

This section discusses how the notion of 'quality' gained prominence in the industrial and business sectors. It also describes the major proponents of the quality movement and their concepts of quality.

The concept of 'Quality' gained prominence in the manufacturing sector of the Western world when Japanese industries established global trade supremacy between 1945 and 1985 (Bank, 1992), beating their western counterparts. Much was made of Japan's application of Deming's and Juran's theories on Quality. In subsequent years, competition was further intensified by the removal of trade barriers and the emergence of successful industries in the Pacific Rim (Hall, 1996; Lozier and Teeter, 1996).

Ironically, although Japanese industries were the quickest to apply Quality principles, the original thinking about Quality was that of a number of American Quality 'gurus', notably Deming and Juran (Bank, 1992; Murgatroyd and Morgan, 1993).

This section focuses on some of the Quality gurus, both American and Japanese, and highlights how the principles, which originated from business and industry, are now applied to service sectors, including education. These quality principles focus on scientific, statistical methods of measurement and problem solving. At the same time, there is recurring emphasis on continuous improvement, strategies, customercentredness, team work, management commitment, leadership, staff empowerment, and company-wide control.

W.E. Deming

Deming's early works focussed on statistical methods for measuring quality in the engineering industries. He specifically advocated using statistical methods to reduce variability and so improve production.

He also developed a systematic problem solving approach known as the Deming or PDCA (Plan, Do, Check, Action) cycle which can ensure a controlled assessment of the work situation instead of merely fire-fighting (Bendall, et al. 1995).

Deming (1986) also focussed on the role of senior management in managing quality and in preventing errors. He also urges the use of organized continual quality improvement which are achieved through a constancy of purpose, a long term vision, and a culture of improvement. His famous 14 points (Deming, 1986), reflect such concepts.

J. Juran

Like Deming (1986), Juran's (1974) ideas were widely accepted in Japan. Also like Deming, he placed the responsibility for quality on management. He also defined quality as 'fitness for purpose'. Since he believed that most quality problems arose from management decisions, he developed the notion of Strategic Quality Management to reduce the cost of quality and increase conformance. An overriding theme in Juran's work is an emphasis on planning. He also highlighted the savings that could be made through measuring and resolving quality problems through quality control.

Juran also advocated 'quality directed leadership', and laid out a systematic approach to a company-wide quality program which includes strategic planning, building continuous improvement processes, arresting problems, reporting progress, creating awareness of quality and giving suitable training.

P. Crosby

Crosby (1979) focused on senior management and argued that profitability could be achieved primarily through quality improvement. He is best known for his 'Four Absolutes': the definition, the system, the standard and the measurement.

Crosby (1979) defines 'quality' as conformance to customer requirements, not intrinsic goodness. To achieve 'quality', the focus of the system must be on prevention, and not detection. Perhaps Crosby's major contribution to the quality movement is the notion of zero defect. This involves putting systems in place so that things are done right first time and every time.

Crosby (1979) also sets down his 14 steps of quality management which stress that quality management must be management-led and that a Quality Improvement Team should be set up to run the programme. To harness employees' commitment, he also advocates raising their level of quality awareness and encouraging teams and individuals to set goals.

Armand Feigenbaum

Armand Feigenbaum (1991) is the originator of total quality control. He is also often credited with linking these two concepts: 'total' and 'quality'. According to him, total quality goes beyond the administrative function to cover the measurement and control of quality at every stage: from customer specification, sales, design, engineering, assembly and shipment.

Total Quality Control for the 1990s is defined by Feigenbaum (1991) in the form of ten crucial benchmarks. The points he makes are very similar to Deming (1986), Juran (1974) and Crosby (1979). Quality management is seen as an ethic as well as a company-wide process. Quality is defined by the customer. Costs are taken as a sum, not a difference. Other concepts relating to quality include seeing quality as a route to cost savings and that as mutually interdependent with innovation. Achieving quality requires both individual and team zeal and continuous improvement. It should also be implemented within a total system connected with customers and suppliers, whether it be the end customer or the person at the next desk (Bendall, et al. 1995).

In recent years, Japanese theorists have had increasing influence over the west, particularly in the implementation and development of quality analytical tools. The main players are Ishikawa, Taguchi and Shingo.

Ishikawa

Ishikawa (1986), a widely acclaimed Japanese guru, was a main player in the company-wide quality control movement which started in Japan around 1955. He was also a pioneer of the quality circle movement in Japan. He was also the originator of the seven tools of quality control which are: the pareto charts (to prioritize action), cause-and- effect diagrams (to identify the causes of variation), stratification (to divide data into subsets); check sheets (for data collection); histograms (to display variation graphically), scatter diagrams (to identify relationships between two factors), and control charts and graphs (to monitor and control variation).

Shiego Shingo

Shingo developed the Poka-Yoke systems, used to prevent defects from occurring. The basic idea is to stop the process whenever defects are occurring, find out the cause and prevent the defect from recurring. This method gives rise to 100% inspection which takes place during a production process and not retrospectively.

The concepts mentioned above have a following in the education field. This is because, due to educational reforms, educationalists have had to face many changes and suffered a lack of direction in recent years. Quality concepts with emphasis on accountability, effectiveness and efficiency, constancy in purpose, having a long-term vision, and developing a culture of improvement, therefore have an 'anchoring' effect as they provide a sense of purpose and direction (Sallis 1993, West-Burnham 1992).

Forces Encouraging the Adoption of Quality Management in Education

This section discusses how the notion of quality management has influenced the education field.

It has been found that many colleges are initially attracted to the idea of BS 5750 but soon find that it is too restrictive and inflexible. As a result, they devise their own quality assurance systems or combine them with a TQM management style (Sallis, 1990).

Sallis (1993) argues for the introduction of TQM into education as a result of what he calls the 'four imperatives'. The moral imperative dictates that young people should be imbibed with moral and professional principles. The environmental imperative recognizes that schools and colleges operate in a changing social context and should therefore prepare students for these social, economic and technical changes. The 'survival imperative' arises out of parental and student choice and formula funding which has made institutional survival an issue it had never been before. Finally, Sallis argues, there is the accountability imperative. This is the need for organizations to develop internal mechanisms and procedures to allow them to respond to external demands for accountability.

On higher education, Sallis (1992) has also identified similar imperatives. The 'professional imperative' refers to the college itself wanting to improve the quality of its service. The 'moral imperative' refers to the college's customers deserving a quality service. The 'competitive imperative' arises because other colleges have introduced a quality assurance system. Finally, the 'survival imperative' dictates that the college has to introduce TQM or other forms of quality management because funding bodies are demanding it.

Out of these four factors, perhaps the most compelling ones are the competitive and survival imperatives. In the majority of cases, the rationale for implementing TQM in educational institutions is externally motivated (Idrus 1996, p.35).

Hill and Taylor (1991) state that market forces are having a very great impact on higher education. Consequently, in higher institutions of learning, organizational structures have had to adapt and change to meet a host of challenges in the environment.

One of these challenges has been an increasing pressure to make further and higher education more accountable in relation to economy, to be efficient and effective, and to interrelate and assess these factors (Sutcliffe and Pollock, 1992). In Britain, the Education Reform Act (1988) and Further and Higher Education Act (1992) have compelled institutions to review the way in which they operate and control their physical and financial resources. The White Paper (1988) proposed a quality audit and assessment unit, and made associated attempts to define various aspects of educational quality. In addition, funding bodies require from institutions that they have appropriate systems for assuring quality and can provide indicators of successful performance before purchasing their educational services (Marsh, 1991). In other words, the growth of Quality Management (QM) has been fuelled by the government's concern for greater accountability and the rise in managerialism in higher education institutions (Lomas 1996, p.60).

Concern over the quality of student learning has become an issue of public interest. In addition, the notion that learning should take place without reference to the economic and social requirements have been coming under attack. At the same time, there has been a rise in the level of managerialism in education. This has arisen out of the necessity to do more with less. As a result, the education sector began to look to the industrial and commercial sectors for management models. Line management began to replace professional responsibility. Along with the development of line management came the emergence of strategic planning, mission statements, objectives, action plans and performance indicators. Institutions are no longer just accountable to the academic community but to the needs of society, the economy and the State as well (Lomas, 1996).

Applying Quality Concepts to Education

This section discusses how quality management, particularly TQM is applied to education. Concepts such as quality assurance, the customer, people and leadership are highlighted here. Finally, challenges facing the implementation of TQM are discussed.

Definition of Quality

Defining 'quality ' is often fraught with difficulties (Sallis, 1993). In Quality Management theories, 'quality' is often a subjective term, to be linked to the expectations and satisfaction of an organization's customers (Ellis, 1993). In cases where there are multiple customers, or no obvious customers, quality is also defined as 'fitness for purpose' (Juran, 1994). In other situations, quality means an emphasis on conformity to standards, or on a 'predictable degree of uniformity and dependability at low cost and suited to the market' (Deming, 1986). Essentially, 'quality' means conformance to requirements. In the education context, 'quality' means meeting the actual needs of children, their parents, or the Local Education Authority. In the higher education sector, universities have to reassure themselves that their teaching is up to standard. As public funded bodies, they also have to reassure society that they are delivering the service they are paid to deliver. And at a more basic, commercial level, universities try to assure their customers, whether students, employers or grant-awarding bodies, that their service is up to a specified standard (Ellis 1993a).

The responsibility of defining quality rests with the customer and the supplier (West-Burnham 1992). The customer has to define the specification with reference to intended usage, required outcomes, cost, standards, quantity etc. It is for the supplier to clarify the definition, propose enhanced standards and conform to those standards. However, educational institutions often find themselves having to deal with more than one set of customers. Often, the requirements of stakeholders, customers and clients overlap. Therefore, it is up to suppliers to strike a balance between competing interests and needs, and to meet customer needs within those constraints (Sallis, 1993). Although this is a time-consuming process, unless and until this happens, the

lack of agreement will create tensions and discords between these groups and compromise quality (Lomas, 1996).

Harvey and Green (1993) provide a framework for defining 'quality in education' by suggesting that 'quality' can be viewed as 'perfection', 'fitness for purpose', 'being transformative' and 'making value for money'. Perfection is that which is universally regarded as of highly superior standards. Fitness for purpose is concerned with teaching effectiveness (the outcomes of teaching process) and teaching efficiency (the use of inputs into the teaching process). The former is linked to the achievement of course aims and objectives, and the latter to the resources which are used to meet the aims and objectives. Quality is seen as transformative as it measures the degree to which the teaching has developed the knowledge, abilities and skills of the students. One measurement that is linked to this is that of 'value-addedness'. Finally, quality is also assessed in terms of the returns from investing or spending in a certain area. This approach is closely linked to the notion of accountability.

Total Quality Management (TQM)

TQM consists of a management philosophy and company practices which aim to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization (Ho and Wearn, 1995). Tobin (1990) describes TQM as the totally integrated effort to gain competitive advantage by continuously improving every aspect of organizational culture.

Feigenbaum (1991) is credited with linking 'total' with 'quality'. He stresses the need for quality approaches to permeate every aspect of an organization. Witcher's (1990) defines TQM is even more comprehensively. For him, 'Total' means every persons in the firm is involved (including customers and suppliers); 'Quality' means that customer requirements are met exactly; 'Management' means that senior executives are fully committed.

In other words, Total Quality Management is concerned primarily with organizational improvement through identifying and solving problems by groups of employees at various levels in the structure (Hill and Taylor, 1991; Sallis,1992). This problem solving process is usually supported by the development of teams and it focuses on corporate goals. TQM recognizes that all employees can make an impact upon the quality of goods and services provided. Thus the organization's systems and processes are regarded as highly as its products and outputs.

In TQM ideology, quality is defined as the customers' perception of quality. The concept of a customer is further defined to include internal as well as external customers. Moreover, everyone in the organization is not only a supplier but also a customer of someone else. In this paradigm, internal customer relations is important since it directly affects employee morale, commitment and motivation, which are in turn determinants of external customer relations (West-Burnham, 1992; Boardman, 1998).

Finally, TQM implies a focus on the cost of quality or more correctly, on the cost of not having quality, i.e. the price of non-conformance.

TQM is a much more ambitious management paradigm as it focuses on the totality of management, and continuous improvement whereas Quality Assurance, after all the rigor of quality control at all stages to ensure that standards are met at all level, tends to maintain the status quo (Hill and Taylor, 1993).

Murgatroyd and Morgan (1993) state that a critical aspect of a TQM -run organization is the systematic recording of what is happening and the use of these records to feed back information about what is happening to the members. Recording of activities include setting performance indicators, writing up the processes for achieving milestones (i.e.standardizing the knowledge' or 'codifying best practice'), and systematically evaluating processes that are linked to the achievements, with a view to fine-tuning and improvements.

Quality Assurance

Quality Assurance is defined as 'fitness for purpose' and 'safe in use' (Sutcliffe and Pollock, 1992) or ensuring that standards are specified and met consistently for a product or service (Ellis, 1993a). It originated from safety critical industries such as aerospace, nuclear power and defence, and their principles are embodied in BS5750 or ISO9000. This approach places a lot of emphasis on quality control, written evidences, documented systems and procedures. Its main objectives are to produce a product that satisfies the customer as cheaply as possible, while meeting delivery requirements. Continuous improvement is not one of its main goals, although it sometimes achieves that as a by- product (Sallis, 1992).

It can be seen from the above discussion that standards of some kind are essential for quality assurance and that consumers of a product or service should be the ultimate arbiters of quality. From this stems the idea that quality is that which satisfies a consumer or customer. In its simplest form, quality in university teaching would be that which satisfies the primary customer, the student. Thus the needs of students might be stated by them or might be implied on their behalf by the teacher (Ellis, 1993a).

To meet the standards set by customers, a management process is established to control activities at all stages to prevent quality problems and ensure only products that meet customer requirements reach the customer (Munro-Faure and Munro-Faure, 1992).

Many of the principles of quality assurance are derived from the BS5750, or now better known as ISO9000. In some quarters, concern about implementing quality assurance in schools has been voiced. Because BS5750 is about conforming to specifications, there is a danger of creating the sense that 'We have got it right, defined it and now all we have to do is deliver', thereby diminishing the drive to improve. This puts it at odds with the TQM notion of continuous improvement (Ellis 1993; Hill and Taylor, 1993; Sallis, 1992; West-Burnham 1995). For example, the notion of conformity to a quality manual can hinder the commitment to improvement

through learning and diminish personal responsibility. However, Sanders (1995) comments that quality assurance must have as its main purpose the continuous improvement of the quality and standards of teaching and learning. He further suggests that, in addition to institutions being held accountable to external stakeholders (i.e. external accountability) and to their own academic community (internal accountability), they should also learn from each other.

Muller and Funnell (1992), in proposing a TQM model for vocational education, argue that the need for clear operational procedures is as important as having a strategic plan. In essence, quality assurance mechanisms revolve around these activities: use of statistical process control, emphasis on prevention, external accreditation, delegated involvement, audit of quality systems, cause and effect analysis (Dale and Plunkett, 1990). West-Burnham (1995) also sets out steps towards conforming to specification. These include: setting a clear commitment to quality in the mission statement and a policy for managing quality, having a quality manual which outlines the specific components of how the school will manage quality, defining responsibility clearly, developing contracts to confirm the mutual obligations of supplier and customer, establishing standard operating procedures (e.g. schemes of work, marking schemes) and using quality audits.

Finally, in quality assurance, conformance to specification must be measurable, either quantitatively or qualitatively.

One major criticism of quality assurance in education is that it places too much emphasis on a system of control and measurement and too little on the human, creative, subjective and non-quantifiable aspects of education. Fish (1991) places quality assurance systems into the 'Technical Rational Model of Professionalism'. She suggests that the foundation of this model is behaviourist, and that it places emphasis on evidence that is visible and observable so that it can be monitored and measured. She raises the criticism that such a model with its emphasis on accountability does not trust professionals and therefore has to set basic standards in order to have a yardstick and base from which to proceed. According to Fish, such a

system is not sufficiently interested in recognizing the inevitably subjective nature of evidence, and in seeking alternative perspectives and interpretations. In addition, as Pring (1992) points out, learning is an incremental process and not something which can be defined in absolute terms. Quantitative measures associated with measuring quality as value for money are problematic (Deming, 1986; Pirsig, 1976; Pring, 1992) and can be misleading if not accompanied by qualitative assessment.

The Customer

TQM is focussed on customer needs. Downey (1994) highlights the centrality of the customer in quality education. Quality starts with and is defined by the customer. Because the customer provides a reason for the supplier's existence, the supplier should know who its customers are, provide lasting value to them, seek to delight them, and recognize that their needs are ever changing.

Hill and Taylor (1991) also state that quality is equated with customers' requirements and that the aim of TQM is to identify and meet customer requirements through processes which are error free. In a similar vein, Lozier and Teeter (1996) state that quality is meeting and exceeding customer expectations and that it is the customer who is instrumental in defining the vision and mission of the organization. In the ISO Technical Committee 176 Draft on Quality Management Principles and Guidelines on their Application, the Quality Management Principle is aimed at continually improving performance over the long term by focussing on customers. Again, in the ISO revised standard (2000 version), the areas of management responsibility and process management are based on customer needs and requirements. It can therefore be seen that the concept of customer forms the 'corner-stone' (Lai, 1998) of these two significant areas in management. With reference to education, Cheng and Cheung (1997) refer to quality as consisting of the set of elements in the input, process and output of the education system which provides services that completely satisfies both the internal and external strategic constituencies by meeting their explicit and implicit expectations.

West-Burnham (1992) identifies six factors which influence customer care in education:

- conformance to requirements
- continuous improvement
- responsiveness
- integration
- focus on delivery
- listening to the customer

Following a customer-driven management system changes the power relationships at work. Customer-driven quality requires providers of services to be constantly aware of what the needs of stake holders are and to operate in a way that stake holders see their ideas, concerns and suggestions being implemented regularly. The focus on customer care also changes the control role of organizational leadership drastically. Firstly, the supplier is no longer the boss. The customer is. The management style is no longer top-down or bottom up but flowing from the customer since it is he who defines quality. Suppliers have to involve customers in partnerships, goal setting, giving real-time feedback and allocating resources. Secondly, it maximizes the power of employees nearest to the customer. Flowing from this is a sense of achievement and ownership by the employees of the problem and the future of the organization (West-Burnham, 1992; Murgatroyd and Morgan, 1993; Downey, 1994).

What is also revolutionary about the 'customer' concept is the notion that everyone in the organization is not only a supplier but also a customer of another colleague in an interrelated series of steps in producing the final product. In other words, each person is dependent on both the last person and the next in the chain of suppliers to complete a transaction successfully. By regarding the next person as a customer in this chain, and meeting his expectations, we can meet the expectations of the ultimate (or external) customer (Boardman, 1998). When colleagues are treated as customers, individuals in the organization are required to perform the tasks to the best of their

abilities while conforming to the customer requirements knowing that they can expect equal treatment in return. (Sallis, 1992).

The internal customer concept also implies that the outcome of each process is seen as a product: consequently, evaluation takes place immediately, possibly by the immediate customer but preferably by the processor (Hill and Taylor, 1993). With tighter internal quality assurance, errors and wastage can therefore be eliminated.

In the literature, several points about applying the notion of customer to education have been raised. Firstly, customers or consumers are not always straightforward to identify. Or more usually, there are too many of them. (Ellis 1993; Hall, 1996) In an obvious sense, students consume or experience teaching but then again, colleagues, heads of department, funding bodies, employers, government and society as a whole have also to be satisfied. As a result there are competing wants and needs (Sallis, 1992). This in turn raises the problem of 'to whom, then should the School direct its primary loyalty?' (Hall, 1996, p.27).

Many academics also find it hard to regard their students as customers. Horsley (2000) observes that 'Hong Kong teachers are still being trained in the traditional approach to education in which the teacher is seen as an instructor, someone who imparts knowledge' (p.8). This seems likely to undermine the notion of students as either customer or stakeholder. Idrus (1996) also notes that there is a feeling of self-sufficiency among professors and academic teachers leading to the belief that there is no need to even think about the students as customers since they lack the wisdom and knowledge to influence the content of the courses. What follows from this is the belief that students are unable to take responsibility for their learning. This is well illustrated in Lai (1998) which defines a customer as a 'rational man who knows where he is heading for and how he gets there through making choices' (Lai 1998, p.3). On this basis, he argues that it is highly debatable that parents and students should be treated as customers since

'occupational division of labour in society means that information possessed by parents with regard to the nature of the educational delivery process and information possessed by teachers and school administrators is not symmetrical' (Lai, 1998, p.4).

He therefore concludes that only frontline teachers know what is genuinely good for their students and suggests that instead of being regarded as customers, students and parents should instead be perceived as stake holders in the educational delivery process 'whose needs, interests and aspirations should be taken into account' (Lai, 1998, p.5). Lai (1998) also adds that if students are to be regarded as customers, they should be participants in the educational process and therefore take some responsibility for it.

A focus on meeting customer needs has led to a move towards a market economy in education which increases the significance of the market model and reduces the significance of professional accountability. If taken to an extreme, successful leadership will be judged by the single criterion of student enrolment and marketing. Therefore, Massy (1997) argues that judgements about educational quality should not be over-dependent on market forces since markets cannot provide the needed discipline without assistance from the specialists in the educational field. He also stresses the need for organized assessment or process review, and not just quality movements initiated by prospective employers in business and industry.

Capper and Jamison (1993) warn against seeing TQM as a potion for all ills. Specifically, they question TQM's ability to help students who typically struggle in schools and its ability to create an equitable educational system. They argue that the main issue is not about adopting TQM concepts like constancy of purpose, quality, customer, and variance which are already accepted as logical and commonsense. Rather, the chief concern should be how to create a social context in which these TQM concepts could be put into action for the benefit of socially disadvantaged students. According to Capper and Jamison (1993), the chief culprit for this situation

is TQM's naive belief that the 'customer's' voice will be heard. This assumption ignores the forces that elevate some customer voices and silence others.

TQM advocates blithely assume, without question, that all "customers" have equal access to resources and services, and ignore power difference that would enable and constrain customer decisions. For example, it is usually customers with the most power who receive the goods and services and who, in turn, will define "quality", whether that power is based on combinations of income, race, gender, ability, religion, gender, sexual orientation, or other personal characteristics. In addition, these same characteristics and accompanying social power determine who is invited to participate on teams and to what extent their voices are heard in team decisions. Because of the effects of "deep structure" of power, persons on the margin may also tend to silence themselves, believing that their position of powerlessness is natural, normal, and logical.' (Capper and Jamison 1993, p. 28).

People and Leadership

The quality guru, Deming (1986), argues that up to 85% of controllable variation in quality is due to common causes, that is, factors not within the control of individuals, but within the control of management or collectivities. A similar point is made by Sallis (1993) who states that the success of a quality initiative depends on the leadership formulating a quality strategy and ensuring that it stays on course in the wake of external pressures. He also adds that middle managers can either block change or act as leaders of teams fuelling the quality initiative. It is therefore the leadership's role to demonstrate their commitment to quality through their consistent behaviour.

In discussing the applicability of TQM to education, Sutcliffe and Pollock (1992) suggest that the lead (of implementing TQM) must be given from a position of authority and that the commitment of senior management is imperative. This should

begin with understanding the notion of quality, the needs of those involved and their basic requirements. The implementation that follows should then begin with drawing up a quality policy, and then establishing an organizational framework for manning and encouraging the involvement of all parties in attaining quality through team work. This process should be reinforced through training and an effective two-way communication. Ultimately, staff should own the TQM process. In addition, the performance should be reviewed consistently to ensure continual improvement.

West-Burnham (1992) mentions the importance of people management in the TQM process. Essentially, this means empowering individuals to flourish and grow and release their capacity for infinite improvement. Teamwork is underpinned by the notion that everyone is responsible for quality and therefore teamwork must permeate the whole institution. It is also given emphasis to encourage a shared vision and understanding and a climate of trust.

Problems in Applying TQM to Education

One of the main objections to introducing TQM into education is that it is an industrial management model. By changing the school-as-factory metaphor to the school-as-enlightened corporation, as some TQM advocates have suggested, the business/economic mentality is perpetuated (Capper and Jamison, 1993).

Murgatroyd and Morgan (1993) criticize TQM's reliance on quantitative data collection and the application of statistical procedures to standardize the production system, as well as giving less value to other data sources such as interviews, observations and critical ethnographies which are just as useful. They also point out that TQM seeks to eliminate variation. This is highly improbable in an educational context where the 'raw materials' are students. Furthermore, choosing 'raw materials' has always been very difficult in public education. This point is also echoed in Dill (1995).

Murgatroyd and Morgan (1993) also identified two sets of causes which have led to failures in implementing TQM in education. The first set relates to the initial stages of implementation. Relevant points to note are the lack of viable commitments by leaders to TQM and poor planning for TQM deployment, lack of good data for driving the TQM process and inability to look beyond the quick-fix mentality to the medium to long term strategic planning. The second set of causes relate to problems arising after TQM is launched. These include staff failing to see the purpose of TQM, lack of support when staff fail to see the values of using tools and procedures to enhance quality. In addition, quality is marginalised due to other priorities, for example, external and more immediate pressures (Knight and McCabe, 1996).

Glover (1993) points out that, in some organizations, leaders' conceptual approach to TQM bears little resemblance to what it should be. In many cases, leaders merely pay lip-service to quality, and make only superficial attempts at organizational change. Another reason suggested is that the concept is valid but the design or implementation is inappropriate or not advised. In other words, if TQM systems are not designed to fit the cultural context, they are likely to meet with failure. Where the concept and design are valid, there is still a possibility of implementation failure. Mechanical systems are often superimposed on the 'real' work processes and decision making because the mission, strategy and values of the organization do not interface with the TQM system. In other words, TQM becomes extra work instead of a new way of doing things. Glover (1993) goes on to suggest that, in order for TQM to be implemented successfully, it has to become a new way of managing. It cannot be a secondary operational strategy, or be given a lower priority.

International Applications in Education

Literature relating to how Quality Management is applied in the U.K, USA, Australia, New Zealand, Western and Eastern Europe is discussed.

The rationale for implementing Total Quality Management or quality assurance in the manufacturing and education sectors are different. In industry, changes are more often than not motivated by the need for improving competitiveness. Such changes are

usually internally generated and motivated. In the education sector, while competitiveness is high on institutions' agenda, quality initiatives are more likely to be externally motivated.

In the US, lower literacy, lower achievement and competencies have formed the basis for a Quality Education movement. Between 1983 and 1993, no less than four major national reports by the US Department of Education, the National Institute for Education, the Education Commission of the States and the National Governors' Association stated the need for greater involvement in learning, and acknowledged complaints by business, industry and government over the decline of baccalaureate graduates (Hartley and Weller, 1994; Lozier and Teeter, 1996; Smith, 1997). As a result of the poor quality of graduates, business and industry found themselves spending heavily on retraining programs and even in providing basic education to workers (Spanbauer 1995). Because of such a large financial stake, large corporations began to exercise their influence on education in the latter part of the 1980s. The message that they emphasised was that, in order to be successful in their industries, graduates needed to be knowledgeable and practise the principles of TQM (Weller, 1997).

The application of TQM in American schools have been well-documented. For example, Mt. Edgecumbe High School has been applying Deming's 14 points to the learning process (Cotton, 1994; Marsh,1997). Some of the impressive results reaped from this included a significantly higher-than-average progression rate for college or university, an extremely low dropout rate, and a very high level of parental and student satisfaction. Similar results, on a larger scale, were reported about Fox Valley Technical College in Wisconsin (Marsh, 1997).

In Georgia, the Next Generation School Project (NGSP) was launched in 1991. This brought together leaders in government, education and business to reform the state's public schools. The project was to promote school excellence through a school-community collaboration to achieve quality education at the local level with state-level support. This initiative was funded by the State. This unified commitment to

quality education promoted shared ownership, vested interest, and pride in achieving educational outcomes. Initial results of this project have positive, and this suggested that there had to be a top-down initiated, structured, systematic delivery system for the reform to work (Murgatroyd and Morgan, 1993; Weller, 1997).

Large corporations also established partnerships with universities to assist them to translate these business concepts into higher education. Some examples of how TQM concepts have been actualized include introducing feedback mechanisms in class (Penn State University), establishing learning communities (Drexel University), treating students as co-producers (Samford University), and using student quality teams in the classroom (Belmont University and Samford University)(Lozier and Teeter, 1996).

In the UK, since the mid-1980s, there has been a growing emphasis on all sectors of education to be responsive to their customers: the government, employers and students. There has also been a drive towards greater accountability and providing services which are value-for-money, effectively and efficiently (Hall, 1996; Lomas, 1996). In the school sector, an array of reforms have been introduced: OFSTED, TQM, Investors in People, School Improvement, Effective Schools. Quality principles are generally well received in special schools and primary schools. The more progressive primary schools have been developing collaborative, projectbased learning approaches for a number of years. However, recent government initiatives designed to improve quality, have concentrated on standards and testing and "have forced many of these pioneers to return to 'chalk and talk' and 'teaching to the test" (Weller, 1997, p.210). In the secondary sector, progress has been made, with support from government and private enterprise. Westwood St. Thomas School in Salisbury, for example, has used Total Quality to engage 150 stakeholders in Strategic Planning. They are also using these tools in the classroom (Davies and West-Burnham, 1997).

In higher education, there has been a series of reforms since 1992. Following a Government White Paper, 'Higher Education: a new framework', legislation

established the Higher Education Quality Councils (HEQCs) and the Higher Education Funding Councils (HEFCs). These bodies were external quality assurance bodies. The HEQC's remit was to audit the higher education institutions' procedures and mechanisms for monitoring, controlling and assessing quality. The effectiveness of quality audits relied heavily on the professionalism of individual academics and was reinforced by peer pressures (Brown, 1997). Quality audits were about 'fitness for purpose' and not about achieving excellence or whether higher education colleges or universities meet particular standards (Lomas, 1996).

While the HEQC was concerned with the means of achieving quality education, the HEFCs' remit was to assess educational outcomes, and standards, and use such assessments to inform funding. The ultimate purpose was to act on behalf of taxpayers and external stakeholders- students, employers and the funding councils (Brown, 1997).

Subsequent to the recommendations made in the Report of the National Committee of Inquiry into Higher Education chaired by Sir Ron Dearing, the two bodies (HEQC and HEFC) and their functions were combined to form the Quality Assurance Agency for Higher Education (QAA). By October 1998, the QAA put forward a new Quality Assurance Process. This process was to include the external review of subject and programme areas, as well as an external review on an institution-wide basis. This process also covered professional and vocational bodies such as the National Health Service, the Teacher Training Agency and the National Council for Vocational Qualifications. Typically, a minimum of two reviewers from the QAA visit a university or college of higher education to review its performance as a whole and to assess the quality of teaching in specific subjects. In keeping with the accountability imperative, reports of both types of review are available to the public. As far as possible, the external reviews are linked to the institution's own review process in a cycle, wherever those processes are shown to be so sufficiently robust that they can be relied upon for this purpose. The cycle includes a summative assessment of the effectiveness of overall academic management systems, especially those which relate

to assuring the standards of awards. Reporting on standards and learning opportunities by subject will occur throughout the cycle of review (Sensicle, 1998).

In Western Europe, the issue of quality has featured very prominently in higher education in recent years and this has been watched very carefully by several governments (Neave, 1994).

Hitherto, quality assurance was a central concern in the higher education sector, treated in a collegial manner, and left to the academics to define what constituted it and how to maintain it. However, a change has taken place in the wake of governments reducing public expenditure and finding ways of ascertaining publicly institutional performance, output productivity and costs. In the education sector, expenditure on higher education has been cut through introducing larger staff/student ratios and increasing student debt. Consequently, the conditions under which students worked and studied, particularly in Britain, France and the Netherlands, experienced a significant deterioration (Neave 1994). This called for even further attention to quality assurance.

Neave (1994) draws attention to the politics that bureaucrats play in cutting costs in the name of 'quality in education'.

Universities have nothing to fear from quality evaluation systems but every reason to be sceptical of those who devise them in the full knowledge that much measures will rarely apply to themselves (Neave, 1994, p.132).

On a macro level, many quality evaluation agencies have been set up. In Denmark for example, the Danish Centre for Quality Assurance and Evaluation of Higher Education, an independent assessment centre, was established in 1992. Its remit applies to both universities and other academic institutions of higher education. (Idrus, 1994, 1996). In France, the *Comite national d'evaluation* was set up to provide assessments of institutions and disciplines to enable institutions to refine their

institutional strategies and objectives. The Netherlands also has a similar agency, the *Vereniging van de Samewerkende Nederlandse Universiteiten*, (VSNU) which, in addition to institutional evaluation and disciplinary-based assessment, externalizes and standardizes what was previously an internal peer review process (Neave, 1994).

In Central and Eastern Europe, quality assurance of a western type was given attention after the collapse of the Soviet Union. International organizations and consultants have been commissioned and they advocate new, western-type procedures for external quality assurance (Tomusk, 1997). The 'imperative of Europeanisation' (Tomusk, 1997) which Central and Eastern European countries experienced also arose out of the trend towards internationalizing the higher education sector in those countries (Kump, 1997). Adopting a western-type of quality assurance is seen as a means of establishing comparability with the higher education systems in the west. This would then enable Eastern and Central European higher education systems to compete and cooperate with their international counterparts. The quality measures adopted mainly concentrated on the setting up of systems of national quality assurance, drawing on elements that are common in other national systems such as Britain, Denmark, France and the Netherlands, state registration of study programmes and state accreditation.

In Australia, major changes have been taking place since 1987 (Catts and Clarke, 1993). Changes subsequently took place against a backdrop of an uncertainty about standards since the abolition of the binary system, a dissatisfaction with aspects of the student experience and the efficiency in the use of large sums of public money (Baldwin, 1997).

A third driving force for quality has been the call for greater efficiency and achieving greater value for money. As a result, the role and operation of universities have been reconceptualized and many people have accepted that universities are businesses and must therefore meet the fundamental goal of maximizing profits and minimizing costs. These have been achieved through larger class sizes, resource limitations and

increased administrative workload carried out by teachers, much of which has resulted from the demands of the quality assurance systems. (Baldwin, 1997).

Finally, quality implementations also came with the realization that less than 45% of the 15 to 19 age group were attending full time education while their counterparts in Japan number 71 % and the USA 74% (Idrus, 1994).

In New Zealand, the quality movement has been slower and more sporadic. Authorities overseeing quality issues include the New Zealand Qualifications Authority (NZQA), the National Quality Awards and the Business Development Regional Quality Awards. These provide some encouragement for educational institutions to implement TQM.

In higher education, there has been a difference in the approaches taken between the universities and polytechnics. While the NZVCC (New Zealand Vice Chancellors Committee) creates a concerted approach by appointing appropriate people to an audit unit, polytechnics appear to approach TQM on an individual basis (Idrus, 1994).

Hong Kong Applications

Literature on quality initiatives taking place in the school, tertiary and vocational education sectors in Hong Kong are described here.

The School System

School Management Initiative (SMI)

The School Management Initiative (SMI), introduced in 1991, was a move towards school-based management in line with the notion of decentralization (Pang, 1998). It aims to set a framework for enhancing the quality of education in schools. This has taken place against the backdrop of school-based management programs being implemented in the western world, notably the UK, USA, and Australia. (Cheng and Cheung, 1997; Dimmock, 1998). This has also been part of the Government's Public Sector Reform Program which started in 1989 and which has given rise to greater

public accountability. The rationale behind this move was that enabling schools to become self-managing would eliminate school problems by cutting down bureaucracy and bringing decisions closer to schools. This would raise the level of organizational responsiveness, flexibility, accountability and productivity in schools. In turn, this would increase their effectiveness and raise the quality of education (Pang, 1998; Pang 1998a; Wong, 1993; Wong, 1993a).

In essence, SMI attempts to shift Hong Kong schools from externally-controlled management to school-based management (Cheung, 1995; Pang, 1998) through the introduction of several measures: clearly defining the roles of sponsors, managers, supervisors, and principals to ensure greater effectiveness and accountability; providing for greater participation of teachers, parents and alumni in school decision-making and management; encouraging more systematic planning and evaluation of schools' program of activities and report of their performance; and giving schools more flexibility in the use of resources to meet their defined individual needs (Cheung, 1995).

The general response to the SMI scheme in its early phases was poor. However, in 1996, it was made compulsory for all government schools and by the year 2000, all Hong Kong schools, including the government aided schools which currently have a low participation rate, will have adopted the scheme. A study by Pang (1998) revealed that since the implementation of SMI, there have not been significant changes in the managerial practices and the relationship between the government schools and the Education Department. This is because as part of the bureaucracy, government schools are bound by the strict rules and regulations restraining them from exercising flexibility, an essential element of school-based management. Pang (1998) also reports that decentralisation has been unsuccessful since decisions and authority have not been delegated from the Headquarters to government schools, and managerial practices in these schools were still characterized by external control rather than internal control. Although the Education Commission Report No. 7 (Education Commission 1997) recommends that all schools in Hong Kong should implement

school-based management in the spirit of SMI by the year 2000, no strategies or mechanisms or strategies have been suggested in the report to ensure this.

In response to this situation, literature on SMI has proliferated and includes suggestions on how the scheme could best be implemented. Cheng and Cheung (1997) argue that decentralization to school level is not sufficient and advocate a multi-level self-management model in schools which is consistent with the concept of Total Quality Management. They argue that school based management should be a type of self-management at the school, group and individual staff level if education quality is to be pursued. In addition, self-management processes at these levels should include five stages: environmental analysis, planning and structuring (affiliating), staffing and directing (developing), implementing, and monitoring and evaluating.

In a study on school planning by SMI schools in Hong Kong, Wong, Sharpe and McCormick (1998) advocate a flexible planning approach as an alternative to the traditional rational planning model that is currently recommended by SMI. In addition, it points out that the support of the principal and the availability of resources contribute positively to the achievement of school goals.

Dimmock (1998) raises the question of whether a western import such as school restructuring (as in the form of SMI and ECR7) was culturally appropriate in the Hong Kong context, and argues that the successful take-up of an innovation depends heavily on the extent to which there is a 'cultural fit' between the innovation and the beliefs, values and behaviours of the context where implementation takes place. Cheng and Cheung (1997) also make a similar point about ensuring that the culture and the initiative fit. Pang (1998a) argues that, in order for SMI to take place, a quality culture must be developed in schools. This requires a change in the school practitioners' beliefs, values and norms. Schools should also allow for more autonomy, time and resources towards this end. A Kaizen (continual improvement) approach with major uses of rational-empirical strategies and normative-re-educative strategies are also recommended.

At the local school level, Ng (1994) and Chan (1997) have identified school characteristics that are conducive to introducing SMI. Ng (1994) argues that the implementation of change is significantly affected by the school's culture. He further recommends that, in order to initiate effective change, efforts should be oriented towards building collaborative work cultures, or changing existing (weak) cultures. In describing a school with a collaborative work culture, he identifies these qualities: commonly agreed long term goals, sense of ownership, positive attitude, discussing major concerns at grass root level, interdepartmental cooperation, low staff mobility, as well as open and fair promotion mechanisms. In another case study about the introduction of SMI, Chan (1997) reports that:

In the case study school the principal is enthusiastic for betterment of school, shared goals are articulated. Teachers' orientation to change are on the whole willing and positive. The supportive relationship among teachers offers the appropriate school climate for innovations. With the organizational arrangement to facilitate better communication of ideas, the school is all favorable for change (Chan, 1997, p. 100).

Conversely, in describing a case study school with a weak culture, Tang (1998) identifies these characteristics: reluctance to participate, unclear operational procedures, insufficient trust and openness between leadership and staff, and lack of empowerment.

Education Commission Report No. 7 (ECR 7)

In parallel to all the quality initiatives, committees have been set up to oversee the provision of quality education since 1993. These included a Working Group on Educational Standards and a Working Group on School Funding. In December 1994, the report of the Working Group on Educational Standards was published. Then in April 1996, the Education Commission set up a Task Group on School Quality and School Funding to make recommendations. These eventually formed the basis of the Education Commission Report No. 7 which consolidated the blue-print for implementing quality measures. Dimmock (1998) notes that there is a significant shift

between SMI and ECR7, from 'effective' schools and schooling to 'quality' schools and schooling. However, both policies largely deal with management rather than curriculum issues.

Measures recommended in the ECR7 include the use of quality indicators for measuring and monitoring school performance and value-added improvement in student performance in major domains of education. Specifically, the indicators should be used for self-evaluation and development. In other words, they are to enable schools to assess their own performance over time, and take appropriate steps for improvement. In addition, such indicators can also provide schools profiles to teachers, parents, students and the community at large. Finally, they can enable comparison among schools of similar background or within the same quality circle.

Within a given framework, schools are required to establish their own indicators. Basically, these should consist of the school context and profile, process indicators, and output indicators.

The school context and profile should provide factual school data and vital statistics to reflect on school characteristics, teacher characteristics, and student characteristics. Process indicators should serve as a useful checklist to reflect whether and to what extent schools have provided the right teaching and learning environment for the development of quality education. The areas that are monitored are: school culture and ethos; school-based management; teaching and learning process; personal growth and development of students; and liaison with external bodies. Output indicators should measure the value-added improvement of students in both academic and non-academic areas at different stages of learning, resulting from changes in factors affecting the student performance. Such factors include improvement in the teaching and learning environment.

Apart from the establishment of quality indicators, other recommendations of the Report include setting goals and developing indicators; putting in place a quality assurance mechanism; providing funding flexibility; providing incentives to

encourage quality school education; raising the professional standards of principals and teachers; and implementing related reforms.

One of the measures identified in the Report was the building of a quality culture. The key components of this is as follows: having clear and commonly accepted goals; translating these goals into achievable, observable and measurable quality indicators for internal evaluation and external assessment; allowing schools more autonomy but at the same time holding them accountable for general administration, finances, and personnel matters; having in place an efficient, equitable and cost-effective funding system for meeting the basic needs of schools, and ensuring that this fundung system is related to performance; providing incentives to recognize and encourage initiatives and the pursuit of excellence; helping and taking measures regarding underperforming schools; raising the professional standards of principals and teachers, and enhancing their professional education and development; introducing corresponding changes in the education-related executive and advisory structure, the curriculum, examination and academic system (Education Commission Report No. 7).

The literature on the ECR 7 is rather limited but one major criticism made about the ECR No. 7 by Chan, Mok, Tse and Wilding (1998), and by the Comparative Education Research Group (1998) of the City University of Hong Kong, is that the Report does not first clearly address the weaknesses in the Hong Kong education system and how to remedy them. Instead, it bypasses this crucial issue by concerning itself with the internal workings of the school. In addition, Chan, Mok, Tse and Wilding (1998) also point out that the Report's definition of quality is underdeveloped, unclear and inadequate. It further remarks that, without a clear working definition and common understanding, there are potential difficulties in driving quality initiatives. Similar criticisms are raised about the approach to creating a quality culture. The authors point out that, although the Report outlines approaches for achieving quality, it does not define what constitutes a quality culture.

To enable schools to build a quality culture, a \$5 billion Quality Education Fund was subsequently set up to fund worthwhile innovative projects on a competitive basis.

The ultimate aim is to provide incentives for schools to strive for continuous improvement. Besides funding one-off school-based projects, the Quality Education Fund Steering Committee launched Outstanding School Awards (OSA) on 1 June 1999. One of the objectives of this award is to cultivate a quality culture within the school sector to strive for excellence, having regard to the school's unique conditions (Quality Education Fund, 1999, 1999a; Quality Education Fund Secretariat, 1998).

The Quality Assurance Initiative (QAI) was introduced to complement the school-based management initiative and to identify schools' strengths and weaknesses through external inspection in schools and promoting continuous improvement. QAI officials take on the role of 'critical friend' to review a school holistically, during a six-day review program. This is followed by a report listing the strengths and weaknesses of the schools and forward action. The contents of the report are open to parents and the public (PTU News, 1998).

Vocational Education - The Vocational Training Council

The central planning organ for Vocational Education and Training in Hong Kong is the Vocational Training Council. Under the Vocational Training Council Ordinance (1982), the Council's main aims are to advise government on measures required to ensure a comprehensive system of technical education and industrial training suited to the developing needs of Hong Kong; to institute, develop and operate schemes for training operators, craftsmen, technicians and technologists needed to sustain and improve industry; to promote and regulate the training of apprentices; to provide and co-ordinate the provision of skills training to disabled persons under aged 15 and over for the purpose of improving their employment prospects and preparing them for open employment; to establish, operate and maintain technical colleges, technical institutes, industrial training centres and skills centres (Vocational Training Council, 1995).

In Hong Kong, about 7% of the relevant age group undergo vocational training courses. As the major provider of vocational education, the VTC offers courses at

craft and technician levels, higher and ordinary certificate levels, and higher and ordinary diploma levels on a full-time, part-time and evening attendance basis.

Inroads to quality assurance were first made in 1995. This took place in the two technical colleges' full-time courses. Each course has a course leader and course team which together constitute a Board of Studies. One of the major responsibilities of this Board is to produce an Annual Course Quality Analysis Return. This has to be set against the context of an agreed departmental policy on quality and is based upon examination results, external examiners' comments, students' views on the course itself and supporting services and other factors. These returns are then forwarded to the College's Academic Planning and Audit Committee which intervenes in cases where the course has not attained the quality required. (Vocational Training Council, 1995).

In 1997, the VTC embarked on a restructuring program to meet the changing needs of the Hong Kong economy. This involved a major revamp of all the courses, as well as a radical change in the organization's structure and culture. This was to culminate in the formation of the IVE (Hong Kong Institute of Vocational Education), a conglomeration of the existing seven technical institutes and two technical colleges. The situation demanded that staff had a commitment to quality, a sense of ownership, empowerment, collegiality, and diversity (Lee, 1998). Essentially, this meant creating a culture that encouraged staff participation, consultation and care. To drive this process, the Total Quality Improvement (TQI) management approach was adopted. This was built around Total Quality Management and Continuous Improvement.

TQI takes a three-pronged approach to achieving quality: customer-orientedness, process improvement and total involvement of all staff within the organisation. In this approach, it is recognized that leadership should be provided by senior management. Education and training is also considered necessary, particularly in these areas: the vision, mission, goals and strategy of the organisation, as well as the needed skills to secure quality improvement and resolve problems. In addition, a 'supportive structure' is to be set up to implement a quality strategy. One such example is senior

management bringing in consultants. Open communication is advocated, as are reward and recognition to teams and individuals who successfully apply the quality process. Finally, measurement and the use of data are considered 'paramount' in a quality management process so that an objective and realistic assessment of performance can be made (Boardman, 1998). The VTC policy further suggests adopting the notion of treating fellow colleagues as internal customers. It argues that by treating the next person as customer in a chain of processes, the expectations of the ultimate customer can be met (Boardman, 1998).

Once the Quality Policy (Vocational Training Council, 1997) has been set out, the implementation of the policy is to be owned by individual units in the VTC as each is empowered to produce a Local Quality Policy Document (Boardman, 1998). It is expected that the implementation of the Quality Policy in its various ways will help to develop a VTC culture and working environment which is committed to the TQI philosophy. The original quality assurance-based quality policy of the former technical colleges (Vocational Training Council, 1995a) is to continue with this overarching framework.

In addition to introducing the VTC Quality Policy, two major supporting initiatives were implemented. Firstly, funds known as 'Quality Money' were awarded for the 9 disciplines in the VTC to undertake curriculum development (Vocational Training Council, 1997a). The existing staff development fund was also expanded (VTC, 1998). The former resembled the Quality Education Fund, which provided 'one-off grants so as to encourage them (schools) to implement initiatives to improve school education (and) promote quality school culture in Hong Kong' (Quality Education Fund, 1999). The latter was done in keeping with the commonly held view that TQM could be sustained through developing staff and thereby gaining their commitment to this approach (Muller and Funnell 1992). The same strategy has been identified in the ECR No. 7 which calls for enhancing the professional education and development of teachers and school principals. This strategy has been identified in the ECR No. 7 as one of the key components of a quality school culture.

The Higher Education Sector - The UGC Institutions

In Hong Kong, quality management has been given a lot of attention since the late 1980s for several reasons. The first of these is that the education system in all sectors had experienced expansion and development. It was now ready to place greater stress on quality (Bush, 1999). In the meantime, the Hong Kong economy had changed from a labour intensive manufacturing-based one to one that was technology and knowledge-based, as manufacturing moved into mainland China because of the lower labour costs there (Lo and Sculli, 1996). There was also general public concern about whether Hong Kong's educational standards matched up to the standards of its economic competitors in the region, about the language competence of the products of the current school system and whether the rapid expansion in higher education in the 1990s had led to a decline in standards. Also, in keeping with the trend for greater accountability in the public sector, questions were asked about whether value for money was being achieved (Chan, Mok, Tse and Wilding, 1998).

In particular, this concern for accountability has been voiced even within the UGC sector. Massy (1997, p.250) states that 'without accountability, even those with the best intentions will begin to cut corners sooner or later as other priorities come to impinge on their time'. Consequently, there has been a trend for the quality of an education system to be judged by its effectiveness measured through cost-benefit analysis, value-addedness and competition in the market place. And since higher institutions are public-funded, consumers have a say in service provision, and the curricula has become increasingly 'market driven'- usually practical and applied in nature. In addition, the quality of education is controlled and managed in terms of assessments and evaluations (Mok, 1998a).

It is against this backdrop that quality management has been introduced into the Hong Kong higher education sector.

Since the mid-1990s, four main types of quality-driven initiatives have taken place in the tertiary sector, namely: research assessment exercises, teaching and learning quality process reviews and most recently, the setting up of centres of excellence.

Research Assessment Exercise

Since 1993, research allocation has been linked with funding. In effect, staff who are identified as above the 'threshold' set by the University Grants Committee (UGC), would be considered as 'active researchers'. The more active researchers there are in the academic departments, the more funds from the institutional recurrent grant for research will be allocated to the departments. Subsequently, promotions and contract renewals depend heavily on publications. This 'publish or perish' syndrome (Cheung, 1995) has drawn emphasis on research and even away from teaching as it renders relatively less recognition (Mok, 1998a). Academic staff perceive that the main rewards are associated with research (Massy and French, 1997) and this is reinforced in Hong Kong by the UGC linking significant funding to institutional research output (Imrie, 1997). At the same time, most of the fund allocations depend on the output rate and the student population which forms the basis of unit cost employed by the UGC, and not on teaching and learning. It has been observed that, as long as research funds are granted by performance, while teaching funds are provided on the basis of student numbers, the motivation to improve research quality is overwhelming. On the other hand, as the performance in teaching is not linked directly to funding, there is no incentive to do more than maintain a threshold standard for teaching and learning (UGC, 1997a).

This situation was ameliorated in subsequent assessment exercises. In the 1999 exercise for allocating funding for the triennium 2001-2004, the UGC took pains to point out that it did not wish to create a situation where research takes precedence over teaching. In fact, it pointed out that research should 'support and illuminate' teaching. In view of this, it widened its definition of 'research' and enlarged the assessments to cover 'scholarship of teaching'. In addition, in the 1999 Research Assessment Exercise, the 'threshold standards' of research have been raised to an attainable level of excellence that is appropriate to the discipline in Hong Kong and that shows some evidence of international excellence (UGC, 1998, 1998a).

Teaching and Learning Quality Process Reviews (TLQPR)

In 1996, the UGC decided to undertake Teaching and Learning Quality Process Reviews (TLQPR) of institutions under its aegis, and use these reviews to inform funding decisions (Massy and French 1997). The emphasis on Teaching and Learning is clearly stressed in the UGC Report, *Higher Education in Hong Kong* (UGC 1996). There, it is stated that the provision of high quality teaching must be the first function of every institution.

The goals of the TLPQRs are to

focus attention on teaching and learning, to assist institutions in their efforts to improve teaching and learning quality, and to enable the UGC and the institutions to discharge their obligation to maintain accountability for quality (Massy, 1997, p.255).

The reviews were not about assessing teaching quality and learning per se, but rather, 'were externally driven meta-analysis of internal quality assurance, assessment and improvement systems' (Massy, 1997, p.253).

In other words, the reviews focussed on the 'processes that are believed to produce quality and the methods by which institutions, faculties and departments assure themselves that quality has been attained' (Massy 1997, p.253).

Major attention was given to these dimensions: curriculum design, pedagogical design, implementation quality, outcomes assessment, and resource provision. The review panel examined the various formal processes including internal validation processes, peer evaluation and assistance schemes, student evaluation schemes, and facilities for assisting teaching and learning. The panel also looked for informal processes such as the various informal communication channels between staff and students to see how they supplement the formal process. In addition to looking at the processes and sub-processes which are supposedly institutionalized by the Higher institutions to facilitate teaching and learning, four "meta-areas" that pertain to the institutions' quality assurance and improvement environment are raised. These are:

quality programme framework, formal quality programme activities, quality programme support and values and incentives.

Throughout the reviews, the TLPQR review panel found itself evaluating whether institutions embedded a strong culture of quality which they identified as having a strong sense of mission, strong leadership, a strong sense and coherent intellectual core, and empowerment at unit level (Massy and French, 1997).

On the whole, the reviews received positive feedback from the institutions. One important outcome of the exercise which has been echoed in the institutional reports has been that the reviews helped to heighten the awareness and development of an academic quality culture (Massy and French, 1997).

Centres of Excellence

As Hong Kong's economy transformed from one that was labour intensive to one that was knowledge based, higher education institutions needed to upgrade and differentiate themselves from those in China. For this reason, the UGC called for the development of centres of excellence. Such centres were to be working in areas that were directly of interest to Hong Kong's industry, commerce and culture. Such excellence should also be building on current strengths while striving for internationally recognized levels of attainment (UGC, 1998b).

As funding from the UGC is limited, it is hoped that the institutions themselves could free resources for developing these centres by closing down 'weaker' departments (UGC, 1996). Such a struggle for survival and 'internal competition' among departments within the same institutions inadvertently strengthens the links between the higher education institutions, the government, and the private sector. This policy also ensures better use of limited resources (Mok, 1998).

Management Reviews

The UGC decided to undertake Management Reviews of the UGC-funded institutions to ensure that each institution had in place processes for resource allocation, planning and financial planning. Such processes were to be readily observable and could cope with the general squeeze on the unit of resources. The reviews covered all the management processes and systems in these areas: academic, administration, research administration, maintenance and development of the estate, procurement, student support services, human resources, IT and finance of all the eight UGC institutions. The Review was not meant to prescribe methods for ensuring value-for-money education since each institution had different histories, cultures and practices. Instead, it sought to promote reflection on processes. In this regard, the reviews resembled the TLQPRs. They were qualitative in nature and sought to promote self-assessment and self-improvement within the institutions through dialogue, discussion and analysis of issues with the consultant and members of the Review Panels. The Reviews also aimed at sharing good management practices.

In evaluating the management evaluation processes of the institutions, the Review Committee was careful not to impose a uniform management style across different institutions. Instead, they were concerned with seeking evidence of 'culture free' and 'operationally meaningful' (Massy, French and Thompson, 1999, p. 4) good management practices that could be applied across institutions. So far, one positive outcome from this exercise has been reported in Massy, French and Thompson (1999). As a result of the Management Review initiatives, there is evidence of institutions developing more conscious approaches to strategic planning, and introducing changes in policies, practices and structures to achieve strategic goals as well as developing closer linkages between resource allocation and strategic and operational planning (Massy, French and Thompson, 1999).

Culture

This section gives the background against which 'culture' has generated interest, how culture is defined, the framework of analysis, prototypes of 'successful' cultures, and the relevance of culture studies.

The interest in school and college culture has grown partly because of 'the dissatisfaction with the limitations of the traditional bureaucratic model' which appears to be inadequate for schools and colleges (Bush, 1998, p.32). This is especially apparent where the shift towards self-management has facilitated the adoption of a strategic approach and reinforced the notion of schools and colleges as unique entities (Bush, 1995).

Current literature on culture in education is often set in the contexts of the school improvement movement, effective school movement and TQM. All three movements demonstrate high levels of congruity (Davies and West-Burnham, 1997). Lewis (1996) states that, while TQM had separate origins from the culture movement, the fields have recently converged with the idea that, to achieve 'excellence' and 'quality', it is necessary either to change, or work with, the culture of an organization. Therefore, in considering the relationship between culture and the implementation of TQM in education, literature relating to culture and school effectiveness and school improvement is also discussed.

Definition and Concepts

Hargreaves (1995) defines organizational culture as the knowledge, beliefs, values, customs, morals, rituals, symbols and language of a group. In other words, organizational culture refers to a way of life.

A similar way of looking at culture is that it evolves from a pattern of assumptions that has been invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration; such assumptions have worked well enough to be considered valid. Therefore, they are taught to new

members as the correct way to perceive, think and feel in relation to those problems (Schein, 1985).

Organizational culture also has a social dimension to it. Nias et al. (1989) uses the term to describe the different social realities that different people construct for themselves. Westoby (1988) refers to organizational culture as social habitat, which includes the informal, ephemeral and covert, as well as the visible and official.

Essentially then, culture in an organization is characterized by 'behaviour-what people say and do; how they work with and through each other; attitudes and values- how assumptions, beliefs and prejudices affect the formal and informal workings of the organization.' (Whitaker, 1993, p.93)

Applied in an educational context, culture can be described as the guiding belief and expectations evident in the way a school operates, particularly in reference to how people relate to each other. In simple terms, 'culture is the way we do things and relate to each other around here' (Thacker, 1993, p.11).

Bush (1998), and Nias, Southworth and Yeomans (1989) also emphasize the development of shared norms and meanings. This occurs through the interaction between members of the organization, or its sub-groups, which eventually evolve into norms which in turn form part of the culture.

Framework of Analysis

In a detailed study of staff relationships in primary schools, Nias et. al. (1989) suggest that there are four identifiable features of a school culture: what people believe in, (beliefs and values), what they think (understandings, attitudes, meanings and norms), how people behave and how they interact (symbols, rituals and ceremonies; preferred behaviors, styles and stances). Values and beliefs are part of individuals' consciously held conceptual apparatus which they use to justify their actions and evaluate

outcomes. Basic assumptions are unconsciously held learned responses which determine how group members perceive, think and feel. Ott (1989) also points out that beliefs provide cognitive justifications for organizational action patterns while values provide the emotional energy or motivation to enact them.

Other authors, like Schein (1985, 1997) and Beare, Caldwell and Millikan (1989), classify aspects of culture into the conceptual or verbal (e.g. language and the expression of organizational aims); behavioural (e.g. rituals, ceremonies, rules support mechanisms and patterns of social interaction); and visual or material (e.g. facilities, equipment, memorabilia, mottoes, crests and uniforms).

Large organizations are likely to have more than one culture. Sergiovani (1984) states that in a multi-culture situation set in a university, subcultures each seek to promote and maintain its own values. Consequently, this creates conflict and tension.

Serviogani (1984) also characterizes the 'strong culture' which. According to him, it calls for a shared commitment among individuals and groups in the organization and a high degree of consistency among the different manifestations of culture.

Caldwell and Spinks (1992), as well as Sporn (1996), also distinguish a strong culture from a weak one. A strong culture has a high degree of congruence between the values and goals of the organizational members, the hierarchical integration and the strategies. A strong culture is conducive to effective implementation of a strategy.

On the other hand, weak cultures are characterized by relatively loosely linked subunits or groups, each having specific cultures which can be contradictory to each other.

Culture types and the Management of Change

In discussing the relationship between culture types and conduciveness to collaborative change management, Fullan and Hargreaves (1992) describe a range of cultures in terms of the level of connectedness and cohesiveness between people working within an organization. These cultures are: a culture of separation, cultures of connection (balkanization, comfortable collaboration, contrived collegiality) and a culture of integration. A culture of separation is characterized by working in professional isolation with little or no feedback to teachers about their effectiveness from outside the classroom. It is also characterized by a school environment that is not supportive of change, a wide and diverse range of teaching practices and little attempt to build agreed and common professional policies.

A culture of connection sees better linkages within groups of staff organization. There are three kinds of cultures of connection. Balkanization takes place where staff attach loyalties to their own groups which compete against each other. Each group reflects different outlooks on learning. Continuity and progression in learning are poor. In addition, there is fighting among groups for resources and territory. This model has particular significance in vocational education which covers a spectrum of diverse disciplines. For example, Bridge (1994, p. 194) observes that there are staff teams possessing different cultural values at his London further education college. An antidote, as suggested by Muller and Funnell (1992), is a model of team which is not delineated by the structure of the educational institution but which builds on the skills of people.

In comfortable collaboration, there is a higher level of cohesiveness. However, although collaboration and participation are high, this is so only at a personal and not professional level. Planning and decision making are reactive and not proactive, and there is little professional activity in terms of contact with theory, reflective practice and professional involvement from outside the school (Fullan and Hargreaves, 1992).

In contrived collegiality, there is some level of collaboration but this is dictated by administrative structures and procedures. This situation is typically a preliminary

stage in setting up a more enduring and genuine collaborative culture. Because this culture is not the result of a natural evolution, and also because collegiality and partnership are imposed on the organization, it is a contrived situation (Hargreaves, 1995).

In a culture of integration, there is strong and common commitment of staff, collective responsibility and a sense of pride in the institution. The staff show a commitment to valuing people as individuals and also to valuing groups to which individuals belong. The culture also enables an open style of management which encourages participation in the planning and decision making processes, fostering individual growth and ownership and creating greater responsibility and interdependency. Such a culture is most conducive to collaborative management and bears a strong resemblance to TQM philosophy.

In a similar vein, Murgatroyd (1988) points to four types of cultures based on relationships in an organization. These cultural types are described as 'enmeshed' 'connected', 'separated' and 'disengaged'. 'Enmeshed' and 'connected' cultures are similar to Fullan and Hargreaves's (1992) culture of integration, and culture of connection (comfortable collaboration and contrived collegiality); the 'separated' culture bears resemblance to the culture of connection (balkanization), while the 'disengaged' culture is like Fullan and Hargreaves' (1992) culture of separation.

An example of a culture of integration (Fullan and Hargreaves 1992) is Torrington and Weightman's (1993) depiction of Valley High. This is a picture of staff commitment and cohesion. The school is being held together by a head, who manages by walking about. He is involved with the children and with the general affairs of the school, and maintains a system of internal promotion for staff who in turn maintain a positive interest in their work. Consequently, there is stability within the staff, as well as good support within departments and cohesion through committees and house systems. There is good formal and informal staff relations, as staff meet formally at least once a week but spend almost every break time and lunchtime in each others' company. This intense interaction with colleagues creates a collegial atmosphere in

which the departmental curriculum is constantly under review and pressure is allpervasive. The result of this is a feeling of not wanting to let other colleagues down.

Yet another example of a culture of integration found in Torrington and Weightman (1993) is Summerfield High. This is where a culture of trust and cooperation exists due to established patterns of behaviour like smiles, frequent expressions of thanks, the way buildings are utilized, the open layout of the school and staff room, and the overall organization.

In contrast, William Barnes, 'a perfectly, ordinary good school' (Torrington and Weightman, 1993, p. 51), is an example of a culture of separation. This situation has arisen due to isolation from the educational community at large and a lack of new blood entering the school or staff leaving it. In addition, the school layout is organized into blocks which inadvertently impedes interaction among staff. There have been few visits from advisers or even senior staff in the school unless secondment or redeployment is involved, and some staff maintain a very heavy-handed 'macho' attitude to discipline, including yelling at the children. Consequently, staff do not believe in themselves, each other or the children although there is a lack of objective indicators to justify the poor self-image.

Murgatroyd (1988) describes the different capacity for organizations to change. These situations are described as 'chaotic' (where the organization responds to change in a fruitless and unstructured way), 'flexible' (where the organization accommodates to change in a considered and flexible way), 'standard' (where the organizational response to change is to adopt routine procedures, and where there is reluctance to take risks or try new strategies), and 'rigid' (where the organization responds to change in a fixed, usually a negative, way).

Whitaker (1993) conjoins these two factors, culture and capacity for change, into a matrix and suggests studying the schools' readiness for change in terms of these two factors. This matrix is shown in Table 2.1.

	Chaotic	Flexible	Standard	Rigid
Enmeshed				
Connected				
Separated				
Disengaged				

Table 2.1 Culture and Capacity for Change

(Whitaker 1993, p. 98)

Whitaker (1993) further suggests that the best scenario for implementing change is one where there is connectedness in the organizational culture and flexibility in accommodating changes. He also suggests that leaders of change should give deliberate attention to building and developing an organizational culture that is conducive to collaboration, participation and change. Bush (1998) also remarks that vision, aims and policies that match the culture of the institution are more likely to become operational than strategies that are inconsistent with those values.

However, external pressures can still bring about success. The case studies of Buckpool School (Hampton, 1994), Heathland School (Samuel, 1997), Wisewood School (Sisum, 1997), show that although quality management had been imposed by the heads, they were able to gather staff involvement through proactive and confident leadership. This was done through the involvement of all staff and students where full use was made of a range of learning and developmental activities, as well as enlisting the help of outside consultants who provided external support and consultancy. In other words, the process of understanding changed and its implementation became a Total Quality activity in its own right. In the case of Heathland, the head moved from TQM into Investors in People to gain the commitment of staff, and to move away from administrative matters and to concentrate on classroom practices. The case studies demonstrate a flexible approach to managing changes, which is supported by an element of 'connected-ness' among staff that is fostered through the work structure, teamwork, staff involvement and staff training.

Handy and Aitken (1986) have developed the notion of tribes to describe various types of organizational cultures: club, role, task, and person. He also identifies components that make up cultures: structure, focus, communication, style, and responsiveness.

In discussing the implementation of TQM in schools, West-Burnham (1992) builds on the four cultures and proposes a fifth: a quality culture. In this culture, the organizational structure and focus are defined as a chain of internal customers working in a process to serve the external customer. This process is managed by constant feedback and measurement. Within the organization, communication is open, frank and purposeful. The organization is driven by values (i.e. providing quality service), not by pragmatism or expediency. Finally, the organization places emphasis on prevention, not inspection, on delighting the customer by providing superior service, and on continuous improvement. Central to all this is the behavior of the leadership which is obsessed with quality. This model also has a sharp focus on the customer who ultimately defines 'quality'. Marsh's (1997) depiction of Fox Valley illustrates this well. Not only has it understood the students and the business community's wants and needs, it has also directly engaged the wider community in the TQM process.

As a result of listening to customers, Fox Valley developed customer driven measures and indicators. Because achievement in jobs is very important to students, Fox Valley developed a job placement tracking system. This emphasis encouraged lecturers to make their course relevant in preparing students for the world of work. Guarantees, in the form of compensations, are offered to dissatisfied students and businesses. In addition, Fox Valley has been prepared to challenge paradigms like the traditional academic calendar. They recognise that all students are different with different wants and needs and learning styles. They work on the basis that the student is not only the customer but the supplier and is responsible for his or her own learning processes. In other words, the student is a co-worker in improving the learning process, but ultimately he or she remains the primary customer.

Mt. Edgecumbe High School is another example of how a quality culture permeates the school, across all levels. It also demonstrates how the goals of state board members, staff and students are aligned to achieve continuous improvement. This has come about because the state board and staff members are concerned about preparing students for their future education and employment and therefore decided to establish a norm of continuous improvement (Cotton 1994). The school accomplishes this by systematically applying TQM at three levels: the management processes, the teaching of Total Quality to students, and Total Quality in learning. The educational purpose is to motivate students to learn and to learn how to learn (Marsh 1997).

On the informal aspects, academic and interpersonal support of students is provided through the 'extended families' made up of staff members, staff members' families and a small number of students. These extended family groups increase students' sense of belonging by giving them personal attention and involving them in out-of-school activities such as fishing, cards and games, picking berries, and occasional meals in the staff members' homes. A sense of cohesiveness and close-knittedness is fostered (Cotton 1994).

Culture and Management Structure

'Structure may be regarded as the physical manifestation of the culture of an organization' (Bush, 1998, p.36). At the same time, structure is also an artifact, 'designed, in part, to support and maintain the desired organizational culture' (O'Neill, 1994, p.103). Structure is expressed in two ways: individual roles and the recommended relationship between role holders is one aspect. Having a structure of committees, working parties and other bodies is another aspect of quality management. Put in another way: 'Structure is simply a description of what people do and how they relate; organization structure is a grossly simplified description of jobs and relationships' (Gray, 1988, p.147).

In discussing the implementation of quality management in schools, Hampton (1994),

Samuel (1997) and Sisum (1997) all point to the use of existing management structures, as well as the formation of quality circles and groups to bring about quality initiatives. Hartley and Weller (1994), and Weller (1997) also point to the fact that it is TQM's structured approach to management that distinguishes it from other piecemeal educational reforms in Georgia, and has won the support of schools and the local communities.

West-Burnham (1992) suggests that teams are a crucial element of total quality management. Therefore, he suggests that, in implementing a TQM approach in a school, certain aspects of the school structure should be considered: the extent to which the structure facilitates the functioning of autonomous teams, whether the structure reinforces the principles of real and effective delegation, the extent to which the structure reflects the school's values and the extent that it is a historic, bureaucratic legacy, and finally, the justification for perpetuating a hierarchical structure that diminishes personal responsibility.

Sallis (1993) points out that, in a TQM culture, structures tend to be lean and simple, with middle management reducing its role of control and scheduling, and focussing on supporting teams and championing quality. The underlying philosophy of the team is one in which the structure is moulded by the process, as opposed to conventional structures which are organised around functions. The focus is less on the hierarchy and much more strongly on teamwork and strong cross-institutional links. Sallis also cautions that elaborate matrix structures with their complexity of linkages can hinder the process by leading to a 'bloated' organization that is concerned with its own maintenance. He points out the possibility of teams becoming too autonomous and branching out in uncoordinated ways. That is why Sallis is quick to emphasize the need for teams to understand the vision and policies, and for leadership to ensure that policies are implemented.

All in all, the overall goal of any management action should be the maintenance of a dynamic equilibrium between culture, structure, strategy and environment in order to

support constant organizational adaptation (Cameron, 1984; Chaffee & Tierney, 1988).

Culture and the successful organization

Mink, Owen and Bright (1993) observe that adaptive cultures (i.e. cultures that adapt to the environment) will have superior performance over the long run. Such cultures have a high degree of unity or alignment at all levels of the organization in terms of vision, values and goals; operations and processes; routines and rewards. In addition, there is responsiveness (i.e. internal responsiveness) within the organization to align and co-ordinate the systems and processes required to deliver quality products and services. Finally, external responsiveness enables openness and interchange with customers, suppliers and other stakeholders in the community. The three dimensions: unity, internal responsiveness and external responsiveness exist, to a greater or lesser extent at each level: individual, group and organization.

Rather similar to quality culture is Sporn's (1996) characterization of a 'performance enhancing culture'. This is a culture which has strength, is strategically appropriate and adaptable. In essence, this means that the values of highly motivated employees are goal aligned and informal control mechanisms exist. The culture fits its context, whether it is the workplace condition, or the organizational strategy. Finally, the culture should also help organizations to anticipate and adapt to environmental change.

Sallis (1993) characterizes the features of any necessary quality organization as one with unit optimization, vertical alignment, horizontal alignment and a single command for each process. Unit optimization is achieved when every unit, programme, and department operates efficiently and effectively. Each area has clear, and preferably written, quality standards within which to operate. Vertical alignment is accomplished when every member of staff understands the strategy of the institution, and its direction and mission, although they may not need to know the detailed breakdown of objectives. In a horizontal alignment situation, there is a lack of competition between units/ programmes/departments, and an understanding of the

aims and requirements of other parts of the organization. Mechanisms are in place to deal effectively with any boundary problems.

To drive TQM, there is a single command for each process. The key processes, whether they are curriculum, pastoral, or administrative are charted and organised so that each process is best carried out from an analysis. This analysis is customer oriented. It starts by asking who the customer for a process is and continues by analysing their needs and the standards they should expect.

This responsiveness to the customer and vibrancy is illustrated in the UGC's report on the Teaching and Learning Quality Process Review (UGC, 1997). The UGC review team notes that quality culture was found to be in departments with a strong sense of mission, strong leadership, and a strong and coherent intellectual core. These units feel empowered, and operate energetically at the unit level. In contrast, ineffective departments are likely to have a fuzzy sense of mission, weak leadership, and abdicate responsibility to individual staff rather than taking collective responsibility (UGC 1997).

On the issue of adapting to changes, Sporn (1996) discusses the orientation of cultures in terms of the focus of the values, attitudes, beliefs and patterns of behaviour of university members. The underlying assumption is that externally focused cultures support the adaptive strategies of management better than internally focused cultures. Internally focused cultures concentrate on the internal dynamics of the organization whereas externally focused cultures emphasize more on the external development of the organization.

Akin and Hopelain (1986) stress the need for strong leadership to guide cultures that adapt to the environment. Kotter and Heskett (1992) suggest that there are four roles that leaders must play to ensure the success of cultural change efforts: they must provide the energy for change, they must provide strategically appropriate direction for the change, they must provide social influence and support and the structure within which change can take place. Bennis (1984) says that competent leadership

leads to empowerment. Individual empowerment is manifested in these ways: people feel significant (i.e. that they are making a difference to the organization), learning and competence are valued (making mistakes is regarded as the main source of learning), and people feel a sense of belonging and feel excited about contributing towards the vision of the organization. Further to individual empowerment, teamwork is also necessary.

Whitaker (1993) states that the key factor in bringing about change successfully is management's capacity to build and develop an organizational culture that is conducive to collaboration, participation and change. Bucko (1994) notes that a leader who acts as a consensus builder who co-ordinates, informs and participates in the change effort will have greater success in bringing about new forms of practice to the organization. He adds that successful innovations require the involvement of the participants in decision making. In addition to that, there must be senior administrators who are supportive of the innovation. Bucko (1994) gives the example of the superintendent who, although not a change agent at local level, may be able to lend support by giving attention to innovation at board meetings, and visits to the schools. This observation is also made by Weller (1997) who notes that, in American schools, top-down initiation of the quality movement is essential if TQM is to succeed. Finally, Bucko (1994) points out that, for innovations to succeed, the change agent has to be actively involved in the implementation process. Troman (1996) describes how a new head teacher had changed an English curriculum by successfully initiating project-based learning and participating in the English team to ensure that it worked, and then using this success as a spin off for making changes to the rigid, inflexible curriculum at his school.

Mink, Owens and Bright (1993) identify four conditions for effective teamwork: a clear and shared purpose; shared values (including the development of trust and the acceptance of individual differences); effective interpersonal and working relationships, and effective closure (celebrating victories, mourning failures, and learning for the future). Hart and Shoolbred (1993) add to this list these other values: intimacy, integrity, unity, consensus, excellence.

A quality culture can be cultivated through rewards. Hart and Shoolbred (1993) suggest that a quality culture can be encouraged by enhanced status, additional training in new skills, extra funding for staff development and new equipment or materials. Glover (1993) points out that, when implementing TQM, it will be necessary to 'put some teeth into the new approach'. He states that managers need to know that their evaluations, and subsequent pay increases and bonuses, are dependent on delivering high level quality work, satisfied staff and consumers, and successful TQM implementation in their own areas of responsibility. Without a change in management evaluation and reward policy, TQM will not be taken seriously. Muller and Funnell (1992) also point out that in vocational education, there is the need to promote from within. French and Raven (1959) and Lam (1996) also argue that, to ensure the commitment of employees to TQM and their compliance with quality improvement policies, managers need to understand the social power that influences the compliance of workers. Only then can quality policies be formulated that are effective in improving quality performance. Collectively, the six power bases that the above-mentioned authors identified are: reward power, coercive power, legitimate power, referent power, expert power and information power.

In some Asian countries, initial steps have been taken to link reward with performance. It was reported that, as part of the SMI drive, a pilot project will be launched in September 2000 to tie in teachers' salaries with work performance, workload and involvement in extra-curricular activities. In Singapore and Taiwan, teachers' promotions are already tied in with performance and not seniority (South China Morning Post, 2000).

In addition to rewards, quality management should not be seen to be creating extra burdens on teachers. Tang (1998) notes that one major reason why changes could not be carried out in a case study pre-vocational school was that teachers perceived the initiative would impose extra heavy burdens on them without any foreseeable benefits either to students or themselves. Bucko (1994) also points out that successful innovations should be characterized by activities that do not escalate teacher workload. Ideally, the innovation should make the workload easier, not harder.

For TQM to be fully embraced into education, it has to be integrated with academic processes. Lozier and Teeter (1996) show how quality management should be shifted from improving administrative processes in academic institutions to improving academic processes. One method is to encourage constant feedback and to make students co-producers of their own learning. The examples given by Lozier and Teeter (1996) are taken from Samford University and Pennsylvania University, as previously mentioned.

Watson, et. al (1995) also point out that, in higher education, a collegial environment is necessary for the successful implementation of TQM. They claim that it is important to allow staff active involvement in decision making so that innovative practice can occur. A collegial culture of academe needs to be harnessed to the process of quality assurance so that good practice and performance indicators arise through the introduction of TQM principles and practice. If this is not done, managerialism may overtake the conventional collegial culture in academe.

Moses (1995) argues that through the introduction of quality management into Australian universities, the managerial approach has replaced a collegial approach in areas such as funding and review. Where traditional collegial values expect that administration supports academic work, quality assurance is not seen to be doing this. Where in traditional collegial fashion, policies support academia and academic staff are fully consulted, the reverse is true of a managerial approach. Extrinsic incentives such as salary increase raise competitiveness and a heavy emphasis on evaluation results in performance which meets external requirements on evaluation but does not go beyond them. This may in turn impede creativity and academic freedom.

On the other hand, there are arguments against collegiality. Hargreaves (1995) cautions against adopting a collegial approach naively. He states that collegial cultures may work well only under specific conditions, such as, when there is a collective agreement to externally imposed changes. Otherwise, the situation will be chaotic.

In addition to ensuring an organizational fit, there must also be sensitivity to ethnic culture when implementing changes. Dimmock (1998) argues that, in Hong Kong, western culture is grafted onto a long-established, deeply rooted culture. Therefore, in the wake of educational policy changes, consideration should be given to these areas: tensions between work efforts vs. western philosophies geared towards catering for individual needs and adaptive teaching; progressive teachers who advocate change vs. traditional teachers and conservative-minded parents; meeting individual needs and heterogeneous abilities.

Significance of Culture in Education

According to Nias et. al. (1989), the value of studying culture lies in gaining better understanding of:

.. the relation between the individuals who construct, inherit, re-create and maintain a school's culture and the macro-societal forces which bear upon them and upon organizations within which the they work... Members of subcultures, within and outside schools, compete to enforce their definitions of value, even of reality, upon one another... the 'cultural perspective' has offered many powerful insights into schools as organizations and particularly into their reluctance to accommodate innovation and change. (p. 145)

The importance of understanding organizational culture lies in the notion that officially agreed activities and structures gives only part of a picture of how the organization concerned functions. It is therefore necessary for educational managers to carry out an analysis to identify the undocumented, unofficial and intangible elements which influence the way the organization functions (O'Neill, 1994). This awareness and understanding of the organizational culture are essential in order to fully understand the possibilities for effecting educational change and improvement (Holly 1987; Deal 1988; Westoby 1988; O'Neill 1994; Whitaker 1993).

Culture and strategy are closely linked. Schneider and Barsoux (1997) claim that the strategic direction of the organization is conditioned by its culture. Weick (1985, p.382) goes further to suggest that culture and strategy are twin concepts: 'It is as if there were a common set of issues in organizations that some of us choose to call culture and others choose to call strategy'. Consequently, there is a wish on the part of managers to understand and operate more effectively within this informal domain of the values and beliefs of teachers and other members of the organization. In other words.

'leaders may focus on influencing values so that they become closer to, if not identical with, their own beliefs. In this way, they hope to achieve widespread support for, or 'ownership' of, new policies. By working through this informal domain, rather than imposing change through positional authority or political processes, heads and principals are more likely to gain support for innovation' (Bush 1995, p.140).

Summary

The quality movement, which originated in the West, had taken off in Japan before being accepted by Western businesses. This movement has also gained acceptance in the public sectors, including education.

In the education field around the world, the impetus has been drawn externally from government, businesses, and even political events. As quality movements are not 'quick fixes', the results are not immediately apparent. Along the way, many initiatives have failed. Consequently TQM can be easily abandoned in the face of poor commitment and heavy workloads. Non- acceptance also arises when TQM is incongruent with the organizational culture. Nevertheless, results of some effective changes have been reported, particularly in the USA.

In Hong Kong, as elsewhere, quality management gathered momentum with the call for greater public accountability of funding, value-addedness, and amidst the perception that educational standards are falling. Quality initiatives have been implemented in all educational sectors in Hong Kong: schools, vocational institutions, and institutions of higher education.

Factors that can enable successful implementation of quality management include a serious commitment from leaders and staff, an efficient operational system and a common mission and value system which act as a binding force for change.

Chapter 3: Methodology

Research Strategy

Why Case Study?

A case study was planned for this research since it would be 'the most likely form of product to capture with verisimilitude the rich, varied, dense and crowded lives and interactions of the staff members' (Nias, 1987, p. 146).

This is a case study of how a hierarchical structure like the Institute of Vocational Education at Tsing Yi (IVE, TY) attempts to introduce a cultural change through TQI, and the factors that either help or hinder that introduction. The case of HKIVE (TY) is not an isolated one. What can be learned through this research is applicable to varying extents to the various campuses of the HKIVE. This is especially the case with the way that HKIVE is managed on nexus and disciplines boards of studies. Campuses are therefore compelled to function in lockstep, and under the same system of operation. The study therefore has an instrumental focus (Stake, 1994) in that what is learned from it has a certain amount of applicability to other campuses.

A single case study approach was adopted because, although the possibility of involving other campuses in the IVE was explored in the initial stage of the research, this option was found to be closed. Besides, there were advantages in limiting the study to one campus in-depth study. Yin (1994) goes even as far as to argue that case studies, like experiments, are generalizable to theoretical propositions and not to populations or to be applied universally. In this sense, the case study, like the experiment, does not represent a "sample", and the investigator's goal is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization). In other words, case study research is often aimed at identifying important constructs rather than gathering data which represents a whole population. It is looking to see what is important rather than how many or what proportion of the population are affected.

Triangulation

The positivist research paradigm focuses on what are observable, quantifiable, generalizable and repeatable aspects of truths, while the interpretive approach emphasizes the human aspect, the 'hows' and the 'whys' (Cohen and Manion, 1994). To gain the best of both worlds, this case study was carried out through a triangulation process. This triangulation research process studies:

- the discrepancy between management's aspiration for academic quality and staff's values, attitudes and beliefs concerning academic quality
- the discrepancy between staff's values, attitudes and beliefs concerning academic quality and staff's perception of how effectively academic quality is monitored
- the discrepancy between staff and management's efforts at maintaining academic quality and the perceived academic results which have been achieved.

The research measures adopted for this triangulation process were documentary analysis, questionnaire survey, and interviews.

'For the research student, the main point is that a single source of data must always be to some extent suspect, and that every effort must be made, with the research resources available, to check the accuracy of data by using a combination of research tools.' (Johnson 1994, pp.161-162)

With triangulation, the potential problems of construct validity also can be addressed, since the different sources of evidence essentially provide multiple measures of the same phenomenon. In addition, triangulation also serves to clarify meaning by identifying different ways to understand and identify the phenomenon (Denzin, 1989; Goetz & LeCompte, 1984).

As the focus related to organizational culture, it was appropriate to carry out research to find out how the entire campus' academic staff felt about academic quality. Mertens (1998) states that surveys are useful because they allow for data to be collected from

a large number of people. In the case of this research, a questionnaire survey was conducted with the entire academic staff population. Using a quantitative approach made it possible to draw a collective profile of the organizational culture and to draw generalizations. In addition, hypotheses could be tested to give clearer directions on which areas to focus on in the qualitative research process. Kerlinger (1970) states the importance of hypotheses as tools of research by claiming that they help researchers organize their work because they provide a framework for collecting, analysing and interpreting their data. Once the hypothesis is confirmed and established, they become powerful tools for advancing knowledge because they help researchers get outside themselves.

Despite the practical advantages and generalizability of research findings afforded by quantitative research measures, quantitative research as a whole is not free from criticism. Mertens (1998) points out that surveys rely on individuals' self-reports of their knowledge, attitudes or behaviours. Thus, the validity of the information is contingent on the honesty of the respondent. Cohen and Manion (1994), in summarising views expressed in the literature, state that quantitative research denigrates life and mind and ignores the human experience. Secondly, it denies the value of subjectivity in the discovery of laws governing human behaviour and dehumanizes the human experience by failing to elucidate the gritty circumstances of the human condition. Ions (1977) argues that the effect of quantitative methods is depersonalization since it represents a form of collectivism. Turner (1970) contends that positivist social science research restricts the image of humans because it concentrates on visible externalities to the exclusion of the subjective world. Shipman (1972) puts it even more strongly as he criticizes positivist methods for producing 'a pruned' and 'synthetic' version of the whole.

Notwithstanding these criticisms, however, the author's survey results provided a clear framework and focus for further probing to take place in the qualitative part of the research.

With the qualitative measures (i.e. documentary analysis and interviews), local meanings are important; foreshadowed meanings are important; and readers' consequential meanings are important (Stake 1994). The case researcher teases out meanings of these three kinds and, for whatever reason, works on one kind more than the others. In each case, the work is reflective. Bassey (1990) also highlights this subjective element in qualitative research which depends on perceived and constructed meaning, and how the researcher's presence and actions might change the situation being studied.

On the other hand, the strength of this method is that the findings can be easily understood since the reader can identify with real life examples and quotes. In addition, methods and measures can change flexibly as new insights are picked up. Proponents of qualitative research in social science maintain that understanding of the world cannot be gained fully from observing but from within individuals who are part of the action being investigated. Therefore, social science is seen as a subjective and not objective undertaking, as a means of dealing with the direct experience of people in specific contexts. In other words, knowledge of the social world is found in individuals' interpretation of reality (Cohen and Manion, 1994).

Documentary Analysis

Sampling

Quality Policy Papers within the College

An analysis was carried out on relevant official policy papers, reports and memos. The vast majority of these documents were lodged with the Academic Review Committee's library accessible by lecturing staff of all ranks. Other documents were open policy papers which had been circulated to staff at all lecturing ranks. In Scott's (1990) typology of records, the documents would fall under the category of 'restricted' access. The policy papers were the end product of debates and revisions at various levels (academic departments, the Academic Review Committee, the TQI subcommittee) and therefore represented the views of the various bodies which derived

them. It can therefore be taken that these are 'authentic' (Johnson 1994) documents representing the official stand at various levels of the organization.

Holsti (1969) argues that it is necessary to examine all relevant sources, not just those that support the researcher's hypothesis. To avoid the problem of bias (Platt, 1981; Scott 1990), it was decided that all policy papers on academic quality should be analyzed. This was possible since the number of such papers was limited and openly accessible to all lecturing staff.

The same principle was also applied to all accessible (Scott, 1990) documents on the VTC strategic and organizational review, and policy papers relating to the quality policy of the organization as a whole.

The selection of documents is representative of the official views and were able to answer these research questions:

- What is the official stance on academic quality?
- How is the VTC organizational culture reported officially or inferred?
- What are the factors in the VTC organizational culture that work for and against a quality culture?

The findings from the documentary analysis further provided a framework for designing the survey questionnaire form and the interview schedule.

The findings from the analysis of the policy documents also provided the basis for corroborating and augmenting (Yin, 1994) with evidence collected through other research methods. It also enabled comparison between the official stance on academic quality with the findings from progress reports and staff perceptions of academic

quality in the College.

Reports on Course Monitoring

Apart from the policy papers on academic quality, two sets of reports on course monitoring were studied to answer this question:

• What are the practices employed to ensure a quality culture?

The analysis of the reports also enabled an evaluation of whether the practices were in keeping with the spirit of the Academic Review Committee (ARC) and individual departmental academic policies, i.e. placing top priority on teaching and learning.

The two most recently available documents, reports of the academic years 1996/97 and 1997/98, were selected for analysis. At the time of the research, the report for 1998/99 had yet to be submitted to the Academic Review Committee and was therefore unavailable. It was decided that any course monitoring reports earlier than 1996 should not be studied since they pre-dated the quality policies and therefore fell outside the scope of this research.

Pilot

A pilot study based on content analysis was initially carried out using the steps recommended by Robson (1993). Essentially, this involved:

- Starting with a research question
- Deciding on sampling data
- Defining the recording units
- Constructing categories for analysis
- Testing the coding on samples of text to assess reliability
- Revision

• Carrying out the analysis

The documents that were analysed fell into the following categories:

- 1. Documents relating to the Official Stance
- 2. Documents relating to the Monitoring of Academic Quality
- 3. Documents relating to VTC Strategic Plan and Implementation
- 4. Documents relating to the Overall Organizational Culture: Factors that Work for and Against a Quality Culture

The titles of the documents analyzed are found in appendix 1, while the coding form for category 1: Documents relating to the Official Stance, is found in Appendix 2.

The documents under study were policy papers and therefore extended texts. To capture the nuances and flavour of the documents, it was decided that the recording unit would be the paragraph. Since it was important to identify the main themes and direction in the paper, a count was made of the number of times a particular issue was mentioned. For this purpose, a framework based on the main issues identified in the Paper on Academic Quality was adopted and a form was designed for carrying out the count. Basically, the analyses focused on these categories: improvement of teaching and learning strategies, flexibility of policy, harnessing the commitment of all staff, involving the learner in improving teaching and learning, measuring requirements and success, collaborative partnership between teaching and non-teaching staff, together with professionals, peers and experts. The departmental policy papers were compared with the framework laid down in the paper on Academic Quality and with each other.

The strength of documentary analysis is that it involves low cost, brings together previously unrelated materials to illuminate a topic, enables access into the past in a way that no other method can, and increases knowledge on topics by bringing materials to light which has not previously had wide circulation. It is an unobtrusive

part of a triangulation process (supplementing data collected by other means). Certainly, in this research, it provided the initial basis for analysis of information.

The underlying assumption of content analysis is that the more frequent a word or phrase appears in the text, the more significant is the idea that it depicts. However, frequency is not the same as significance so it is necessary for researchers to justify why a frequency measure of significance is appropriate. It may be that a single striking word or phrase conveys a meaning out of all proportions to its frequency; and a non-quantitative approach may be better able to grasp the significance of such isolated references. As a result, the content analyst must engage in an act of qualitative synthesis when attempting to summarize the overall meaning of the text and its impact on the reader (Weber, 1990).

For this reason, some documents were studied holistically to ensure that the context in which the issues were mentioned was also taken into consideration. However, this posed still another problem, which is that comprehension of the meaning of an item in context is a matter of interpretation, and therefore, of individual discretion (Scott, 1990).

In addition, like other approaches to textual analysis, content analysis faces difficult problems of validation, in that its success depends upon the interpretative abilities of the researcher and on his or her ability to convince readers of the validity of the interpretation offered.

These problems of validity and reliability of information could be overcome by corroboration with findings gathered by the other research methods.

Procedure

After the pilot stage, other documents were analysed using either content analysis involving coding, counting and interpretation, or through in-depth interpretation and

synthesis of meaning with due regard given to the context. The documents studied fell into these categories:

- Documents which were extended texts
- Documents which had extended texts and diagrams

Because of the diversity of the document types, the most practicable way was to adopt a 'grounded' or inductive strategy (Platt, 1981). This means that the researcher started from what was there and attempted to derive categories and problems from it as it seemed more likely to meet with practical success. Therefore, extended texts were analysed, using the Miles and Huberman (1994) method of data reduction---data display---data conclusion. Sources which included numerical data were analysed quantitatively in addition to the extended text sections being analysed using Miles and Huberman's (1994) method.

The documents were also analysed by groups. The first set of documents was the Academic Review Committee's Paper on Academic Quality and the ensuing Departmental Academic Policy Papers. As the departmental policies followed the framework laid down by the Academic Review Committee, it was decided that the same framework should be used for analysis. Issues raised by individual departments were mapped according to this framework since this made comparison easier. Since all departments had to address all the issues raised by the ARC paper, the direction taken by the departments was fairly uniform and a word count (how many times) would not yield as much information as studying and interpreting the nuance (how? and why?). Therefore, apart from word counts, interpretation was carried out on the texts.

The second group of texts were those which related to the overall VTC culture and policies. Because TQI was only one of the elements addressed in these documents, it was necessary to extrapolate the necessary parts for analysis to deal with them thematically. An example was the Consultant's report on the VTC Strategic and

Organizational Review where analysis was focused only on sections dealing with the organizational culture and quality management.

A third group of documents were those related to course reporting where there were extended texts and diagrams. The extended texts were dealt with thematically, whereas inferences were drawn from counting items in the tables. Items were coded according to these categories: teaching methodology, course management, assessments, resources, students. Inferences were drawn on figures obtained through counting to establish the relative importance of each of the issues, and the rate at which action points were addressed.

Questionnaire Survey

Following the documentary analysis, a questionnaire survey based on the documentary findings was carried out. A copy of the pilot questionnaire is found in appendix 3.

Initial Planning and Design of Questionnaire

Unstructured Interviews

In the initial stage, unstructured interviews were carried out with three people who were key informants on Academic Quality Management in the VTC. In this case, judgment sampling was adopted because in-depth information was available only to a select few. Interviewees included members of the IVE Total Quality Improvement Sub-committee, and an education officer. The purpose was to gather information about the main issues surrounding the promotion of academic quality in the VTC. Oppenheim (1992) argues that such unstructured, exploratory interviews lead to the 'conceptualization' of the research problem and the development of 'hidden agendas' for later in-depth interviews. One salient point which emerged from the interviews with the key informants was that the bureaucratic and pyramidal management structure in the VTC had a major influence on the academic quality culture. This

consideration was then taken in the questionnaire design whereby rank was identified as one of the variables in influencing the academic quality culture.

Initial Considerations

At the same time, an initial literature review on organizational culture was carried out to identify the relevant issues. Although there was an abundance of literature on this topic, it was finally settled that since the measurement in this research was specific to a culture of academic quality, it would be more appropriate to design a questionnaire bearing in mind these two issues: organizational culture and quality management.

After getting an initial 'feel for the problem' (Oppenheim, 1992), some decisions were made about the direction of the research, the aims, the type of information needed, and the approach to adopt. (Mertens, 1998; Cohen and Manion, 1994; Clegg, 1990; Oppenheim, 1992). A questionnaire was subsequently designed, based on these considerations. The purpose of this survey was:

To build a profile of the academic quality culture in the Technical College *

This questionnaire was expected to draw out staff's perceptions of academic quality in the institution, since organizational culture is described as the multiple social realities which people construct for themselves (Nias 1989).

Specifically, this meant gathering information in these three areas which coincided with the working definition of 'culture' in this research:

^{*} At the time when the questionnaire was administered, the IVE(Tsing Yi) was still known as the Hong Kong Technical College (Tsing Yi).

- Attitudes, Values and Beliefs (implicit aspects of culture)
- Procedures, Structures and Policies (explicit aspects of culture)
- Management of Quality (explicit aspects of culture)

The variables in this research design were: rank, length of service in the VTC (including the Technical College), length of service in the Technical College sector, and the level of involvement in the monitoring of the quality of courses.

Subsequently, the following hypotheses were set:

- There is a positive correlation between rank and a positive inclination towards academic quality.
- There is a positive correlation between the length of service in the VTC and a positive inclination towards academic quality.
- There is a positive inclination between length of service in the Technical College sector and a positive inclination towards academic quality.
- There is a positive correlation between the level of involvement in the monitoring of the quality of courses and a positive inclination towards academic quality.
- There is a positive correlation between the department that a respondent belongs to and a positive inclination towards academic quality.

The research strategy was to find out which of the variables correlated with a positive inclination towards academic quality and then discover where significant differences lie. In effect, the research would yield simple descriptive data about staff's responses as well as perform a correlational analysis of variables.

After the main areas of inquiry were identified, individual questions were developed. The general guideline in ordering the questions was to move gradually from statements relating to the familiar/esoteric/micro/personal arena to the impersonal/practical/macro/management-related arena. This decision was taken on the assumption that respondents would feel more comfortable as they moved gradually

from 'easier' to 'harder' questions. This is because 'since people's participation in survey is voluntary, a questionnaire has to help in engaging their co-operation, and eliciting answers as close as possible to the truth' (Davidson, 1970).

The questionnaire for the pilot study and letter of introduction are found in appendix 3. The questionnaire comprised 34 statements. Care was taken to ensure that the questions were specific, to the point and able to elicit the type of information that the questions were intended for (Kane 1985). Attention was also paid to Krosnick, Narayan and Smith's (1996) advice on types of responses that could bias results. Respondents were asked to indicate their response on a Likert scale of 1 to 5 (1= strongly agree, 5=strongly disagree).

Piloting the Study (Questionnaire)

A pilot study was conducted in late October 1998. The purpose was to minimize the ambiguity of the meaning of questions, to optimize the kind and the number of relevant questions, to test the appropriateness of the format, to analyze results and to take heed of any issues that could be further explored in the interviews forming part of the triangulation research process. In addition, a letter of introduction was also drafted and used in the pilot stage. The value of pilot work should not be underestimated. As Oppenheim (1992) puts it:

'Piloting can help us not only with the wording of questions but also with procedural matters such as the design of a letter of introduction (and from whom it should come), the ordering of question sequences and the reduction of non-response rates. We should realize from the beginning that pilot work is expensive and time-consuming, but avoiding or skimping on pilot work is likely to prove more costly still.' (p. 47)

Judgement sampling was used in this exercise. A total of 30 questionnaires were sent to a cross section of lecturers and senior lecturers in the Hong Kong Technical College (Chai Wan), a sister college of the Hong Kong Technical College (Tsing Yi).

The rationale for selecting this sample population for the pilot study was that the staff composition was similar to the Technical College at Tsing Yi. This sampling method involved 'the choice of subjects who are in the best position to provide the information required' (Sekaran, 1992, p.235). This method was regarded as appropriate also because the purpose of the pilot study was not to arrive at generalizations but to find the general pattern of responses, test the validity and reliability of the instrument, and to make any revisions to the wording in the statements. Nonprobability sampling may be used when researchers, may be 'less concerned about generalizability than they are about obtaining some preliminary information in a quick and inexpensive way' (Sekeran, 1992, p.235). It is also noted that 'a judgement sample is used as a pilot or trial sample to decide how to take a random sample later' (Levin and Rubin, 1994, p.281).

At the time of entering data, 25 valid questionnaires were returned. After the cut-off date, other returned questionnaires were not taken into account.

The results obtained for this pilot study were very similar to those obtained in the main survey. Because of this high level of similarity, they validate the findings in the main survey. Essentially, the findings in the pilot study indicated that staff's identification with the College's goals and direction was not as strong as their professionalism.

The TQM concept of being 'customer focused' was better accepted when it was applied to industry and commerce (i.e. potential employers) but not when it was applied to students and fellow academic staff. However, significantly more staff were willing to be responsive to industry, students and fellow colleagues. They were also agreeable to subjecting courses to external monitoring.

On the whole, staff were less positive about the structures, policies and procedures in

monitoring quality. However, of all the mechanisms used for monitoring quality, they were slightly more positive about the ones that involved obtaining feedback from students.

Staff were either neutral or negative in their attitude towards the management of quality. In fact, of all the three sections, Section 3: Management of Academic Quality, had the lowest overall mean score.

A statistical analysis of the results showed that Section 1 had a Cronbach Alpha reliability co-efficient of 0.66 (considered to be slightly below an acceptable level); Section 2 had a co-efficient of 0.78 (considered to be acceptable) and Section 3 a co-efficient of 0.87 which is considered to be good (Sekaran 1992).

Revisions

Based on the results of the pilot study, the following revisions were made:

Section I

1. Personal Data - Question 1

In the pilot study it was found that placing assistant lecturers, lecturers and senior lecturers in the same category would not yield a clear picture of views held by staff of different ranks. This is especially significant because staff of different ranks have different levels of involvement in the management of courses. In the revised questionnaire (appendix 4), the three ranks (assistant lecturer, lecturer and senior lecturer) were listed as separate categories. Also, the rank of 'workshop instructor' was added to the list.

2. Personal Data- Question 4

In this question, option (d) was meant for staff to fill in any other sector of the Vocational Training Council (usually the VTC headquarters) that they had worked in. However, this seemed to confound respondents. As a result, in the final version, option (d) would read as 'worked at the VTC headquarters' to avoid any confusion.

Section II

1. Scale

It was found that on a scale of 1 to 5, respondents tend to choose '3' as their response. This neutralized the mean score and made the overall responses seem more ambivalent than they should. As a result, it was decided that respondents should state clearly whether they agreed (options 3 or 4) or disagreed (options 1 and 2). Also, in the revised questionnaire, a description was provided for each response. Therefore, 1 represented 'strongly disagree', 2 represented 'disagree', 3 represented 'agree', and 4 represented 'strongly disagree'.

- 2. Statement 1.4 'I feel morally responsible for the quality of courses that I teach' Feedback from respondents about statement 1.14 was that the phrase 'morally responsible' was rather vague. It was finally decided that the question should be removed.
- 3. Statement 1.9- Academic staff should care for their students' entire well-being, not just for their academic performance.

Since the research was about ACADEMIC quality, and not overall student learning experiences, it was decided that this question was beyond the scope of the research and would be excluded from the revised questionnaire.

4. Statement 1.11 - Academic staff should treat other staff with whom they collaborate as customers.

Since the area of the research was on academic quality, it was decided that the word 'academic' should be inserted before 'staff' to read:

Academic staff should treat other academic staff with whom they collaborate as customers.

5. Statement 1.16 - It is necessary to engage external agents to monitor the quality of courses.

It was found to be necessary to clarify the term 'external agents'. Hence, the revised statement in the revised questionnaire now reads as:

It is necessary to engage external agents (e.g. groups, individuals outside the course teams) to monitor the quality of courses.

Procedure

The questionnaire was revised for the main survey and sent out to all academic staff in the college. A copy of the revised questionnaire is found in appendix 4. A 100% sampling strategy was adopted this time because the larger the sample, the more confidence there was that the sample results would approximate the true figures for the population (Blalok 1970). A copy of the cover letter sent out to staff is found in appendix 4. The initial response rate was rather low. This was noticeably the case with one department. Hoinville and Jowell (1978) warn about bias in surveys caused by non-responses. To avoid this problem, a further reminder was sent out after the deadline and staff in the department with a noticeably low response rate were contacted and encouraged to respond. This method of improving the response rate has been mentioned in Cohen and Manion (1994). The situation improved and the final total response rate was 45%.

The returned questionnaires were sorted, edited and coded for data tabulation and computer analysis. The coded results were then computed on the Statistical Package for the Social Science (SPSS) programme in order to obtain the necessary information for analysis.

Missing data were treated by excluding the particular item on the individual questionnaire. The following were the main procedures used to employ the statistics

to analyze the data with a view to accomplishing the following objectives for this study:

Objective 1:

In order to establish the reliability and validity of the questionnaire, its internal consistency reliability was examined by computing the Cronbach Alpha for each section as well as that for all three sections taken as a whole.

Objective 2:

To determine which of the factors (listed below) had a significant positive correlation with academic quality culture, Spearman -rank correlation coefficients were determined for each of the following:

- Rank
- Total length of service in the Vocational Training Council
- Length of service in the Technical College Sector
- Work experience elsewhere in the VTC
- Involvement in quality management
- Department

Objective 3:

To find out if there was any difference in the mean score by

- Rank
- Involvement in quality management,

a Wilcox Signed Ranks Test was carried out.

Objective 4:

To find out where the greatest difference in responses lie, a T-test was carried out.

Objective 5:

To determine the profile of the population, a frequency count was undertaken by rank since this variable (i.e. rank) proved to be most significantly related to a positive inclination towards academic quality.

Objective 6:

To find out the mean differences by rank and involvement with quality management, the descriptive data were analysed. The results of the pilot study are presented in Chapter 5 and of the main survey in Chapter 6.

Interviews

The major issues in Academic Quality Management were identified through the documentary analysis. This was then followed by a questionnaire survey to gain a general understanding of views on academic quality and quality management, and to find out if their perceptions tallied with the official stand. After a general profile was drawn up, further probing into the 'hows' and 'whys' was undertaken by a series of interviews to establish an in-depth view. A copy of the interview schedule is found in appendix 5. The findings were then corroborated and compared with evidence found through other methods in the triangulation process (Cohen and Manion, 1994). Yin (1994) highlights the fact that interviews are important since most case studies are about human affairs. He argues that these human affairs should be reported and interpreted through the eyes of specific interviewees, and that well-informed respondents can provide important insights into a situation. Yin (1994) also adds that interviews can provide shortcuts to the prior history of the situation, helping the researcher to identify other relevant sources of evidence. Cohen and Manion (1994) and Seidman (1991) also point out the usefulness of interviews in gaining an in-depth perspective of the situation. As Bell (1987) puts it,

"the interview can yield rich material and can often put flesh on the bones of questionnaire responses." (p. 70)

A copy of the interview schedule is found in appendix 5. The interview schedule was designed based on the main categories found in the documentary analysis and questionnaire survey. Interviewees were asked questions in these areas: academic quality, working relationships, quality assurance mechanisms, and management of academic quality.

The first main part, Academic Quality, corresponds to Section II. Part 1. Statements 1.1 to 1.5 of the questionnaire survey: Values, Beliefs and Attitude towards Academic Quality. The constructs behind these questions are:

- Staff's familiarity with the college's vision and mission
- The importance that staff attach to academic quality
- Staff's attitude towards various aspects of academic quality

The second part, Working Relationships, are directly related to Section II, Part 1: Values, Beliefs and Attitude towards Academic Quality, statements 1.6 to 1.15. It was also intended to compare the findings with the documentary analysis of the consultant's report on VTC Strategic Review Report. The constructs were:

- 1. Relationship between academic staff and students
- 2. Relationship between peers within and across departments
- 3. Relationship along the hierarchy
- 4. Organizational climate

The third part of the schedule related to Quality Assurance (QA) Mechanisms. This was related to Section II. Part 2 of the questionnaire survey as well as the ARC, departmental and VTC Quality policy papers, and the Course Monitoring Reports. The construct here was the effectiveness of individual quality measures.

The last part of the interview schedule related to Management of Academic Quality. The constructs here were:

- Factors that encourage a quality culture
- Factors that hinder a quality culture
- Correlation between deployment of resources and academic quality culture

To ensure consistency in the type of information collected and to enable a clearer comparison of findings, a semi-structured interview format was adopted. The semi-structured interviews offer the best of both worlds in that it provides a framework for data collection and still gives flexibility in probing and clarification where necessary. Questions can be spontaneously formulated to follow the flow of conversation (Johnson and Ransom, 1983) so that 'depth (can) be achieved by providing the opportunity of the interview to probe and expand the interviewee's responses'. (Hitchcock and Hughes, 1989).

Piloting

The interview schedule was piloted with two interviewees to check the validity of the questions and to gain practice in asking questions and recording responses. These two interviewees were from the lecturer and senior lecturer ranks, selected through judgement sampling. The results showed that most questions were able to elicit the type of information intended excepted that certain questions needed to be broken down during the interviews. In other words, questions could not be asked at one go. They had to be asked in parts. For example, in the section on working relationships, a typical exchange would be thus:

Interviewer: How would you describe working relationship among academic staff?

Interviewee: Gives response(various turns)

Interviewer: Yes, let's now turn to the working relationship between staff and

students in this campus...

Other interview questions which required the same treatment during the interview

process were:

Working Relationships

Quite a number of staff have difficulty in seeing a.) their students b.) other

academic staff with whom they work as "customers". Why do you think that is

the case?

Management of Academic Quality

Do you see a strong correlation between the way resources are deployed and

the level of academic quality in the Tsing Yi campus?

Sampling

Rank formed the basis for selection since the questionnaire survey revealed that there

was a significant positive correlation between rank and academic quality. The 24

interviewees were selected across these ranks: senior managers (head of department

and above), principal lecturer, senior lecturer and lecturer. The representation of

interviewees at each rank is:

Senior managers: 3 out of 10 (or 33%)

Principal lecturers: 5 out of 14 (or 36%)

Senior lecturers: 5 out of 44 (or 11%)

Lecturers: 11 out of 125 (or 9%)

A differentiated sample percentage was used because the number of senior managers

and principal lecturers were significantly smaller than that of senior lecturers and

lecturers. Oversampling the minority groups (i.e. senior managers and principal

lecturers) was carried out to reduce the margin of error and permit subgroup analyses.

(Mertens, 1997; Smith, 1993). Within the ranks, care was taken to ensure that

96

interviewees were chosen across all the departments, as far as possible, and that they were all variously involved in the quality assurance processes.

Procedure

The interviews were held either in the interviewees' office, in the researcher' office, or in the laboratory. Each of these locations afforded quietness and minimal interruptions or intrusion of privacy. Each interview lasted 30 minutes. At the outset, interviewees were reminded of the objective of the interviews as well as the main areas that would be covered. Permission for tape recording the conversation was also sought. 16 out of the 24 interviewees gave their permission while eight refused.

Notes were taken during the tape recorded sessions to enable the researcher to keep track of the interviewees' responses. In addition, the conversations were transcribed after the interview, and the researcher checked the accuracy of the transcriptions by listening to the tape a second time. In interviews which were not tape recorded, copious notes were taken during the session, and these were then cross-checked with interviewees after the session was formally closed.

Burgess (1988) notes that 'the presence of a tape-recorder influences the beginning and end of pre-set conversations when buttons are pressed that signal the beginnings and ends of conversations. At these times individuals appear most aware of the machine, however small it may be.' (pp. 141-142) A problem that could arise may be that the interviewee may not always say what they mean in many words. Hitchcock and Hughes (1989) explain that this is because social meanings are complex and not equivocally revealed by a dictionary like translation of 'responses' to 'prearranged questions' which can then be mechanically 'coded' to reveal patterns for subsequent analysis. Sometimes, probing was necessary, and the interviewer had to interpret what is being said. This situation often arises when the interviewee feels uncomfortable telling the truth. This was especially marked in an unequal interviewer-interviewee relationship.

However, as Yin (1994) points out, the tapes provide a more accurate rendition of an interview than any other method. And in any case, interview as a whole is a subjective research methodology, no matter how it is carried out. Miles and Huberman (1994) also note that no matter how hard the interviewer tries to be systematic and objective, ambiguities will arise due to interviewees holding back information. Also, the relative position or identity of the interviewer and interviewee (gender, rank, role, familiarity) all play a part in deciding what information is disclosed (Mertens, 1997).

Furthermore, in the analysis, it was found that the responses given in interviews that were tape recorded and those that were not were not very different. There was no significant evidence of the validity of information being compromised by the tape recordings. This was probably due to the fact that Academic Quality had been openly debated and the issues involved were not considered to be sensitive. In the final analyses, evidences collected from the interviews were triangulated. Hitchcock and Hughes (1989) also point out that, to avoid bias, information from different measures should be compared.

Nevertheless, Cohen and Manion (1994) identify several problems with interviews as a research method. The problem of invalidity is the most obvious one. The cause of invalidity is the bias which is defined as a systematic or persistent tendency to make errors in the same direction, that is, to overstate or understate the 'true value' of an attribute. Hitchcock and Hughes (1989) identify age, gender, class and ethnicity as factors leading to this bias. One remedy is to compare the interview measure with another measure that has already shown to be valid. If the two measures agree, it can be assumed that the validity of the interview is comparable with the proven validity of other measure. Through our triangulation research process of documentary analysis, interviews and questionnaire surveys, the information obtained was confirmed and validated.

After all the information had been collected and where possible, transcribed, these were compared by question and rank. In other words, interviews were compared within these groups: senior manager, principal lecturers, senior lecturers and lecturers.

Subsequently, comparisons were also made across groups. Comparisons were made by questions that appeared in the interview schedule, as each question logically represented a unit of analysis.

Summary

This case study research was carried out through a triangulation research process involving documentary analysis, questionnaire survey and interviews. Each of these research methods helped to corroborate and confirm findings. Each method offered a different type of strength. Documentary analysis enabled the researcher to discover initial issues for further analysis and hypothesis formulation. Questionnaire surveys gave quantitative results which helped to draw a collective profile. Interviews allowed for in-depth findings to take place. For each of these methods, a preliminary pilot study was carried out to test the usefulness and validity of the research instrument. Changes were then made to the instruments to ensure greater accuracy and sensitivity.

Chapter 4: Documentary Analysis

Overview

The purpose of the documentary analysis was to find out the official stance regarding academic quality, evaluate the effectiveness of the quality assurance mechanisms, and identify factors that worked for and against a quality culture in the Campus.

The documents were grouped under these categories:

- 1. Documents relating to the official stance on quality
- 2. Documents relating to the monitoring of academic quality
- 3. Documents relating to the VTC strategic plan and its implementation
- 4. Documents relating to the overall organizational culture: factors that work for and against a quality culture

The titles of documents analysed are found in appendix 1.

Documents Relating to the Official Stance on Quality

ARC Paper on Academic Quality

This paper sets out the framework for the maintenance and improvement of academic standards. Essentially, the paper describes a system that checks and measures, supports, gives feedback, reviews and reports on courses. The ARC paper is also the cornerstone on which the College's departmental quality policies and practices rest. The policy begins with the premise that quality improvements are to be pushed through in course teams and subject teams. It also clearly states the role of the Academic Review Committee (ARC) and the Academic Planning and Audit Committee (APAC). The function of the Academic Review Committee (ARC) is to 'monitor and evaluate how well the Colleges, as a whole, achieve their aims and objectives as stated in their course schemes.' (p.1. ARC Paper on Academic Quality), while the Academic Planning and Audit Committee (AP&AC) has an audit role in 'monitoring and evaluating the effectiveness of courses' (p.1 ARC Paper on Academic Quality).

The AP&AC reports to the ARC by producing a course summary report. Performance is reported through a college summary report which is based on the course summary reports given by course leaders in the College. Course summary reports are based on the quality grades. These are arrived at, based on the collective judgements of the course teams. The collective judgements are in turn formed through an analysis of formal unit assessment and students' perception of the course.

Students' perceptions of how well the course meets their needs are sought through a dialogue between academic staff and students so that 'the underlying reasons for the concerns can be fully explored and accurately defined' (p.1. ARC paper on Academic Quality).

The Paper laid down 8 proposals for quality management in the Technical College and this was subsequently approved by the Technical Colleges Academic Board (TCAB). These 8 proposals are as stated below:

Proposal 1.

'Before June 1996 the AP&AC must agree with each department a policy paper on quality' (p.1 ARC paper on Academic Quality).

The departmental quality policies must encompass these six criteria: (1) They must seek primarily to improve the quality of teaching and learning strategies, (2) They must be flexible, (3) They must harness the commitment of all (teaching and non-teaching) staff, (4) The learner should be involved in improving the process of teaching and learning, (5) The policy should establish measurement of requirements and of success or other wise in meeting those requirements, in all functions in order that progress can be proved, (6) There should be a collaborative partnership between teaching and non-teaching staff, learners together with professionals, peers and experts.

Proposal 2

'The ARC will establish a framework of policies and procedures to monitor and evaluate the educational quality of the College's courses. This minimum framework should allow the Departments enough flexibility to ensure that they can operate effectively and efficiently' (p. 3 ARC Paper on Academic Quality).

Proposal 3

'The ARC will devise mechanisms to stimulate debate on educational quality during the development of departmental policies throughout the 1995/96 academic year. Thereafter, the ARC will establish procedures to encourage support and recognize the development of good teaching practice' (p.3 ARC Paper on Academic Quality).

Proposal 4

'Course Leaders, in conjunction with the HoD, will arrange for academic staff to provide written reports based on an interview with each student. To place the reports on a common footing and to provide guidance for departments the AP&AC will agree the form of the Student Report with each department' (p. 3 ARC Paper on Academic Quality).

Proposal 5

'Course Leaders will provide the AP&AC with a course summary report for each year of their courses. This report will list a quality grade for each unit and the support services. It will also provide an overall quality grade for each year of a course. Very good grades or those below satisfactory should be accompanied by a brief explanation. As an appendix it will give the list of the summative indicators on which the quality grades are based. The Course Summary Report will also be included as part of the Annual Course Monitoring Report' (p.5 ARC Paper on Academic Quality).

Proposal 6

'Summative indicators and quality judgements will be based on a scale of quality grades A to E with the following definitions:

- A. Very Good- many good features
- B. Good-Good features and no major shortcomings
- C. Satisfactory- Shortcomings balanced by good features
- D. Unsatisfactory Some shortcomings in important areas
- E. Poor-Many shortcomings' (p.5 ARC Paper on Academic Quality)'

Proposal 7

The AP&AC will provide the ARC with a College Summary Report listing the overall quality grades for each year of their courses and lighlighting courses with common areas. As an appendix the report will also list the overall quality grades for each unit. Any inconsistency between the overall quality grade and the unit grades should be explained. If a year of a course is judged to be unsatisfactory the AP&AC will establish a Working Group to help the Course Team rectify the problem. This Working Group will report back to the AP&AC so that other Course Teams can avoid such problems' (p. 5, ARC Paper on Academic Quality).

Proposal 8

'The ARC will establish Working Groups to review the implementation of departmental policies on quality. From the 1996/97 academic year onwards every department will be reviewed during a three year period' (p.6 ARC Paper on Academic Quality).

The reporting structure and mechanisms used at each level of the quality reporting structure is represented in figure 4.1:

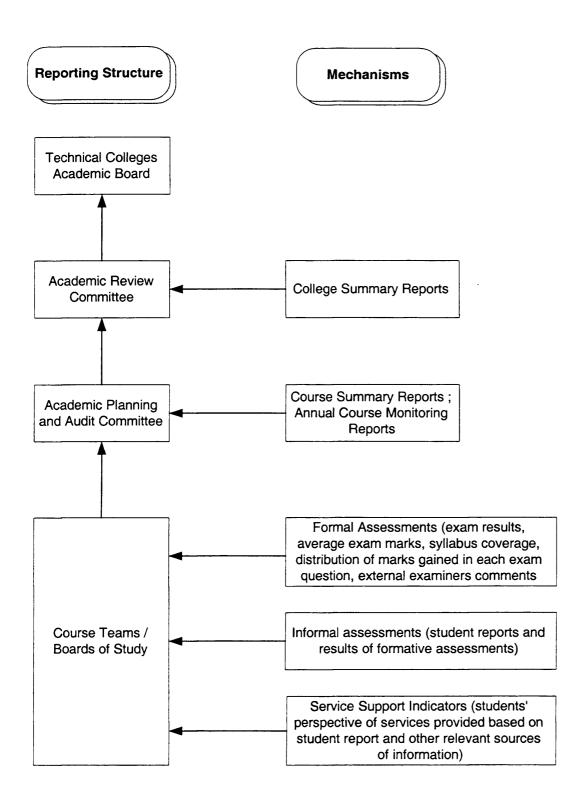


Fig 4-1 Reporting Structure and Mechanisms

Departmental Quality Policy Papers

The departmental quality policies closely followed the six criteria set out in proposal 1 of the ARC Paper on Academic Quality, as well as adopting proposals 4, 5 and 6 for monitoring quality. This being the case, the discussion in this section is based on the strategies adopted to fulfil each of the six criteria. A framework for the analysis is found in appendix 2.

Criterion 1.

'The departmental quality policies should seek primarily to improve the quality of teaching and learning strategies, in order to increase attainment.'

In the departmental quality policy papers, the most commonly mentioned strategies for improving teaching are: staff training and development, peer review, and consultancy work. These items appeared in almost all the departmental quality policies. Other strategies include

- walk-through discussions of teaching approaches (Computing and Mathematics)
- having a mentor system whereby a more experienced staff helps a new member
 of staff to settle in and be familiarized with the practices of the department
 (Business Administration; Computing and Mathematics)
- recruiting suitably qualified staff (Business Administration)
- HoDs' paying unheralded visits to classes (Business Administration)
- pitching learning materials at the right level (Business Administration)
- holding tutorial and seminar critical reviews, negotiated learning (Design)
- personalised and individual monitoring of project led enquiry (Design)
- course review (Design)
- setting the course delivery and materials at the right level (Manufacturing).

Often, the type of strategies adopted tied in with the nature of the discipline as well as

the personality of the Head of Department.

The strategies for improving learning include:

- recognising and addressing students' learning handicaps (Electrical Engineering)
- giving practical training in the department (Electrical Engineering)
- giving students proper induction to their course (Business Administration)
- carrying out statistical analysis of student intake (Computing and Mathematics) to help staff better understand the competence and calibre of their students.

An assessment of the strategies identified showed that 'standard' items were listed. These items were often the result of directives given from Headquarters during the period when the departmental quality policies were written. However, some departments, notably Business Administration, showed considerable initiative in introducing strategies for improving teaching and learning. Although other departments mentioned the writing of a quality manual, Business Administration was the only department that actually submitted one to the Academic Review Committee. The strong emphasis on teaching and learning is encapsulated in the opening lines of its Quality Policy:

'Well entrenched in our minds is the acute awareness that our students as well as the Department stand or fall by the quality of our teachers' delivery and of the students' learning.' (p.1 Department of Business Administration Quality Policy Paper).

Criterion 2.

'It must be flexible.'

Although little has been mentioned about how to go about being flexible, most departments mentioned the need to keep track of changes in the industry and to offer courses that were relevant to the needs of the marketplace. They also mentioned that

changes in market needs should be reflected in the periodic reviews of the quality policies. Other methods include being attuned to serviced department needs (English and Communication), being responsive to Academic Board requirements (Electrical Engineering), and adopting the philosophy of continuous improvement (Business Administration, Manufacturing Engineering, and Computing and Mathematics).

Criterion 3.

'It must harness the commitment of all (teaching and non-teaching) staff through open management and giving staff ownership of quality improvements and responsibility for delivering those improvements.'

In all documents, harnessing commitment through open management seemed to be equated with giving staff more responsibilities and involving them at all levels of course management (e.g. course team, subject teams). Some departments (ME, MF, CM, DE) also go as far as to superimpose on its course management structure a quality officer and quality teams or circles to enforce quality policies. The brief of such groups is to review policies and practices in various areas of teaching and recommend improvements. Most departments rely very heavily on committee structures to enforce quality management. In the Electrical and Communications Engineering Department Quality Policy Paper, for example, quality strategies are outlined in terms of committees and working groups and how each is expected to monitor quality. The focus is on a team-oriented culture which extends from the course team level and beyond to the Board of Study, Departmental Management, and the Academic Review Committee. Only two departments went further than that. One department (Design) stated that it adopts a

'non-hierarchical, self-directed work team structure which incorporates a system designed to anticipate, empower, and encourage a customer-focused ethos' (P. 1 Design Department's Quality Policy Paper).

Another (English and Communication) used phrases such as 'democratic processes', 'open consultation', 'two way-flow of information' as well as 'encouragement and reward for initiatives' (Centre for English and Communication Studies Paper on Academic Quality, p.5).

Criterion 4.

'The learner should be involved in improving the process of teaching and learning.'

The ARC Paper on Academic Quality recognises that, although there is difficulty in providing defensible evidence to substantiate students' perceptions, it is very important to take account of the students' perception of how well the course meets their needs. The most common mechanisms used for gathering student views are: student interviews, student reports, student progression analysis, staff- student consultative committees, and student questionnaires. It should be noted that all of such mechanisms are initiated by staff. Only two departments (Design and English and Communication Studies) claim to practice negotiated learning in which there is built-in, personalised and individual monitoring of project-based enquiry.

Criterion 5

'The policy should establish measurement of requirements and of success or otherwise in meeting those requirements, in all functions in order that progress can be proved.'

As required by the Technical Colleges Academic Board, all Departments have to adopt the standard procedures for measuring success. Mechanisms to serve this purpose include the course summary reports, the Course Quality Annual Returns (CQAR), external examiners' reports, as well as reports from Boards of Study meetings. Of particular importance is the CQAR which involves the award of a subjective grade and an objective grade on individual subjects by the course team. The subjective grade is arrived at through feedback obtained from students about the

individual subjects, whereas the objective grade is arrived at through scrutiny of the pass rate for the subject, and the spread of marks. In cases where minor problems with individual subjects arise, points of action are identified and taken up. These are subsequently reported back to the ARC. In the case where an entire year of a course is deemed seriously flawed, a working party from the ARC will step in to make sure that improvements are made. This practice is standard and uniformly adopted across the College.

Criterion 6

There should be a collaborative partnership between teaching and non-teaching staff, learners together with professionals, peers and experts.'

All departments claim, in their quality policy, that they are customer- oriented. By 'customer', they refer mainly to employers, students, other departments that they service, and the VTC management. All departments, in their mission statements, very clearly indicated that their prime customer is the prospective employer and therefore aim at fostering ties with industry and commerce. Professional bodies are also considered important since accreditation of courses and exemptions are sought from these organizations and their requirements have to be fulfilled. As such, the Departmental Advisory Board's (DAB) feedback is deemed useful for refining the curriculum. Students' perception of courses are actively sought through various mechanisms mentioned under Criterion 4.

Overview of Departmental Quality Policy Papers

All eight departmental quality policy documents start on the same premise which is stated in proposal one of the ARC Paper on Academic Policy. They are therefore very similar. And since all the courses have a vocational orientation, the mission statements for each of the courses were very similar. It was clear that the ultimate aim of each course was to provide quality training to students so that they can in turn be 'products' that the marketplace requires. In addition, there is a heavy reliance on structures to monitor and maintain academic quality as well as a clear compliance to

quality monitoring devices prescribed by the ARC.

Despite this very strong similarity in approaches and strategies, some differences can still be detected. For example, it was found that the engineering departments tended to use more factual language and emphasized more strongly on structures and mechanisms. The non-engineering departments (i.e. Design, Business Administration and English and Communications) used more emotive language and dealt noticeably more on the human factors (flat structure, democratic procedures, negotiated learning).

In some departments, quality is equated with excellence. Professional and self-accountability are also emphasized. For example, in the Business Administration Quality Policy Paper, teaching is described as 'craftsmanship'. It is also mentioned that teachers should strive for 'professional satisfaction in teaching'. Accountability is found in answering to oneself (i.e. the teacher), and satisfying clients and self.

In other departments, notably the engineering departments, Quality takes on a different shade of meaning. It is equated with meeting customer requirements and not 'self-gratification', as one department (Computing and Mathematics) puts it.

All departments strive to be flexible in their quality policy but only three departments proactively and explicitly state that they would review their strategic plan and quality policy yearly.

Monitoring of Academic Quality

Course Performance Review and Course Quality Annual Returns (CQAR)

The author studied the Course Performance Review and the Course Quality Annual Returns which constitute the College Summary Report that AP&AC (Academic Audit and Planning Committee) submits to ARC (Academic Review Committee) after each

academic year. These mechanisms are studied because they make formal and informal assessments of courses, as well as the services rendered to support the courses.

The Course Performance Review is directly related to the year-end results and progression rates. Typically, departments are required to account for courses which have high failure rates, high reassessment rates, low progression rates, or high distinction and credit rates. Explanation for these situations are highlighted and such information is also included in the CQAR action points, so that attention can be given to solving the identified problems.

The Course Quality Annual Returns includes a letter quality grade as well as a list of action points for improvements. The quality assessment for each unit (i.e. subject) and for each stage of the Course (i.e. year) are based on a scale of grades (A to E).

A study of the 1996/97 and 1997/98 CQAR action points show that problems lie mainly in these areas (in order of importance): teaching, assessments, resources and students.

Predictably, teaching is by far the most addressed issue in the CQAR action points. Areas of teaching addressed include:

- Teaching methodology (e.g. varying the pace of teaching to suit students, use of
 practical examples, revising lecture notes, stressing concepts, use of case studies,
 teaching less theory, simplifying content to suit students' level, having more
 tutorials, making use of audio-visual materials, better integration in the use of
 equipment with teaching);
- Course management (e.g. better co-ordination of teaching activities, reduction of class size, scheduling of classes, limiting scope of course, modifying syllabus, having more clerical and administrative support).

Most feedback fall under these categories. Other feedback belong to these areas:

Assessments

- Ensuring assessments are able to discriminate students' performance;
- Ensuring that assessments given to different classes are standardised;
- Ensuring that assessment criteria are standardised;
- Ensuring a reasonable mark distribution;
- Shifting the credit boundary.

Resources

- Updating of equipment;
- Making equipment available for students to complete their projects;
- Use of IT (including the use of the internet) for learning purposes.

Students

- Students' learning style;
- Learning motivation;
- Disciplinary problems;
- High drop out rates;
- Poor entry standards;
- Poor language skills;
- Poor cognitive skills.

These points have been mentioned variously in the individual CQAR action points, and are of equal importance.

As can be seen from the list, the CQAR does manage to pick out pertinent teaching and learning issues for improvement. This view can be substantiated by the fact that in the summary of the CQAR review exercise (1997/1998), departments expressed their satisfaction that the exercise was beneficial for improving the quality of courses.

When comparing the 1996/1997 CQAR returns and the 1997/98 returns, it was found that the action points were mostly addressed. Problems which persisted were usually of a nature beyond the control of individual departments. Examples of such problems were difficulty in attracting suitable students, high failure rates of some courses due to poor intake, low language proficiency (a very longstanding and universal problem in Hong Kong), inadequate clerical or administrative support, and purchase of equipment that was centrally controlled.

Departments also continued to improve course quality through validation, revalidation, or changes to course schemes. Students needs were taken into account such as adjusting the level of difficulty in lecture notes to suit the students' ability, fine-tuning examination papers, giving students more tutorial help, and closely monitoring teaching strategies. All these actions helped to lower failure rates in courses.

It is through mechanisms like the CQAR that quality policies are put into action and realized.

Documents relating to the VTC Strategic Plan and Implementation

In mid-May 1996, the Government commissioned the management consultants, Segal Quince Wicksteed (Asia) Limited, to conduct a strategic and organizational review of the Vocational Training Council. In this section, two related papers were analysed. These are: Meeting with Heads of Departments of Technical Colleges and Principals of Technical Institutes (paper on outcome of discussion); and the Executive Summary of the Final Report to the Secretary for Education and Manpower. These were widely circulated within the VTC in late 1996. The purpose of studying these

documents was to find out senior managers' perception of the VTC organizational culture, and to identify the Consultant's recommendations relating to this issue.

Meeting with Heads of Department of Technical Colleges and Principals of Technical Institutes – Report on Discussion

During the consultation period, issues relating to organizational culture were raised. In the meeting with Heads of Departments of Technical Colleges and Principals of Technical Institutes, participants were required to do a SWOT analysis of the VTC. Strengths identified include stability factors such as hardworking staff, guaranteed funding, extensive capital plant and equipment, good management capability at unit level, established links with industry and commerce, and a stable and established reputation in vocational education and training. It was clear from the study that the VTC was regarded as a stable, and well-established organization. However, stability comes with a price. One of the weaknesses identified was the VTC's slowness in changing. In addition, weakness in internal communications, a lack of student focus and lack of transparency in decision making were also mentioned. Communication was all one way. There was also excessive control, a 'top-down' command structure and an over-concentration on headquarters functions at the expense of the operational units. It was further claimed that ideas were stifled, reaction to innovative ideas was negative and there was a culture of fear. When asked to discuss the management style of the VTC, its culture and internal communications, one group of participants described the organization as 'autocratic', 'Victorian, defensive, bureaucratic and hierarchical'; 'self-perpetuating, system driven, ultra-conservative, impersonal and insular'. (pp.7-8)

When asked to suggest a way forward for the VTC to develop itself, the group thought that the VTC needed to be 'more respecting of individual professionalism and experience, open and transparent, consultative and supportive'. (p.8)

On the matter of the VTC's organization and structure, another group reported that the VTC was 'dominated by strong central controls, bred of insecurity with HQ', 'driven

by a compliance culture that drives out imagination and innovation', 'inflexible to student needs and has no natural drive to satisfy customer and clients'. The culture was also described as 'satisfying the boss', 'managing external complaints and opting for a 'no-risk' stance.' (pp.8-9)

Also pertinent to the research was the observation made by participants that the Academic Board did not exercise the authority it should and its discussions were influenced to too great a degree by senior management.

Strategic and Organizational Review of the Vocational Training Council - Executive Summary of Final Report to Secretary of Manpower and Education

The Final Report to the Secretary of Manpower and Education Training also echoed the views aired by senior managers in the technical colleges and technical institute sector. The report is a culmination of views gathered from principal stakeholders such as students, employers and the government, as well as consultations including meetings with staff at all levels and all sectors within the VTC.

The Segal Quince and Wicksteed (Asia) Limited consultants found many aspects of VTC management to be centrally driven, and that there was a strong emphasis on control largely to ensure probity and equitable distribution of resources across the organization. The report also raised concerns about the lack of two way communication of ideas with staff lower down the hierarchy. The consultants were also led to understand that both the Council and its Boards and Committees were also predominantly executive led as it found limited evidence of discussion of strategic issues.

Furthermore, it was reported that the internal communication was often one-way and top down. It was pointed out that staff felt frustrated about their ability to get their ideas across, or even have them heard.

Decision making was perceived to be highly centralised and done at top management level. This too was a source of 'enormous frustration among staff many of whom are highly professional and very competent' (p. vii). It was further noted that, as an organization, the VTC lacked a clear and well-articulated policy on quality.

Among the many recommendations that were made, the two most pertinent to our research were the need for the VTC to devolve authority and responsibility to its operational units, as well as the need for a clear and well-articulated policy on quality. The consultants argued that devolution would help to motivate staff. They suggested that, apart from staff being given greater authority and responsibility, operating units should also be given control over their administrative support staff. Currently these staff are managed centrally. The report also recommended rewarding staff for generating and implementing ideas which meet new demands and raise additional revenue for VTC.

In addition, the Consultants recommended the establishment of quality teams to provide a more critical internal capacity to review the effectiveness of courses (paragraph 26) as well as to develop a 'clearly articulated mission statement related to the two key stakeholder groups - employers and students' (p. x; paragraph 35). With regard to the mission statement, the consultants specified that it should contain the following core objectives:

'to provide the skills required in the labour market to maintain economic development and growth, and to assist individuals to develop their skills and talents so as to enhance their employability and support personal development and progression in the labour market.' (p. x; paragraph 35)

Quality in the VTC - Papers relating to Vision, Mission, Strategy and Policy

The VTC Mission was developed by the Executive Director Management Committee (EDMC) and circulated to all VTC staff in November 1997 for comments.

The vision is as below:

'To be the leading institution for vocational education and training in the region'

and the mission is:

'To meet the developing needs of Hong Kong by satisfying employers, students and providing an Alternative Route in vocational education and training'

Among the strategies that were mentioned, those that are relevant to our present research are as follow:

- initiating proactive working relationship with employers and stakeholders;
- fostering student ownership and learning;
- seeking staff ownership and involvement in mission, goals and strategies;
- increasing staff involvement in VTC development;
- encouraging and enhancing staff development;
- devolving greater authority to operational units; and
- conducting regular audit/resource review.

VTC Quality Policy

The theme of getting staff at all levels more involved, and harnessing their commitment through that process, is even more marked in the VTC Quality Policy. This policy was sent to all staff by the Executive Director in February 1998. This policy had been developed by the EDMC's TQI (Total Quality Improvement) subcommittee. The College's Academic Review Committee was asked to consider the further development of the Technical Colleges' Quality policy in the light of the new

VTC Quality Policy. Furthermore, the TQI sub-committee expected top management to own the proposals:

'...One of the main requirements of TQM is that senior management "buy in to " and positively lead the quality initiatives, hence the need for EDMC taking ownership of the proposals.' (p. 1, Total Quality Improvement (TQI) Staff Update)

Recognizing the need for staff involvement, the Executive Director had this to say of the policy:

• • • •

- 5. The Policy describes an environment for change which recognizes the contribution all staff will need to make to ensure that it is implemented....
- 6. It is anticipated that all staff will 'own' the initiative, hence making it an important and integrated part of their working lives. In addition, the implementation of the Policy will make a major contribution towards the VTC's vision and mission.'

(Memo on 'The VTC Quality Policy - A Route to Total Quality Improvement'; 3 February 1998).

The policy is a facilitating document within which all VTC units would be required to develop their own quality program.

The objective of the quality policy is

'to create a culture and working environment in which all staff can develop their capability and maximize their contribution to the provision of a total education and training experience which will enable students and trainees to make the most of their potential, and subsequently meet the manpower needs of the economy' (VTC Quality Policy 1997). The policy is built around the concepts of Total Quality Improvement (TQI) and Continuous Improvement (CI). The paper recognizes that, although the quality program is management led, it needs to be staff developed and implemented. Since the quality policy is to be achieved 'bottom up', each unit is empowered to produce a local quality policy document and state how they intend to implement the concepts as laid down within this VTC policy. The paper stresses the importance of all staff taking ownership of the ongoing development of their local quality policy as early as possible.

In the paper, Total Quality Management is defined as

'The whole organization working closely together within a support oriented culture / environment to achieve ever increasing excellent performance and service that completely satisfy both internal and external customers by meeting their explicit and implicit expectations.' (VTC Quality Policy 1997)

The model for implementing Total Quality Management takes the concept of Continuous Improvement and builds on the three fundamental principles of total quality: customer focus, process improvement, and total involvement. The elements under these are education and training, communications, supportive structure, reward and recognition, measurement. The diagram in Figure. 4.2 illustrates the concept (Refer to p. 120).

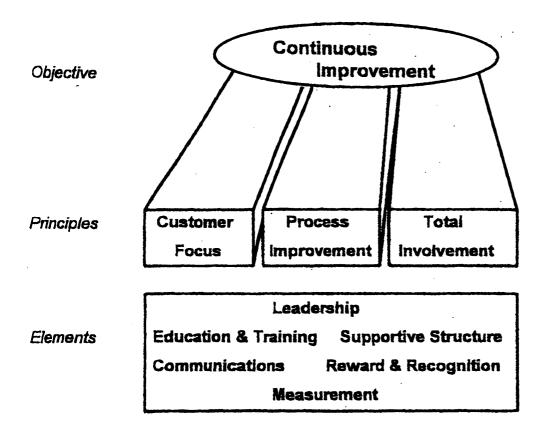


Fig. 4.2. Implementation Concepts from "TQM- Three Steps to Continuous Improvement", Tenner & DeToro. (VTC Quality Policy, P. 3).

The development of a supportive culture requires staff to identify those situations in which they are a customer and those in which they are a supplier of a service. Each unit is required to reconsider the processes in which they are involved and to ask the question –'Do the activities within the process and the process itself add value to the VTC?'

The paper states that training should take place and each unit should identify which training they require for their staff and when they need it. The TQI committee, in liaison with the new Staff Development Unit, would consolidate such staff training and, where possible, facilitate general type courses.

The new organizational structure facilitates a culture and environment in which the educational and training processes are actively supported to ensure the teachers and trainees are able to meet the needs of customers, students and employees.

The paper recognizes that it is the management's function to create and monitor the working environment to ensure that teachers and trainers receive the necessary support to enable them to meet the ever-changing needs of the customers. All teachers and trainers are responsible for continuously monitoring their performance and the views of their customer to ensure that they are delivering a quality service in terms of their teaching and learning. The paper also makes it clear that the responsibility of all academic staff and administrative support staff is to ensure that the service they provide adds value to the education and training process.

The VTC strategic plan identified three key academic initiatives to support and enhance the quality of teachers and trainers: teaching and learning, curriculum development and staff development.

The policy stresses the need to obtain customer feedback, and to improve continuously through evaluation by customers and self-evaluation. Finally, it is essential that students and trainees experience more than just the academic or practical elements of their courses. The paper states that the VTC should also contribute to the total experience of students and trainees. It stresses that importance for staff in each unit to recognize the part that they play in this total experience. Hence it requires that their local quality policies define how they are going to ensure that their contribution is going to maximize the experience that all students and trainees gain during their time in the VTC.

In addition, the policy also pledges a TQI Support Culture, in which senior management, the government and the VTC Council support the activities of the organization in order to meet the needs of its external customers, i.e. students and employers. This illustration (p. 10, VTC Quality Policy) is found in Fig. 4.3.

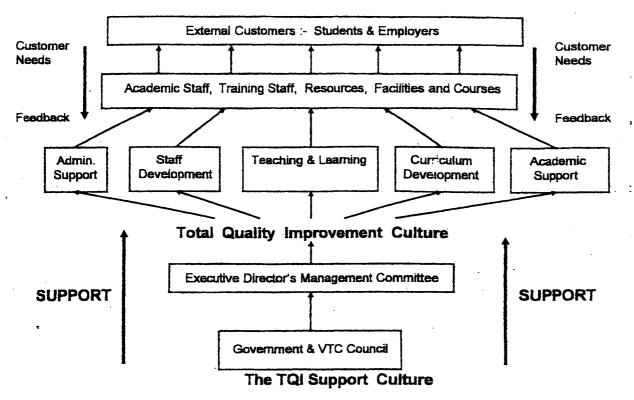


Figure 4.3 Framework for a TQI Support Culture

Policy Documents relating to the Overall Organizational Culture: factors that work for and against a quality culture

Despite attention given to harnessing staff commitment and cultivating a culture of supportiveness and customer-orientedness, there are persistent complaints among staff that communication channels are lacking between them and top management. This view has been expressed at various forums and particularly with reference to the recent amalgamation of the technical colleges and technical institutes into IVE.

'The major finding in this survey is there is a lack of communication between the IVEMC and the rest of the staff in the TCs and TIs. Over 73% disagreed on the fact that VTC has openly consulted staff's and students' opinion. Also, 73% said the progression model is not being made clear to the students. The communication is being looked at as one way, from top down' (p. 2, Result of Staff Union Survey).

'The impact of reorganization is great and long lasting, and yet the implementation has been overly rushed. Students within the VTC were not widely consulted on the formation of IVE. They knew little about the matter and the VTC did not provide a direct channel for the vast majority of students to express their views and seek clarifications' (Student Union's Declaration on the Formation of IVE- Student Union Newsletter (translated from Chinese).

'But I sincerely wish the VTC can strengthen the communication channel with the teaching staff, listen to and respect their opinion. Otherwise, if the communication channel is blocked, the staff will be forced to seek help from outside sources, possibly through the media. If it comes to that, it will not be to the advantage of the future development of the Institute' (PTU News).*

In an interview with the VTC Staff Newsletter (July 1999), the Deputy Executive Director was presented with the staff view that communication was one of top down instead of bottom up.' His response to this is quoted in full below:

'In fact we have had a number of opportunities to get the message across. Prior to the formation of IVE, two briefings were held by the Executive Director for over 1,200 TC and TI staff. There were extensive discussions. I myself visited the campuses to meet with all heads of departments to discuss IVE. At present, I continue to hold regular briefings to update them on the latest developments and answer their questions.

Other than these, we have a full range of communication channels between staff and the management – the Caucus, the Executive Director's Management Committee (EDMC), the joint Directorate Committee, the IVE Management Committee (IVEMC) and the Academic Board. Various levels of

^{*} Professional Teachers Union News

TC and TI representatives, from nexus heads to teaching staff, are members of all these committees. Besides, all heads of department are members of the Discipline committees. They are directly involved in the planning of the new course syllabuses and curricula. These committee meetings are formal channels. They allow the campuses and the VTC management to communicate on an on-going basis. All campuses are encouraged to propose agenda items for discussion in these meetings. The IVEMC is the key policy decision-making body of IVE and its minutes are available for general viewing for all VTC staff on the intranet. We also encourage staff to write in and express their views on the latest developments. Since various levels of TC and TI staff are represented on all the committees, it is their responsibility to communicate with their colleagues. Heads of departments also need to hold monthly meetings with their staff to brief them. We always favour a two-way communication approach, top down and bottom up. Judging from this aspect, we hold the same view as our staff.'

The full quote presents the management's conceptualization of how communication flow can be structured. It underlines management's view that a structure has been set up and this suffices in ensuring a two-way flow of information. The stance taken was that management has done its part, it is now up to staff to do theirs. Another point worth noting is that the opening paragraph of this quote suggests 'giving information to staff' rather than 'consultation with staff'.

Summary

It is clear that Academic quality has been given prominence in the College as well as in the VTC as a whole. In the ARC's paper on Academic Quality: Full-time Courses, Quality is defined as meeting academic standards and requirements set out in the Course Documents which are validated by external members. In that process, it has to meet the requirements of industry and students whom they regard as their customers. To ensure that it meets its external customer (i.e. employers, students) requirements, the College has a mechanism of soliciting advice through informal links with industry, industry representatives on the Departmental Advisory Boards, employers'

surveys, student surveys, staff-student consultative meetings, and students interviews. Accountability is ensured through course summary reports as well as the award of quality grades in the CQAR. This, together with the possibility of having a working group to review a course which has been identified as unsatisfactory, are effective measures to ensure that the quality of courses is closely monitored.

The ARC's paper focuses on the quality assurance of courses, and rightly stresses on the teaching and learning process and results, and how to facilitate quality vocational education. The VTC's quality paper, on the other hand is more all-embracing. This is appropriate because it is linked to the strategic plan of the organization. Essentially, the paper focuses on building a culture to maximize staff's potential and commitment to producing high quality courses. The way forward, as it proposes, is to concentrate on three aspects, internal and external customer—orientedness, process improvement and total involvement, with the support of VTC's senior management, government and the VTC Council.

Management at College and VTC levels recognize the need to harness staff commitment through open management, devolution of responsibility and authority, and a two-way flow of communication. To facilitate this, there is a very sophisticated structure of communication channels in the form of committees at all levels. However, documents reveal that the long entrenched culture in the VTC has been one of stability and top-down communication and this cannot be changed within a short span of time. It is probably against this backdrop that both the ARC and the VTC quality policy papers have adopted an incremental, continuous improvement approach.

Chapter 5: Main Survey Findings

Sampling

For the final survey, a 100% sample of teaching staff was taken from these ranks at the Tsing Yi campus: workshop instructor, assistant lecturer, lecturer, senior lecturer and principal lecturer. The population, which totalled 199, was from all seven departments and one servicing centre of the campus. These departments were: Business Administration, Computing and Mathematics, Design, Construction, Electrical and Communications Engineering, Manufacturing Engineering, and Mechanical Engineering. The centre surveyed was English and Communication Studies. A total of 90 (out of 199) questionnaires (see appendix 4) were returned, a response rate of 45 %.

Parametric Tests

Following revisions in the questionnaire, the results obtained from the final survey showed an improved Cronbach Alpha's coefficient reliability of 0.8250 in Part 1 (Values, Beliefs, Attitudes on Academic Quality), an improved value of 0.8096 in Part 2 (Structures, Policies, Procedures and Practices), and a value of 0.8167 for Part 3 (Management of Academic Quality). The internal reliability of each of the three sections was therefore considered to be good. The internal reliability of all three sections taken together was also found to be good (i.e. 0.8758) (Sekaran 1992). Table 6.1 below compares the internal reliability coefficients obtained for the pilot survey with those obtained for the main survey:

Section	Pilot Survey	Main Survey
Section 1: Values, Beliefs and Attitudes Towards Academic Quality	0.66	0.8250
Section 2: Structures, Policies, Procedures and Practices for Academic Quality	0.78	0.8096
Section 3: Management of Academic Quality	0.87	0.8167

Table 6.1 Comparison of Internal Reliability

Furthermore, the yielded results also showed an error estimation of +/-0.0482, or a 95% confidence interval for the population mean.

Profile of respondents

The frequency distribution of rank of respondents broadly mirrors the actual proportion of staff at all ranks in the college. The table below compares the actual number and percentages of staff at all ranks in the college with the number and percentages of respondents at all ranks.

Rank	Number and percentages of staff at all ranks in the college (%)	Number and percentages of respondents at all ranks (%)
1. Workshop instructor	11 (5.5%)	3 (3.3%)
2. Assistant lecturer	5 (2.5%)	2 (2.2%)
3. Lecturer	125 (62.8%)	55 (61.1%)
4. Senior lecturer	44 (22.1%)	22 (24.4%)
5. Principal lecturer	14 (7.1%)	8 (8.9%)

Table 6.2 Comparison of Staff and Respondents Composition by Rank

In addition, the distribution of respondents from each department was also fairly even. The percentage of respondents from each department ranged between 6.7% to 18.9%. Details are given in the table below.

Department	Number of respondents	Percentage (%)
1. Business Administration	9	10 %
2. Computing and Mathematics	10	11.1 %
3. Construction	6	6.7 %
4. Design	9	10 %
5. English and Communication Studies	17	18.9 %
6. Electrical Engineering	12	13.3 %
7. Mechanical Engineering	14	15.6 %
8. Manufacturing Engineering	13	14.4 %
Total	90	100%

Table 6.3 Composition of Respondents by Department

As for length of service, 85.6% of staff indicated that they had worked in the VTC for

under 6 years, 6.7% had worked between 6 to 9 years, while 7.8% had worked for over 10 years. The figures are illustrated in the table below:

Length of Service in the VTC	Percentage
Below 6 years	85.6
6 - 9 years	6.7
10 years and above	7.8

Table 6.4 Length of Service in the VTC

In terms of length of service in the Technical College, the survey results showed that the vast majority of respondents (70%) have been working there for three to six years. The remaining 30% have worked below 3 years. The large percentage of staff working for less than 6 years can be explained by the fact that the Tsing Yi campus history is very short (7 years). This is illustrated in the table below:

Length of Service in the Campus	Percentage
Below 3 years	30%
3 years or above	70%

Table 6.5 Length of Service in the Campus

With regard to the work experience of the respondents, the survey results showed that only 21.1% of the staff had worked in other sectors of the VTC (i.e. technical institutes, training centres), while the vast majority (78.9%) had been recruited from elsewhere. These included the universities, the former polytechnics, commercial fields and industry.

This is shown in the table below:

Work Experience of Respondents	Percentage
Not worked anywhere else in the VTC	78.9
Worked in a Technical Institute	20.0
Worked in a Training Centre	1.10
Worked at the VTC Headquarters	0.00

Table 6.6 Work Experience of Respondents

Nearly half of the respondents (45.6%) indicated that they had 1 to 3 responsibilities that were related to course monitoring. A near-half of the respondents (45.6%)

indicated that they had 4 to 6 responsibilities, while only 8.9% indicated that they had more than 7 responsibilities. The table below illustrates this.

Level of Involvement in the Monitoring of the Quality of Courses	Percentage
1 to 3 responsibilities for academic quality management	45.6
4 to 6 responsibilities for academic quality management	45.6
7 or more responsibilities for academic quality management	8.9

Table 6.7 Level of Involvement in the Monitoring of the Quality of Courses

It can be concluded from the data that respondents were all involved in monitoring quality, in varying degrees. Such monitoring occurred at various levels in the College structure. At the local level, there are various course teams made up of subject leaders, class tutors and year tutors. These teams report directly to their respective boards of study. The boards of study then report to their respective department heads and the Academic Review Committee. Finally, the Academic Review Committee reports to the Technical Colleges' Academic Board (TCAB). In addition to this reporting structure, there are various quality circles (QCs) or quality initiative groups within departments. At the VTC level, there is also a Total Quality Initiative Sub-Committee which guides the quality initiatives of the VTC. Interestingly, the survey findings show that senior lecturers and lecturers were more involved in the day-to-day monitoring of the quality of courses, while principal lecturers were more involved in committee work at cross departmental, college level.

Presentation of Survey Findings

The findings (mean, distribution and standard deviation) of the survey findings are presented in this section. In the survey, 1=strongly disagree, 2=disagree, 3=agree, and 4=strongly agree.

1. Values, Beliefs and Attitude Towards Academic Quality

Statement 1.1

I am familiar with the Technical College's mission.

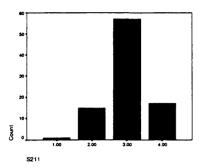


Figure 1.1 Results Obtained for Statement 1.1

S211

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.1	1.1	1.1
	2.00	15	16.7	16.7	17.8
	3.00	57	63.3	63.3	81.1
	4.00	17	18.9	18.9	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.8 Results Obtained for Statement 1.1

The vast majority of the respondents (or 82.2%) agreed with this statement, while 17.8% did not. The overall mean for this statement was 3.000 (=agree) and the standard deviation obtained was 0.6360. A breakdown of the responses showed that 82.2% either agreed (3) or strongly agreed (4) with this statement, while 17.8% either disagreed (2) or strongly disagreed (1). One reason why most staff were familiar with the mission was that in the months leading to the implementation of the IVE, the curriculum was undergoing rationalization, and all staff were affected by this directly or indirectly. In addition, the College's mission was often brought up for discussion as there was a great deal of publicity in the press and public discussion of the IVE's niche position. It was clear that the Vocational Training Council wanted to promote IVE as offering THE alternative route to grammar school type education. In the course of all these events, the College mission was often mentioned.

Statement 1.2 I am committed to the Technical College's mission.

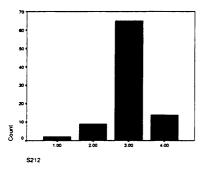


Figure 1.2 Results Obtained for Statement 1.2

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	2	2.2	2.2	2.2
	2.00	9	10.0	10.0	12.2
	3.00	65	72.2	72.2	84.4
	4.00	14	15.6	15.6	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.9 Results Obtained for Statement 1.2

The responses were similar to that obtained for statement 1.1. 87.8% either agreed (3)or strongly agreed (4) with this statement, while only 12.2% either disagreed (2) or strongly disagreed (1). The high percentage of agreement with this statement could be explained by staff's involvement in the process of curriculum changes at various levels. The overall mean for this statement was 3.0111 and the standard deviation obtained was 0.5901.

Statement 1.3 As an academic staff, my top priority is to deliver quality courses.

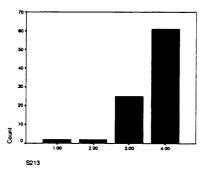


Figure 1.3 Results Obtained for Statement 1.3

S213

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	2	2.2	2.2	2.2
	2.00	2	2.2	2.2	4.4
	3.00	25	27.8	27.8	32.2
	4.00	61	67.8	67.8	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.10 Results Obtained for Statement 1.3

Almost all (95.6%) respondents indicated that they agreed (3) or strongly agreed (4) with this statement. A breakdown of the data showed that there were significantly more respondents (67.8%) who chose "strongly agree" as their answer than any other responses. Only 2.2% of the respondents indicated that they disagreed with the statement and another 2.2% registered strong disagreement. This shows that a vast majority of academic staff saw academic quality as their top priority. It also reflects a stronger personal commitment to the profession than to the institution. The response to this statement yielded a high mean score of 3.6111. The standard deviation was 0.6482.

Statement 1.4 I am committed to developing myself professionally by taking training courses

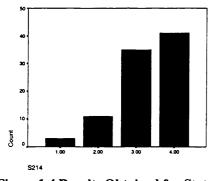


Figure 1.4 Results Obtained for Statement 1.4

S214

	_ ,	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	3.3	3.3	3.3
	2.00	11	12.2	12.2	15.6
	3.00	35	38.9	38.9	54.4
	4.00	41	45.6	45.6	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.11 Results Obtained for Statement 1.4

84.5% of respondent either agreed (3) or strongly agreed (4) with this statement. A further breakdown show that slightly more respondents (45.6%) chose "strongly agreed" than "agreed" (38.9%). The mean score for this statement was 3.2667, and the standard deviation was 0.8045. Only 12.2% of the respondents indicated that they did not agree (3) with this statement and 3.3% indicated that they strongly disagreed. This is to be expected since taking training courses, particularly with the aim of upgrading qualifications, is a trend in the higher and further education sector in Hong Kong. Within the Tsing Yi campus, it is the norm for staff to hold a master's degree. Within some engineering departments, the percentage of doctorate holders is noticeably high. This compares very favourably against the basic entry requirement for academic staff which is a bachelor's degree with honours and three years' relevant working experience. Undoubtedly, the further education sector in Hong Kong is very competitive. Upgrading skills is seen as a path to career advancement. This may, of course, have a wash back effect on the quality of education delivered. This point is encapsulated by the Deputy Executive Director in a memo (dated 15 September 1999) to all principals, vice-principals, Heads of Department and Principal Education Officers. The memo states that by engaging in professional development, 'the individual will benefit with possible increase in job security and eligibility for promotion.' In addition, the memo also states that staff development, in addition to professional development, 'is an activity which all staff are expected to be involved in'.

Statement 1.5 Where necessary, I put in extra time outside normal working hours to deliver a high standard of teaching.

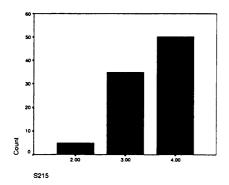


Figure 1.5 Results Obtained for Statement 1.5

S215

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	2.00	5	5.6	5.6	5.6
	3.00	35	38.9	38.9	44.4
	4.00	50	55.6	55.6	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.12 Results Obtained for Statement 1.5

94.5% of respondents indicated that they either agreed (3) or strongly agreed (4) with the statement. Significantly more respondents chose "strongly agreed" (55.6%) over "agreed" (38.9%). Only 5% of the respondents did not agree (2) with the statement and no one strongly disagreed. Again, this indicates that most staff have a very strong personal commitment towards quality teaching. The mean score obtained for this statement was 3.5000 and the standard deviation was 0.6043.

Statement 1.6

Maintaining high academic standards is every academic staff's responsibility, not just that of senior staff.

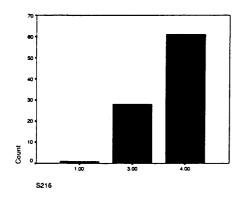


Figure 1.6 Results Obtained for Statement 1.6

S216

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.1	1.1	1.1
]	3.00	28	31.1	31.1	32.2
	4.00	61	67.8	67.8	100.0
l	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.13 Results Obtained for Statement 1.6

There was a near unanimous agreement (98.9%) with this statement. A further breakdown showed that 67.8% of respondents indicated that they strongly agreed (4) with this statement, and 31.1% agreed (3). Only 2 (1.1%) respondents indicated that

they strongly disagreed with the statement. This showed that academic staff were willing to take responsibility for upholding academic standards and not leave it to someone further up the ranks. The mean score obtained for this statement was 3.6556 and the standard deviation was 0.5438.

Statement 1.7 Initiatives in quality assurance should come from all academic staff, not just from senior staff.

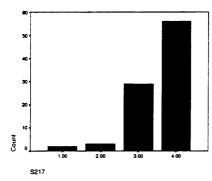


Figure 1.7 Results Obtained for Statement 1.7

S217

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	2	2.2	2.2	2.2
	2.00	3	3.3	3.3	5.6
	3.00	29	32.2	32.2	37.8
	4.00	56	62.2	62.2	100.0
1	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.14 Results Obtained for Statement 1.7

The results show that almost all academic staff believed that initiative should come from all staff and not just from management or senior staff. A breakdown showed that 94.4% of respondents agreed with this statement. Out of this number, 62.2% strongly agreed (4) and 32.2% agreed (3). Only 3.3% of the respondents disagreed (2) with the statement, while 2.2% strongly disagreed (1). The mean score for this statement was 3.5444 and the standard deviation was 0.6731.

Statement 1.8

Academic staff should treat students as their customers.

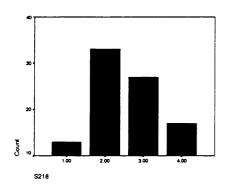


Figure 1.8 Results Obtained for Statement 1.8

S218

				Valid	Cumulative
1		Frequency	Percent	Percent	Percent
Valid	1.00	13	14.4	14.4	14.4
	2.00	33	36.7	36.7	51.1
ļ	3.00	27	30.0	30.0	81.1
ł	4.00	17	18.9	18.9	100.0
İ	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.15 Results Obtained for Statement 1.8

As seen in the results, slightly over half of the staff did not accept the concept of treating students as customers. 51.1% of the respondents registered either strong disagreement (1) or disagreement(2) with this statement, while 48.9% either agreed (3) or strongly agreed (4). What is also noticeable here is that only 18.9% strongly agreed with the statement, while 30% of the respondents agreed with it. The mean for this statement was 2.5333 and the standard deviation was 0.9622.

Statement 1.9 Academic staff should treat the industry or service sector as customers.

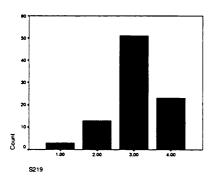


Figure 1.9 Results Obtained for Statement 1.9

S219

			Valid	Cumulative
	Frequency	Percent	Percent	Percent
Valid 1.00	3	3.3	3.3	3.3
2.00	13	14.4	14.4	17.8
3.00	51	56.7	56.7	74.4
4.00	23	25.6	25.6	100.0
Total	90	100.0	100.0	
Total	90	100.0		

Table 6.16 Results Obtained for Statement 1.9

A breakdown of the responses showed that 82.2% of the respondents either agreed (3) or strongly agreed (4) with this statement, while only 17.6% either strongly disagreed (1) or disagreed (2). The mean score for this statement (3.0444) was significantly higher than that for statement 1.8. The standard deviation was 0.7330. It shows that while the response to the concept of internal customers (e.g. students and colleagues) was lukewarm, the concept of the external customer (i.e. industry and the service sector) was more readily accepted. This was because staff were acutely aware that the industry or service sector would be employing their graduates when they left the college and they had to be training graduates who are 'marketable'.

Also, each academic department in the college has an advisory board which draws members from industries. Their role is to give feedback on the needs and trends of the job market and even on the funding of courses. Consequently, staff were receptive to such feedback.

Statement 1.10

Academic staff should treat other academic staff with whom they collaborate as customers.

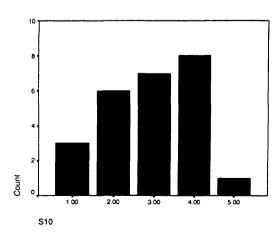


Figure 1.10 Results Obtained for Statement 1.10

S2110

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	12	13.3	13.3	13.3
İ	2.00	38	42.2	42.2	55.6
1	3.00	33	36.7	36.7	92.2
	4.00	7	7.8	7.8	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.17 Results Obtained for Statement 1.10

The majority of respondents (55.5%) either strongly disagreed (2) or disagreed (1) with this statement, while 44.5% either agreed (3) or strongly agreed (4). The mean score for this statement was 2.3889 and the standard deviation was 0.8169. Again, this shows that quite a large number of staff did not accept the concept of treating colleagues as internal customers. The mean for this statement was even lower than that for statement 1.8 (i.e. 2.5333).

Statement 1.11 Academic staff should be responsive to their students' needs.

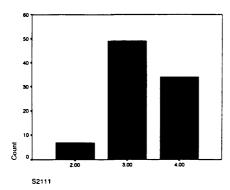


Figure 1.11 Results Obtained for Statement 1.11

S2111

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	7	7.8	7.8	7.8
	3.00	49	54.4	54.4	62.2
	4.00	34	37.8	37.8	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.18 Results Obtained for Statement 1.11

A breakdown of the figure shows that only 7 (or 7.8%) of the respondents did not agree with the statement, while no one disagreed with it. 54.4% agreed (3) with the statement and 37.8% strongly agreed (4). This seems rather self-contradictory and the point would be taken up at interviews with staff. Although almost half of the respondents did not agree that students should be treated as their customers (see statement 1.8), a significant majority (92.2%) indicated that academic staff should be responsive to their students' needs. The mean score for this statement was 3.3000 and the standard deviation was 0.6080.

Statement 1.12 Academic staff should be responsive to their industry's or service sector's needs.

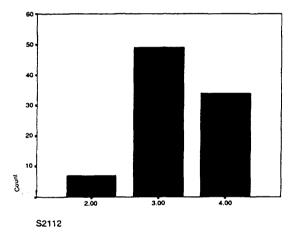


Figure 1.12 Results Obtained for Statement 1.12

S2112

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	7	7.8	7.8	7.8
!	3.00	49	54.4	54.4	62.2
1	4.00	34	37.8	37.8	100.0
ł	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.19 Results Obtained for Statement 1.12

The breakdown figure showed that 92.2% agreed (3) or strongly agreed (4) with this statement. Only 2 (or 7.8%) of the respondents did not agree. No one strongly disagreed. The mean score for this statement was 3.3000 and the standard deviation was 0.6080.

As mentioned in our comments on 1.9, academic staff were keenly aware that the industrial and service sectors employed their graduates and staff were eager to meet their requirements. In addition, the percentage of agreement (92.2%) with statement 1.12 was higher than that for statement 1.9.

Statement 1.13

Academic staff should be responsive to the needs of staff with whom they collaborate.

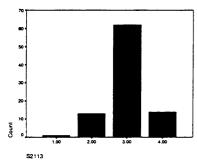


Figure 1.13 Results Obtained for Statement 1.13

S21	1	

			Frequency	Percent	Valid Percent	Cumulative Percent
	Valid	1.00	1	1.1	1.1	1.1
		2.00	13	14.4	14.4	15.6
		3.00	62	68.9	68.9	84.4
1		4.00	14	15.6	15.6	100.0
1		Total	90	100.0	100.0	
	Total		90	100.0		

Table 6.20 Results Obtained for Statement 1.13

It was found that 84.5% of the respondents agreed (3) or strongly agreed (4) with the statement, while 15.5% disagreed (2) or strongly disagreed (1). The overall mean for this statement was 2.9889 and the standard deviation was 0.5901. It should also be noted that the percentage of agreement for this statement (84.5%) compared very favourably to the percentage of agreement for statement 1.10 (44.5%). Staff generally felt that they possessed the 'expert' knowledge in their teaching area and therefore could exercise better professional judgement than their colleagues, particularly those who did not teach in their subject area. They also felt that by treating colleagues as customers, they would have to assume that their colleagues were right all the time. This is a notion that they could not accept. However, most staff were agreeable to taking their colleagues' views into account in their normal course of work, provided that they were allowed to exercise their own professional judgement in the end.

Statement 1.14

It is necessary to engage external agents (e.g. groups, individuals outside the course teams) to monitor the quality of courses.

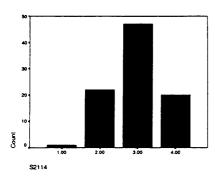


Figure 1.14 Results Obtained for Statement 1.14

S2114

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.1	1.1	1.1
	2.00	22	24.4	24.4	25.6
	3.00	47	52.2	52.2	77.8
	4.00	20	22.2	22.2	100.0
1	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.21 Results Obtained for Statement 1.14

74.4% of the respondents agreed (3) or strongly agreed (4) with this statement, while 25.6% agreed (2) or strongly disagreed (1) with it. This fairly high figure could be due to the fact that staff were used to the process of validation and accreditation of courses. The mean score for this statement was 2.9556 and the standard deviation was 0.7175.

Statement 1.15

Teamwork among academic staff is essential for ensuring the quality of courses.

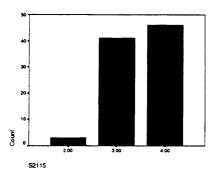


Figure 1.15 Results Obtained for Statement 1.15

S2115

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	3	3.3	3.3	3.3
i	3.00	41	45.6	45.6	48.9
	4.00	46	51.1	51.1	100.0
l	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.22 Results Obtained for Statement 1.15

The mean score for this statement was 3.4778 and the standard deviation was 0.5654. 96.7% of the respondents either agreed (3) or strongly agreed (4) that teamwork among staff was essential. In fact, a higher percentage of respondents (51.1%) strongly agreed (4) with this statement compared to the 45.6% that agreed (3). The percentage of agreement also compared very favourably against the percentages obtained for statements 1.10 (44.5%) and 1.13 (84.5%). The favourable attitude towards the notion of teamwork is due to the fact that, in general, courses are run by subject groups and course teams. Therefore, teamwork is heavily emphasized in course delivery.

General Discussion of 1: Values, Beliefs and Attitude Towards Academic Quality

On the whole, the vast majority of respondents had a positive attitude towards various aspects of academic quality. A very large number of staff agreed (3) or strongly agreed (4) that they were familiar with and committed to the mission of the College. The response was even more positive in the statements relating to staff's professionalism. In statements 1.3,1.5, 1.6 and 1.7, over 90% of the staff indicated that they were willing to take on more work in order to ensure delivery of quality

courses. They also recognized the fact that academic quality concerned everyone, not just senior staff.

The results revealed that staff had some difficulty with the concept of 'customer', particularly in relation to treating students and colleagues in that way. The percentages of agreement for statement 1.8 and statement 1.10 were less than half the total number of respondents. On the other hand, staff were far more accepting of the concept of treating industry or the service sectors as customers. This is indicated in the results obtained for statement 1.9.

In contrast to this situation, the respondents were far more willing to be responsive. This is most noticeable when contrasting the results obtained for statement 1.8 (Academic staff should treat their students as their customers.) with statement 1.11 (Academic staff should be responsive to their students' needs). This point is also noticeable when comparing statement 1.10 (Academic staff should treat other academic staff with whom they collaborate as customers) with statement 1.13 (Academic staff should be responsive to the needs of staff with whom they collaborate).

This is illustrated in the table below:

Statement	Percentage of Agreement
1.8 Academic staff should treat students as customers.	48.9%
1.9 Academic staff should treat the industry or service sector with whom they collaborate as customers.	82.2%
1.10 Academic staff should treat other academic staff with whom they collaborate as customers.	44.5%
1.11 Academic staff should be responsive to their students' needs.	92.2%
1.12 Academic staff should be responsive to their industry or service sector's needs.	92.2%
1.12 Academic staff should be responsive to the needs of staff with whom they collaborate.	84.5%

Table 6.23 Comparison of Statements

It should also be noted that treating colleagues as customers (statement 1.10) or treating students as customers (statement 1.8) consistently have the lowest and second lowest percentages. This shows that the concept of the internal customer is not widely

accepted. On the whole, staff tend to think that they would have to assume a subordinate role if they treated colleagues and students as customers. This view was elaborated in the interviews.

Responses to other aspects such as professional development (statement 1.4), engaging external agents (statement 1.14) and teamwork (statement 1.15) were also positive with significantly more than half of the respondents agreeing to each of the statements.

The percentage of agreement with each of the statements in this part, and their means, are given in table 6.24 (in rank order).

Statement	Percentage of	Mean
	Agreement	
1.6 Maintaining high academic standards	98.6	3.6556
is every academic staff's responsibility,		
not just that of senior staff.		
1.15 Teamwork among academic staff is	96.7	3.4778
essential for ensuring the quality of		
courses.		
1.3 As an academic staff, my top priority	95.6	3.6111
is to deliver quality courses.		
1.5 Where necessary, I put in extra time	94.5	.3.5000
outside normal working hours to deliver a		
high standard of teaching.		
1.7 Initiatives in quality assurance should	94.4	3.5444
come from all academic staff, not just		
that of senior staff.		
1.11 Academic staff should be responsive	92.2	3.3000
to their students' needs.		
1.12 Academic staff should be responsive	92.2	3.3000
to their industry or service sector's needs.		
1.2 I am committed to the Technical	87.8	3.0111
College's mission.		
1.4 I am committed to developing myself	84.5	3.2667
professionally by taking training courses.		
1.13 Academic staff should be responsive	84.5	2.9889
to the needs of staff with whom they		
collaborate.		
1.1 I am familiar with the Technical	82.2	3.0000
College's mission.		
1.9 Academic staff should treat industry	82.2	3.0444
or service sector as customers.		
1.14 It is necessary to engage external	74.4	2.9556
agents (e.g. groups, individuals outside		
the course teams) to monitor the quality		
of courses.		
1.8 Academic staff should treat students	48.9	2.5333
as their customers.		
1.10 Academic staff should treat other	44.5	2.3889
academic staff with whom they		
collaborate as customers.		

Table 6.24 Results Obtained for Statements in Section 1 by Rank Order

2. Structures, Policies, Procedures and Practices for Academic Quality

Statement 2.1 Policies decided by the academic committees (i.e. ARC, APAC) impact directly on the quality of courses.

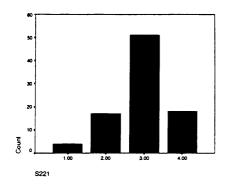


Figure 2.1 Results Obtained for Statement 2.1

S221

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	4	4.4	4.4	4.4
	2.00	17	18.9	18.9	23.3
	3.00	51	56.7	56.7	80.0
	4.00	18	20.0	20.0	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.25 Results Obtained for Statement 2.1

A total of 76.7% of the respondents either agreed (3) or strongly agreed (4) with this statement, while 23.3% either disagreed (2) or strongly disagreed (1). The mean for this statement was 2.9222 and the standard deviation was 0.7529. This fairly high percentage of agreement was due to the direct influence that the decisions made by the Academic Review Committee had on marks, grades, quality grades and the outcome of examination results.

ORIENTATION OF PAGE IS AS PER THE **ORIGINAL IN** THE BOOK.

Statement 2.2

The way academic policies in the Technical Colleges are implemented impact directly on the quality of courses.

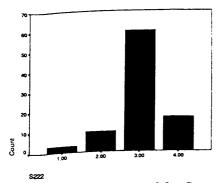


Figure 2.2 Results Obtained for Statement 2.2

Frequency	Percent	Valid Percent	Cumulative Percent
3	3.3	3.3	3.3
10	11.1	11.1	14.4
60	66.7	66.7	81.1
17	18.9	18.9	100.0
90	100.0	100.0	
90	100.0		
	3 10 60 17 90	3 3.3 10 11.1 60 66.7 17 18.9 90 100.0	Frequency Percent Percent 3 3.3 3.3 10 11.1 11.1 60 66.7 66.7 17 18.9 18.9 90 100.0 100.0

Table 6.26 Results Obtained for Statement 2.2

As compared to the results obtained for 2.1, a higher percentage of the respondents agreed with statement 2.2. A breakdown of the figure showed that 85.6 % of respondents either agreed (3) or strongly agreed (4) with this statement, while only 14.4 % either disagreed (2) or strongly disagreed (1). The mean score for this statement was 3.0111 and the standard deviation was 0.6619.

Statement 2.3

At the Technical Colleges, academic staff work in partnership with management to provide quality courses.

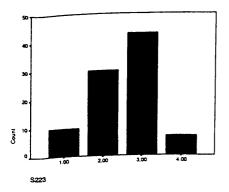


Figure 2.3 Results Obtained for Statement 2.3

S223

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	10	11.1	11.1	11.1
	2.00	30	33.3	33.3	44.4
	3.00	43	47.8	47.8	92.2
l	4.00	7	7.8	7.8	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.27 Results Obtained for Statement 2.3

A breakdown of the figure showed that the results were almost equally divided. While 44.4% of respondents either strongly disagreed (1) or disagreed (2) with the statement, 55.6% of respondents either agreed (3) or strongly agreed (4) with it. The mean score for this was 2.52222, while the standard deviation was 0.7964. The possible reasons why a significant percentage of respondents disagreed with this statement was that there was no mechanism for staff to discuss academic quality. Rank and file representation at Academic Committees (e.g. Academic Review Committee, Development Committee) were minimal. Policies were often decided by senior staff (Principal Lecturer grade and above). Often too, decisions were made at headquarters level, and then executed at college level without any consultation. It was also not uncommon to find decisions made on pragmatic rather educational grounds.

Statement 2.4

On the whole, the present course monitoring system can effectively maintain the high quality of courses.

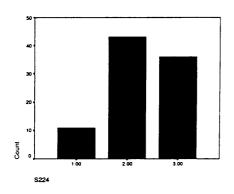


Figure 2.4 Results Obtained for Statement 2.4

5224

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	11	12.2	12.2	12.2
	2.00	43	47.8	47.8	60.0
	3.00	36	40.0	40.0	100.0
•	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.28 Results Obtained for Statement 2.4

The results showed that the responses skewed towards the negative. 60% either disagreed (2) or strongly disagreed (1) that the course monitoring system was effective, while 40 % agreed with the statement. The mean score for this statement was 2.2778 and the standard deviation was 0.6709. This was because staff felt that the system just encouraged people to go through the motions without giving real consideration to quality. The current system encouraged a focus on figures obtained through final marks and responses from student evaluation forms. Such quantitative methods did not encourage sufficient in-depth probing into quality issues.

Statement 2.5 Periodic review of courses at Board of Studies level can effectively maintain the high quality of courses.

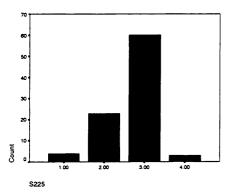


Figure 2.5 Results Obtained for Statement 2.5

S225

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	4.4	4.4	4.4
	2.00	23	25.6	25.6	30.0
	3.00	60	66.7	66.7	96.7
	4.00	3	3.3	3.3	100.0
	Total	90	100.0	100.0	
Total		90_	100.0		

Table 6.29 Results Obtained for Statement 2.5

70% of the respondents either agreed (3) or strongly agreed (4) with this statement, while 30% either disagreed (2) or strongly disagreed (1) with it. This was because a lot of practical matters relating to the day-to-day running of the courses were addressed at course board level. The mean score for this statement was 2.6889, while the standard deviation was 0.6116.

Statement 2.6

Peer review ensures that staff learn good teaching practices from each other.

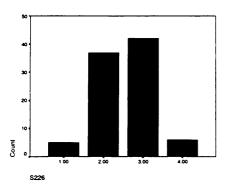


Figure 2.6 Results Obtained for Statement 2.6

S226

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	5	5.6	5.6	5.6
	2.00	37	41.1	41.1	46.7
1	3.00	42	46.7	46.7	93.3
	4.00	6	6.7	6.7	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.30 Results Obtained for Statement 2.6

Here again, the responses were almost equally divided. 46.7% either disagreed (2) or strongly disagreed (1) with this statement, while 53.4% either agreed (3) or strongly agreed (4). The mean score for this statement was 2.5444, while the standard deviation was 0.7057. One possible reason was that many staff did not believe that one peer review per year would have any positive impact on staff's teaching. Besides this, staff felt that peer reviews could be very artificial situations that can be 'stage managed' to make the lecturer involved appear more effective than usual.

Statement 2.7

Analyses of final results give a clear indication of how effectively a course has been run.

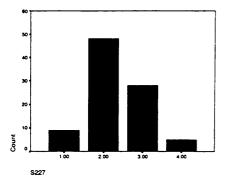


Figure 2.7 Results Obtained for Statement 2.7

S227

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	9	10.0	10.0	10.0
	2.00	48	53.3	53.3	63.3
	3.00	28	31.1	31.1	94.4
	4.00	5	5.6	5.6	100.0
i	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.31 Results Obtained for Statement 2.7

The breakdown figure showed that the majority of respondents (63.3%) either disagreed (3) or strongly disagreed (4) with the statement, while 36.7% either agreed (2) or strongly agreed(1). The mean score for this statement was 2.3222, while the standard deviation was 0.7317. Staff indicating a negative (either 2 or 1) response probably believed that exam results could not be the sole indicator of how effectively a course had been run since other intangible, non-visible factors could have influenced the results.

Statement 2.8

Feedback from student course evaluation is useful for improving a course.

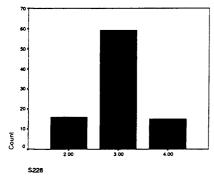


Figure 2.8 Results Obtained for Statement 2.8

S228

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	16	17.8	17.8	17.8
	3.00	59	65.6	65.6	83.3
	4.00	15	16.7	16.7	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.32 Results Obtained for Statement 2.8

The vast majority of respondents (82.3%) saw the usefulness of the course evaluation, while only 17.8% did not. The mean score for this statement was 2.9889, while the standard deviation was 0.5901. From this, we can see that many staff valued student's input into the running of courses and were willing to respond to their views.

Statement 2.9 Feedback obtained from student interviews is useful for improving a course.

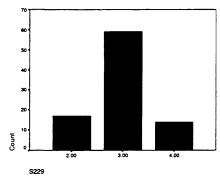


Figure 2.9 Results Obtained for Statement 2.9

S229

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	17	18.9	18.9	18.9
	3.00	59	65.6	65.6	84.4
1	4.00	14	15.6	15.6	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.33 Results Obtained for Statement 2.9

Most respondents (81.2%) agreed with this statement, while only 17.8% did not. The mean score for this statement was 2.9667, while the standard deviation was 0.5892. Again, this showed that most staff were willing to respond to students' views which they valued.

Statement 2.10

Based on feedback, actions are often taken to improve a course.

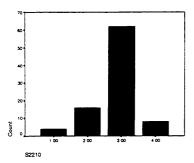


Figure 2.10 Results Obtained for Statement 2.10

S221	0

		T		Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	4	4.4	4.4	4.4
	2.00	16	17.8	17.8	22.2
	3.00	62	68.9	68.9	91.1
	4.00	8	8.9	8.9	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.34 Results Obtained for Statement 2.10

77.8% of the respondents either agreed (3) or strongly agreed (4) with this statement and 22.2% did not. The mean score for this statement was 2.8222, while the standard deviation was 0.6461. What should be noted here was that the percentage of agreement for this statement (77.8%) was lower than the percentage of agreement obtained for statement 2.8 (82.3%) and statement 2.9 (81.2%).

Statement 2.11 At course team level, I enjoy a spirit of trust and mutual co-operation with my colleagues.

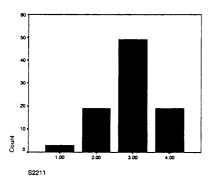


Figure 2.11 Results Obtained for Statement 2.11

S2211

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.00	3	3.3	3.3	3.3
2.00	19	21.1	21.1	24.4
3.00	49	54.4	54.4	78.9
4.00	19	21.1	21.1	100.0
Total	90	100.0	100.0	
Total	90	100.0		

Table 6.35 Results Obtained for Statement 2.11

75.5% of the respondents either agreed (3) or strongly agreed (4) with this statement, while 24.5% either disagreed (2) or strongly disagreed (1). The mean score for this statement was 2.9333, while the standard deviation was 0.7465.

General Discussion of 2: Structures, Policies, Procedures and Practices for Academic Quality

The majority of staff recognized that academic policies and the way they were implemented have an impact on the College's academic quality. Almost half of the staff did not perceive that academic staff worked in partnership with management in providing academic quality and slightly over half did not think that the present course monitoring system could effectively maintain high academic standards. From the responses, it could also be seen that most staff were particularly negative about these mechanisms: course monitoring (statement 2.4), peer reviews (statement 2.6), analyses of examination (statement 2.7). On the other hand, they were far more positive about other aspects: Boards of Study (statement 2.5), student course evaluation (statement 2.8), student interviews (statement 2.9), action based on feedback (statement 2.10) and course team relationships (statement 2.11). It can be implied from this that more staff were positive about obtaining information and taking action at course level than they were in the quality system that was set by management.

Table 6.36 shows the percentage of agreement for each of the statements in this part, as well as their means.

Statement	Percentage of Agreement	Mean
2.2 The way academic policies in the Technical Colleges	85.6	3.0111
are implemented impact directly on the quality of courses.		
2.8 Feedback from student course evaluation is useful for	82.3	2.9889
improving a course.		
2.9 Feedback obtained from student interviews is useful	81.2	2.9667
for improving a course.		
2.10 Based on feedback, actions are often taken to	77.8	2.8222
improve a course.		
2.1 Policies decided by the academic committees (i.e.	76.7	2.9222
ARC, APAC) impact directly on the quality of courses.		
2.11 At course team level, I enjoy a spirit of trust and	75.5	2.9333
mutual co-operation with my colleagues.		
2.5 Periodic review of courses at Board of Studies level	70	2.6889
can effectively maintain the high quality of courses.	-	
2.3 At the Technical Colleges, academic staff work in	55.6	2.5222
partnership with management to provide quality courses.		
2.6 Peer review ensures that staff learn good teaching	53.4	2.5444
practices from each other.		
2.4 On the whole, the present course monitoring system	40	2.2778
can effectively maintain the high quality of courses.		
2.7 Analyses of final results give a clear indication of how	36.7	2.3222
effectively a course has been run.		

Table 6.36 Results obtained for Statement in Section 2 by Rank Order

3. Management of Academic Quality

Statement 3.1

On the whole, responsibility is appropriately assigned to course teams to run their courses.

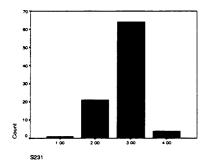


Figure 3.1 Results Obtained for Statement 3.1

S231

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.1	1.1	1.1
	2.00	21	23.3	23.3	24.4
	3.00	64	71.1	71.1	95.6
	4.00	4	4.4	4.4	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.37 Results for Statement 3.1

A majority of the respondents (75.5%) agreed (3) or strongly agreed (4) with this statement, while 24.4% either disagreed (2) or strongly disagreed (1). The mean score for this statement was 2.7889, while the standard deviation was 0.5299. This fairly high percentage of agreement can be understandable since course teams are normally run autonomously, as long as they abide by the college's academic regulations set by the Academic Review Committee.

Statement 3.2

On the whole, authority is appropriately delegated to course teams to run their courses.

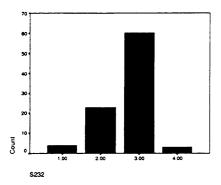


Figure 3.2 Results Obtained for Statement 3.2

S232

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	4.4	4.4	4.4
	2.00	23	25.6	25.6	30.0
l	3.00	60	66.7	66.7	96.7
1	4.00	3	3.3	3.3	100.0
1	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.38 Results obtained for Statement 3.2

70% of the respondents agreed (3) or strongly agreed (4) with this statement, while 30 % either disagreed (2) or strongly disagreed (1). As with statement 3.1, there was little strong agreement with this statement. The mean score for this statement was 2.6889 while the standard deviation was 0.6116. The percentage of agreement was quite similar to that obtained for statement 3.2.

Statement 3.3

There is a high degree of openness between management and academic staff on how courses should be run.

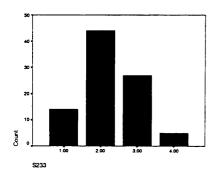


Figure 3.3 Results Obtained for Statement 3.3

S233

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	14	15.6	15.6	15.6
1	2.00	44	48.9	48.9	64.4
l	3.00	27	30.0	30.0	94.4
ļ.	4.00	5	5.6	5.6	100.0
ŀ	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.39 Results Obtained for Statement 3.3

The breakdown indicated that more than half the respondents (64.4%) disagreed (3) or strongly disagreed (4) with this statement, while 35.6% either agreed (2) or strongly agreed (1). The overall mean for this statement was 2.2556, while the standard deviation was 0.7870. This percentage of agreement (i.e. 55.6%). was even lower than that obtained for statement 2.3: 'At the Technical Colleges, academic staff work in partnership with management to provide quality courses'.

Statement 3.4

Staff views on how courses should be run are taken seriously and acted upon.

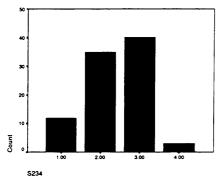


Figure 3.4 Results Obtained for Statement 3.4

S234

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	1.00	12	13.3	13.3	13.3
	2.00	35	38.9	38.9	52.2
	3.00	40	44.4	44.4	96.7
	4.00	3	3.3	3.3	100.0
	Total	90	100.0	100.0	
Total		90	100.0	i	

Table 6.40 Results Obtained for Statement 3.4

A slight majority (52.2%) of the respondents indicated that they either disagreed (2) or strongly disagreed (1) with the statement, while 47.7% either agreed (3) or strongly agreed (4) with it. The overall mean for this statement was 2.3778 and the

standard deviation was 0.7581. It can be implied from the results that most staff did not feel a sense of ownership in the running of courses.

Statement 3.5

Resources are deployed in such a way to ensure a high quality of course delivery.

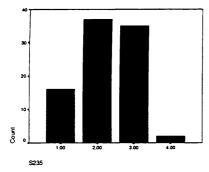


Figure 3.5 Results Obtained for Statement 3.5

S235

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.0	00	16	17.8	17.8	17.8
2.0	00	37	41.1	41.1	58.9
3.0	00	35	38.9	38.9	97.8
4.0	00	2	2.2	2.2	100.0
То	tai	90	100.0	100.0	
Total		90	100.0		

Table 6.41 Results Obtained for Statement 3.5

More than half the respondents (58.9%) either disagreed (2) or strongly disagreed (1) with this statement, while less than half (41.1%) either agreed (3) or strongly agreed (4). The mean score for this statement was 2.2556, while the standard deviation was 0.7726.

Statement 3.6 High quality teaching is given its due recognition.

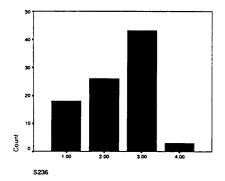


Figure 3.6 Results Obtained for Statement 3.6

S236

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	18	20.0	20.0	20.0
ļ	2.00	26	28.9	28.9	48.9
	3.00	43	47.8	47.8	96.7
	4.00	3	3.3	3.3	100.0
	Total	90	100.0	100.0	
Total		90	100.0		

Table 6.42 Results Obtained for Statement 3.6

A large minority of respondents (48.9%) disagreed (2) or strongly disagreed (1) with this statement, while 51.1% either agreed (3) or strongly agreed (4) with it. The mean score for this statement was 2.3444, while the standard deviation was 0.8368. From the results, it can be implied that many staff did not perceive the organizational culture to value high quality teaching.

General Discussion of 3: Management of Academic Quality

While the majority of staff were satisfied that responsibility and authority for running courses rested appropriately with course teams, they were significantly less satisfied with other areas. This was particularly so for statement 3.3 in which only 35.6% of staff agreed that management was open with staff on the running of courses. In statement 3.4, fewer than half the respondents agreed that staff views were taken into account and that resources were appropriately allocated. In addition, slightly more than half of the respondents agreed that high quality teaching was valued. This implies a 'top-heavy', 'top-down' approach to management which may not be genuinely concerned with frontline staff's views and does not reward high quality teaching, although it seemingly has a quality system in place.

The table in the next page shows the percentage of agreement for each of the statements in this part (in rank order), as well as their means.

Percentage of	Mean
Agreement	
75.5	2.7889
70	2.6889
51.1	2.3444
47.7	2.3778
41.1	2.2556
35.6	2.2556
	75.5 70 51.1 47.7

Table 6.43 Results Obtained for Statements in Section 3 by Rank Order

Correlation between Variables and a Positive Inclination Towards Academic Quality

Spearman-rank correlation coefficients were determined to judge the correlation between a positive inclination towards academic quality with each of the variables: rank, length of service in the VTC, length of service in the Technical College sector, work experience, and degree of involvement in quality monitoring.

The coefficients were worked out on the basis where:

Ho: There is no correlation

Ha: There is a positive correlation

and where the correlation is significant at the .01 level (1-tailed).

The Spearman-rank correlation coefficients are as follow:

Variables	Correlation coefficient	p-value
1. Department	0.040	0.354
2. Rank	0.303	0.002
3. Length of service in the VTC	0.089	0.201
4. Length of service in the Campus	0.098	0.179
5. Work experience elsewhere	0.114	0.143
6. Level of involvement in monitoring the quality of courses	0.202	0.028

Table 6.44 Coefficient Correlations of Variables

It can therefore be concluded that the positive correlation is strongest between academic quality culture and rank (i.e. correlation coefficient = 0.303; p-value = 0.002). This is followed by involvement in the quality assurance of courses (i.e. correlation coefficient = 0.202; p-value = 0.028). The p-values for the other factors were not significant enough.

Differences in Mean by Rank

In addition, a non-parametric test (i.e. Kruskal-Wallis Test) was carried out to find out which of the variables (rank, department, length of service in the VTC, length of service in the campus, work experience elsewhere in the VTC, and the level of involvement in quality assurance of courses) yielded significant differences in the means obtained for the statements. Again, significant differences in means occurred only by rank. In other words, at the p-value of 0.004, where the significance level was at 0.01, at least two sets of means were different. The mean difference for other variables: length of service in the VTC, length of service in the College, work experience elsewhere in the VTC, and the level of involvement in quality assurance of courses were either equal or insignificant.

A further non-parametric test (i.e. the Wilcox Signed Ranks Test) was carried out to determine where the significant differences occurred by rank.

It was then found that at a 0.05 significance level,

- There was significant difference in mean scores obtained for principal lecturer rank and senior lecturer rank.
- There was also significant difference in mean scores obtained for principal lecturer rank and lecturer rank.

The details are given below:

	Workshop	Assistant	Lecturer	Senior	Principal
	Instructor	Lecturer		Lecturer	Lecturer
Workshop	N.A	0.180	0.285	0.180	0.285
Instructor					
Assistant	0.180	N.A	0.180	0.180	0.180
Lecturer					
Lecturer	0.285	0.180	N.A	0.098	0.018*
Senior	0.180	0.180	0.098	N.A	0.035*
Lecturer					
Principal	0.285	0.180	0.018*	0.035*	N.A
Lecturer					

Table 6.45 Mean Differences by Rank

N.B * denotes significant difference

Through the Kruskal-Wallis test, it was found that at the significance level of <0.05, the significant differences (by rank) were found to be in statements 1.1(0.001), 1.2(0.002), 1.5(0.004), 1.6(0.046), 1.7(0.048), 1.9(0.031), 1.12(0.010), 1.13(0.047), and 1.15(0.005). The details are given in the table below. The number of workshop

assistants (3) and assistant lecturers (2) were very small and constituted 27% and 40% of their rank respectively. Findings from such a small sample size may not be conclusive. Therefore, although the findings from these two ranks are presented, they will be discussed only where necessary.

1. Values, Beliefs and Attitude Towards Academic Quality

1.1 I am familiar with the Technical College's mission.

Rank	Percentage (%)of respondents that either agreed or strongly	Mean
	agreed	
PL	100	3.8750
SL	90.4	3.0476
L	74.5	2.8545
AL	100	3.0000
WI	100	3.0000
1		{

Table 6.46 Results Obtained for Statement 1.1

1.2 I am committed to the Technical College's mission.

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	100	3.7500
SL	95.2	3.0000
L	81.8	2.9091
AL	100	3.0000
WI	100	3.0000

Table 6.47 Results Obtained for Statement 1.2

For statements 1.1 and 1.2, principal lecturers had the highest percentage of agreement followed by senior lecturers and lecturers. One possible explanation was that principal lecturers dealt with academic management and had a more global perspective of the direction of the College.

1.5 Where necessary, I put in extra time outside normal working hours to deliver a high standard of teaching.

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	100*	4.0000
SL	100	3.4545
L	94.6	3.5273
AL	50	2.5000
WI	66.7	2.6667

Table 6.48 Results Obtained for Statement 1.5

All principal lecturers and senior lecturers agreed with this statement, while a high percentage of lecturers also registered their agreement. In addition, all principal lecturers strongly agreed with the statement. The mean obtained for principal lecturers was higher than that obtained for senior lecturers.

1.6 Maintaining high academic standards is every academic staff's responsibility, not just that of senior staff.

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	100*	4.0000
SL	100	3.7273
L	98.2	3.6182
AL	100	3.0000
WI	100	3.3333

Table 6.49 Results Obtained for Statement 1.6

^{*} ALL respondents indicated strong agreement

^{*} ALL respondents indicated strong agreement

All principal lecturers and senior lecturers agreed with this statement, while a high percentage of lecturers also registered their agreement. In addition, all principal lecturers strongly agreed with the statement, giving this category a higher mean than the senior lecturers.

1.7 Initiatives in quality assurance should come from all academic staff, not just from senior staff.

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	100*	4.0000
SL	95.5	3.5909
L	94.6	3.5091
AL	100	3.0000
WI	66.6	3.0000

Table 6.50 Results Obtained for Statement 1.7

All principals indicated their strong agreement with this statement and therefore had the highest rate of agreement. This was followed by senior lecturers and lecturers. As middle managers of the College, principal lecturers needed to mediate between senior management's decisions and frontline staff (senior lecturers and lecturers) views. They were therefore likely to appreciate input from staff at all ranks, not only those of senior managers.

^{*}All respondents indicated strong agreement

1.9 Academic staff should treat the industry or service sector as customers.

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	87.5	3.5000
SL	90.9	3.2727
L	78.2	2.9273
AL	50	2.0000
WI	100	3.0000

Table 6.51 Results Obtained for Statement 1.9

For this statement, senior lecturers had the highest rate of agreement, followed by principal lecturers and then lecturers.

1.12 Academic staff should be responsive to their industry or service sector's needs.

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	100	3.7500
SL	100	3.4545
L	90.9	3.2182
AL	0	2.0000
WI	100	3.3333

Table 6.52 Results Obtained for Statement 1.12

All principal lecturers and senior lecturers agreed with this statement. However, more principal lecturers strongly agreed with the statement. As a result, the mean for principal lecturers was higher than that for senior lecturers. Of the three groups, lecturers had the lowest percentage of agreement. This situation could be explained by the fact that principal lecturers tend to have more contact with industry and commerce during their course of work.

1.13 Academic staff should be responsive to the needs of staff with whom they collaborate.

Rank	Percentage (%) of respondents that either agreed or strongly	Mean
	agreed	
PL	87.5	3.2500
SL	95.5	3.1364
L	81.8	2.9273
AL	0	2.0000
WI	100	3.0000

Table 6.53 Results Obtained for statement 1.13

For this statement, senior lecturers registered the highest percentage of agreement, followed by principal lecturers, and then lecturers.

1.15 Teamwork among academic staff is essential for ensuring the quality of courses.

Rank	Percentage (%)of respondents that agree or strongly agree	Mean
PL	100*	4.0000
SL	100	3.6364
L	94.5	3.3818
AL	100	3.0000
WI	100	3.0000

Table 6.54 Results Obtained for statement 1.15

All principal lecturers and senior lecturers agreed with this statement. A high percentage of lecturers also registered their agreement. In addition, all principal lecturers strongly agreed with the statement, giving this category a higher mean than the senior lecturers. One reason for this could be that, principal lecturers had to deal with academic matters on a macro level so that they had to gain the cooperation of all staff. Consequently, they valued teamwork more.

^{*}ALL respondents indicated strong agreement

2. Structure, Policies, Procedures and Practices for Academic Quality

A Kruskal -Wallis test was conducted to check the differences of means obtained for 2.1 to 2.11 by rank. It was found that the means obtained for statement 2.10 (Based on the feedback, actions are often taken to improve a course.) were significantly different (i.e. 0.043 where the significant level is at 0.05) by rank. The results are presented below:

Statement 2.10 Based on the feedback, actions are often taken to improve a course.

Rank	Percentage (%) of respondents that agree or strongly agree	Mean
PL	100	3.2500
SL	90.9	2.9545
L	66.7	2.6667
AL	100	3.0000

Table 6.55 Results Obtained for Statement 2.10

Since only 2 Assistant Lecturers responded to this statement, the result obtained for this group was not conclusive. However, it could be seen that the results obtained for senior lecturers and principal lecturers were not significantly different, while the difference between lecturers and senior lecturers, and the difference between lecturers and principal lecturers were. As convenors and managers, it was natural for principal lecturers and senior lecturers to feel that they had taken feedback into consideration and acted on them, within constraints. Lecturers may not have appreciated this.

3. Management of Academic Quality

A Kruskal-Wallis test was carried out to find if the means obtained by rank in 3. Management of Academic Quality, were equal. At a significance level of <0.05, it was found that there were significant mean differences for 3.1 (On the whole, responsibility is appropriately assigned to course teams to run their courses.), 3.4 (Staff views on how courses should be run are taken seriously and acted upon.), and

3.5 (Resources are deployed in such a way to ensure a high quality of course delivery.) The results obtained for 3.1 was 0.014, 3.4 was 0.026, and 3.5 was 0.006.

3.1 On the whole, responsibility is appropriately assigned to course teams to run their courses.

There were significant differences between lecturers and principal lecturers (0.016). On the other hand, there were no significant differences between senior lecturers and lecturers, or senior lecturers and principal lecturers. The detailed results are shown in table 6.56.

Rank	Percentage (%)of respondents that either agreed or strongly	Mean
<u> </u>	agreed	
PL	100	3.2500
SL	81	2.8571
L	67.3	2.6545
AL	100	3.0000
WI	100	3.3333

Table 6.56 Results Obtained for Statement 3.1

3.4 Staff views on how courses should be run are taken seriously and acted upon.

Significant differences in means were found to be between workshop instructors and senior lecturers (0.009), assistant lecturers and senior lecturers (0.009), as well as lecturers and senior lecturers (0.035) (refer to the next page).

Rank	Percentage (%)of respondents that either agreed or strongly agreed	Mean
PL	62.5	2.8750
SL	57.2	2.5714
L	38.2	2.1818
AL	100	3.0000
WI	100	3.0000

Table 6.57 Results Obtained for Statement 3.4

Also, the lecturers had the lowest percentage of agreement for the statement.

3.5 Resources are deployed in such a way to ensure a high quality of course delivery.

Rank	Percentage (%) of respondents that agree or strongly agree	Mean
PL	87.5	2.8750
SL	47.7	2.5714
L	29.1	2.1818
AL	50	3.0000
WI	100	3.0000

Table 6.58 Results Obtained for Statement 3.5

The means revealed that the percentage of lecturers and senior lecturers who either agreed or strongly agreed with this statement was significantly smaller than the percentage of principal lecturers who did the same. The results also showed that lecturers and workshop instructors had a higher percentage of agreement than senior lecturers and lecturers. However, as their numbers were very small (i.e. assistant lecturers=2, workshop instructors=3), the results were inconclusive.

Several observations can be made from the figures. Firstly, it can be seen from the mean that principal lecturers were significantly more positive towards academic culture than staff from other ranks. This is evident from the results obtained from the

Wilcox Signed Rank test. Also, in 4 statements (1.5, 1.6, 1.7, 1.15), principal lecturers showed their unanimous and strong agreement by choosing 'strongly agree' as their response.

The results indicated that staff at higher ranks tend to agree or strongly agree more with the statements. In 7 (1.1, 1.2, 1.6, 1.7, 1.12, 1.13, 1.15) of the above 9 statements, the mean obtained for principal lecturer was higher than that obtained for senior lecturers, while the mean for senior lecturers was higher than that of lecturers. Similarly, in Part 2. Structure, Policies, Procedures and Practices for Academic Quality, only slightly more than half of the lecturers felt that feedback was being followed up, whereas all principal lecturers felt the same. The reason could be that principal lecturers were the ones who had to act on feedback and appreciated the constraints. Lecturers appreciated this situation less.

The difference could be attributed to the role and responsibilities attributed to each rank. Principal lecturers are academic leaders, and their role is to oversee the quality assurance of courses, as well as maintain direct links outside the department and with the college. Senior lecturers, in varying degrees, also perform similar jobs, but the emphasis is on course quality monitoring within the department. A lecturer's main role is in teaching, although it may involve some administrative work relating to the subjects he teaches.

Again, in Part 3. Management of Academic Quality, principal lecturers were significantly different from the other groups. This may be that as middle managers who are directly involved in the management of courses, they take a different perspective from other groups of staff who are more heavily involved in teaching.

Summary

A comparison of the results from the present study with that of the pilot study shows that the two sets of findings are broadly consistent. On the whole, it has been found that staff had positive work values and a positive attitude towards academic quality. They did not see their students as customers. However, the majority of academic staff were willing to be responsive to their student needs. Staff were also generally positive about obtaining feedback from students and acting on the feedback they obtained.

A large majority of staff saw the industry and service sectors as their customers and almost all the respondents indicated a willingness to respond to their needs. However, this attitude was not extended to colleagues.

On the whole, staff felt that the quality monitoring mechanisms were effective, although some were deemed more effective than others. Most staff were satisfied with the way courses were run and their teamwork with other colleagues. However, they were less satisfied with their working relationship with management which they saw as lacking in openness and reluctant in considering staff views. Slightly over half of the respondents felt that resources were not deployed appropriately to ensure a high quality course delivery. Lastly, although most staff put quality course delivery as their top priority, and indicated that they were committed to improving themselves professionally, nearly half of the respondents felt that high quality teaching was not given its due recognition.

Non-parametric tests reveal that rank was an important factor which determined staff's attitudes and beliefs, as well as their perceptions. The general pattern showed that staff at the higher rank tend to agree more with the statements, and obtained higher mean scores for most of the statements. One reason may be that the higher ranking staff (i.e. principal lecturers) tend to take a macro perspective of academic issues. Also, as they had been involved in setting the 'rules' for quality management, they were able to appreciate the processes and systems better.

Chapter 6: Staff Interviews

Introduction

Academic staff in the Tsing Yi Campus were interviewed over a two-month period. A total of twenty-four academic staff of all levels (senior managers, principal lecturers, senior lecturers, lecturers/assistant lecturers) were interviewed for roughly half an hour each. The interviews were semi-structured and covered the following areas:

- Academic quality
- Working relationships
- Quality assurance mechanisms
- Management of academic quality.

During the interviews, two to three basic questions (See appendix 5) were asked in each of the above-stated areas, answers were elaborated on, and clarifications were sought. The following sections give the findings of the interviews.

Profile of Interviewees

Interviews were conducted with senior managers, principal lecturers, senior lecturers, and lecturers.

By definition, 'senior managers' are members of the Campus Senior Management Team (SMT) which consists of the principal, the vice principal, all heads of department and the head of the Centre of English and Communication. For this research, three (or 30%) of this ten-member group were interviewed. These included one member who led the Campus Academic Review Committee (ARC) as well as the Vocational Training Council's Total Quality Improvement (TQI) sub-committee, one member who was an ex-officio member of the Campus ARC, and one member who had been actively involved in the validation of courses.

Five (or 36%) principal lecturers out of a total of 14 in the Technical College were interviewed on various aspects of academic quality in the College. As principal lecturers, these persons are academic course leaders in their departments, as well as members of various academic committees and discipline boards of study in the campus as well as within the IVE structure.

Five (or 11%) senior lecturers out of a total of 44 were interviewed on their views of various aspects of academic quality in the College. As senior lecturers, they supervise the teaching of subjects. Two of the senior lecturers sat on the Academic Review Committee, one was in charge of evening studies for his own department, the other two had been heavily involved in their departmental quality initiatives when these first started in 1994.

A total of 11 (or 9%) out of 125 lecturers across the campus were interviewed. They taught courses run by their own departments and serviced other departments. All of them have been involved in course monitoring activities.

Academic Quality

Senior managers and principal lecturers tended to define academic quality in global terms, concentrating on the importance of meeting the needs of commerce and industry. Interviewees from the Senior Management Team (SMT) defined quality as 'fitness for purpose'. The implication was that academic quality was defined by the customer. As a senior manager, who also sat on the Academic Review Committee and had previous experience in applying TQM in industry, stated:

"TQM should be that all activities should circle around a client-server relationship. Therefore everything should be defined in terms of a 'client-server contract' so that roles and responsibilities will be clear and tangible.

Principal lecturers defined academic quality as 'fitness for purpose' in addition to the richness of the learning experience and acquisition of skills. By 'Fitness for purpose', this essentially meant meeting the needs of customers, who primarily consist of employers, professional institutions, the Vocational Training Council and its students, in the most cost effective and efficient way and producing graduates who employers find to be competent workers.

Senior managers and principal lecturers alike pointed out that academic quality should not be judged by the technical knowledge that was taught, but also by the 'intangibles' which employers value. These include self-confidence, interpersonal skills, and problem-solving skills.

One principal lecturer stated that in looking back upon graduation, students should believe that they had a fulfilling educational experience that prepared them for their work and study. Another principal lecturer took this one step further by defining academic quality as 'striving for excellence'.

Senior lecturers defined academic quality as the: 'richness of experience that a student cohort go through- the environment in which they learn, the support mechanisms and the quality of resources', 'students meeting course objectives', 'students becoming better learners', 'students achieving learning outcomes', 'students' ability to reach career goals', 'helping students to meet their career aspirations) and 'teaching well'

Similarly, lecturers gave definitions which fell within the input-throughput-output paradigm. Interviewees referred to the input element as customer and stakeholders' needs and wants. The throughput element essentially deals with the teaching, quality assurance and staff development processes. Specifically, staff referred to academic quality as 'teaching well', 'ensuring that we deliver materials to students in the most effective way', 'parallel learning on the part of the teacher', and 'students understanding what is being taught'. The output element relates to 'achieving the unit

objectives', 'enabling students to find jobs', 'meeting society's needs' and 'enabling students to become better human beings'.

A comparison of the definitions showed the mindset and concerns of staff at different ranks. It showed that staff were concerned about different aspects of the same issue: academic quality. Specifically, it showed that the more senior the rank, the greater the concern was on macro aspects of quality. The more the staff was involved in teaching and learning, the more he was likely to concentrate on these aspects.

Staff at all ranks agreed that academic quality was important but were not sure if this awareness of its importance necessarily translated into a quality culture. An ARC exofficio member puts it this way, "people talk about it (academic quality) but they don't expect to do much about it." Similarly, a principal lecturer pointed out that a lot of people were 'more or less jumping through the hoops' as far as the quality measures were concerned. In other words, 'they would only do what is required without consideration for academic quality'. Lecturers were particularly cynical about management's stand on it. They felt 'management only cares about figures so maintaining academic quality depends on individual lecturers' professionalism', and that 'academic quality is equated with cost effectiveness.' One lecturer also expressed the concern that there was insufficient emphasis on 'what is a teacher and what is a teacher doing'. This was particularly the case with the way resources had been allocated. Lecturers were also unhappy that, as a result of the mismatch between students' ability and academic standards set for them, staff were pressurised into adjusting the level of content and grades.

Across the ranks, most interviewees thought that there was no correlation between commitment to academic quality and rank or between commitment to academic quality and involvement with quality initiatives. On the whole, interviewees did not think that rank or involvement in academic quality issues, such as sitting on relevant committees, had any impact on staff's commitment to academic quality. As one principal lecturer who had been heavily involved in the Academic Review Committee (ARC) put it:

"People sitting on these committees think they have been given responsibilities to develop quality procedures. I am not sure how it affects their teaching."

Instead, almost all interviewees thought that it depended on individual staff's professionalism. Even so, they felt that such a commitment did not necessarily translate into an academic quality culture. Various explanations were given for this situation.

The senior manager heading the ARC noted that, at College level where mechanisms for monitoring academic quality were well in place, measures to improve the actual teaching and learning of courses were not given enough emphasis. On one senior manager's admission, insufficient attention was paid to academic quality even by some members of the senior ranks. This issue was raised by interviewees across the ranks. Consequently, staff felt that 'TQM is just another label'.

This problem was compounded by the then recent moves to amalgamate the technical colleges and technical institutes into one entity known as the Institute of Vocational Education (IVE). The major preoccupation had been shifted to rationalising the courses in the technical colleges and technical institutes. As the leader of the ARC noted:

'The VTC has lost its way. It was doing very well two years ago. The cultural change (to achieve academic quality) has been pushed to the background. We now need to bring it back to the forefront.'

Another interviewee, a senior lecturer put it this way, 'it (i.e. the VTC) has lost focus and been overtaken by recent events.'

In instances where quality initiatives have been introduced at organisational level, this is often seen by staff as directives from the top and not as movements which were

initiated by staff at various levels. Consequently, staff do not own these initiatives. One senior lecturer, who also sat on the college's Academic Planning and Audit Committee, stressed that there had not been enough empowerment for people at lower levels of the organization (i.e. senior lecturer and lecturer levels) to 'orientate quality practices according to the courses they teach to fit the particular situation they were dealing with'.

One principal lecturer also pointed out that, although senior and middle managers had been sent on change management workshops, there was no follow-up afterwards. In addition, they had not been charged with the task of disseminating good academic quality practices. And even if they tried to do this on their own accord, they would see that their efforts were not acknowledged or appreciated. As a result, they lost enthusiasm for what they had been doing and what they had learned did not cascade down to other levels. Similarly, a senior lecturer who had been teaching TQM in her department noted that there had been inadequate training on TQM for staff.

Interviewees were of the view that, for Total Quality Management to thrive, there had to be clear leadership and an orchestrated effort involving everybody within an organisation.

A senior manager and leader of the ARC and TQI sub-committee noted that, although different levels of staff may view academic quality from different angles and had their own concerns, every staff member should try to understand where he or she fitted into the overall mechanism, how his or her work fitted with the main goals and aims of the organisation, and how their work could move the organisation forward. In other words, 'everybody should consider a sense of total quality'. He noted that at present, quality improvements in the college tended to be territory (departmental) based and this affected interfaces between departments and disciplines. However, a senior lecturer who had been continuously involved in departmental quality initiatives lamented that there were no observable quality goals or concerted effort to promote academic quality in the campus. Neither had there been any broad-based, campuswide agreement on what constituted academic quality.

Working Relationships

Working relationships within departments, across departments and across the campus, as well as relationship with students were discussed.

Relationships among Staff

Across the entire campus, the management culture was top-down with individuals at different levels expressing the view that top management should trust staff more and empower staff by devolving responsibilities.

In terms of working relationships campus wide, all senior managers agreed that the entire VTC culture was so hierarchical that staff related to each other on the basis of the rank of the other person. In addition, some heads of department were known to 'rule very rigidly without encouraging any innovation'.

Principal lecturers also felt that relationships with the top management at headquarters and senior management at the College were extremely hierarchical. A top-down approach was adopted in the management of day-to-day operations. This permeated the entire VTC organisation. Therefore, as one interviewee who had a lot of direct interface with top management put it, 'no matter what you say, if top management doesn't like it, then it doesn't get heard. So you just do what they want.'

On the whole, interviewees of all ranks were satisfied with the working relationship within their departments. Principal lecturers felt that there was a lot of teamwork, goodwill and trust in individual staff's expertise which broke down the rank barriers and carried work forward. Bottom-up initiatives were also encouraged at team level. However, one principal lecturer who had been heavily involved in course validation noted that some junior staff tended to use rank as an excuse for declining to do certain work.

All senior lecturers agreed that staff relationships within departments were generally congenial and that a team spirit was prevalent within course teams and within departments. One senior lecturer (a course leader) said,

"With my course meetings, and other course leaders' meetings, we have an agenda circulated... we know each other formally and informally, we get together for beers, you know, there are ways of developing interpersonal skills. I think that is central to having an environment where staff can relate to each other and talk to each other. If you have a problem, you shouldn't be scared. You should be effective."

Lecturers described working relationship within their own departments as 'super', 'congenial', 'ideal', 'no secrets in the office.' One lecturer said that 'if someone has to complete a rush job, everybody else in the office will chip in'.

Most respondents did not accept the concept of treating colleagues as customers. One senior manager, the ARC leader, said that academic staff of higher ranks did not see academic staff of lower ranks as customers, and therefore did not support or service them in that way.

Principal lecturers also felt that the relationship between staff should be one of 'peers' than of 'customers'. 'It is a relationship of two colleagues who are absolutely aware of what should be done, and it should be done in the best possible way'. In other words, they saw colleagues as people with whom they served the same purpose, not as people who they served.

Senior lecturers tended to describe their working relationship in terms of teamwork, but did not directly object to the concept of customer.

On the other hand, lecturers disagreed with applying the concept of customer to colleagues. One lecturer explained that, in Chinese culture, good personal relationships and personal influence go a long way in ensuring that one can carry out tasks smoothly. However, this is different from everyone taking the view that they are part of a process that ensures the final product or service offered to the ultimate customer is of good quality. It is also different from a service-oriented paradigm where staff believe in serving each other.

Across departments, it was generally agreed that relationships were distant and territorial. As one senior manager put it, there is a feeling of 'them' and 'us' with heads of department trying to gain more territory, resources and control. This was also the view shared by the principal lecturers. This was because some heads of department liked to maintain a 'strong department' and 'have control' over matters. An example quoted by one senior manager was in service teaching. Instead of working together with the servicing departments, some parent departments wanted to take over the subjects taught by the servicing departments and gain control over what and how they were being taught.

However, one principal lecturer conceded that cross-departmental working relationships also depended on the standing of the departments in relation to each other, and the diplomacy and tact of individual staff in dealing with other department's staff.

Senior lecturers' descriptions of cross-departmental relationships include: 'I don't know much about it', 'little interaction' and 'there is no collegial spirit. This is like a factory. People are working in isolation'. As one interviewee explained, this situation arose because staff came from different professional fields and therefore understood vocational education differently. As a result, departments functioned differently. Similarly, lecturers described cross-departmental relationships as 'distant', 'little interaction',' lacking in opportunity to develop mutual trust', 'territorial', 'possessive' and even 'hostile' (where there is competition for resources). One lecturer whose department required servicing from other departments admitted that

"'serviced subjects' are not seen as an integral part of a course. Students therefore do not think that the 'serviced subjects' are important". On the other hand, lecturers servicing other departments complained that they were given the worst timetable slots (i.e. 8:30 a.m. and 4:30 p.m.) and information about students whom they taught were withheld from them. On academic issues, tension arose when the parent department and the servicing department could not agree on course delivery, assessment methods, and grades. Parent departments expected conformance to their own departmental standards and requirements but servicing lecturers felt that their subject area did not fit neatly with the given requirements and therefore had to make adjustments. Some servicing lecturers felt that parent departments should trust the servicing department more because the subject in question belonged to the latter's area of expertise.

Relationship with Students

Except for some of the interviewees at senior management level, almost all respondents did not accept the notion of the student as a customer. Some senior managers complained that the prevailing culture was one of teacher centredness and where students were expected to 'keep quiet, do as they are told, and not ask questions.' However, during interviews with other senior managers, students were referred to as 'products' or as 'graduates which are produced by the College'. When asked why staff generally had difficulty accepting the concept of treating the students as customers, several explanations were given.

Firstly, within the Oriental/Chinese education traditions, teachers are looked up to and students are expected to be quiet and compliant. One interviewer described it as the 'teacher-knows-best syndrome'. This same educational culture is what most lecturers experienced as they went through the local school system. Therefore, they are now replicating that process. Furthermore, teachers in the Oriental tradition are required to take on a parental, caring role. The ex-officio member of the ARC pointed out that "parents in Chinese cultures are carers but they are also very strict with their children, which is very different from the West. This is reflected in the education system". From that position, lecturers expect respect. Therefore, the concept of treating the

student as a customer, making demands and voicing opinions, are seen as a threat to that position.

In addition, students in the college are also known to be 'docile' and 'don't seem to know what they want' because they have not been encouraged to think critically or asked for their views. In addition, students may not want to express their view for fear of having what they say held against them.

Most principal lecturers said that students were people receiving knowledge, while some saw them as end-products of an education process. All interviewees generally did not see their students as customers. As one interviewee pointed out, 'students are seen as 'end-products, or even worse, numbers'. The explanation given for this was that, in Chinese culture, students' views are not regarded as very important because teachers believe that students do not really understand what they want. They may know what their career aspirations are, but they do not know how to reach those goals. The onus, therefore, is on the teacher to help them and guide them by giving them the relevant information and knowledge.

One principal lecturer who had worked overseas also mentioned that students were not treated as customers because there was no immediate economic reason for doing so. He pointed out that, unlike in some countries where academic departments had to market their courses and where the survival of courses depended on student enrolment, Hong Kong institutions competed much less for students. There was therefore less urgency to please students or potential students.

Finally, within the entire organisation, there was a culture of treating students as final products or numbers. In planning and decision making, consideration for numbers was given a higher priority than quality.

Senior lecturers also found it hard to treat the students as customers although they generally accepted that students were stakeholders in the education process. One interviewee said that, by adopting the customer—oriented approach, the relative status between teacher and student would be reversed, and the student would expect to be served. Another reason was that the teacher-student relationship was not one based on money. As one interviewee pointed out, "Many teachers and educators are motivated by what I would call 'higher aspirations'-academic issues, moral issues and desire to serve society, and students." Therefore, "that paradigm of customer-centred service which is borrowed from another aspect of industry, it doesn't fit so well". The implication of all this, as another senior lecturer suggests, is that

"we have to maintain academic standards and therefore we only award grades which, according to our professional discretion, students deserve. We also have the moral responsibility to teach students how to be good persons.

Sometimes, this involves taking measures that are not popular with students."

All lecturers interviewed felt that, as teachers, they were responsible for meeting the needs of their students and maintaining their professionalism. However, they had reservations about the notion of treating students as customers. As one lecturer puts it,

"We are not in the business of selling skills which depends on a customerbased relationship. We are in the business of education which is a business of drawing out the potential of students and the teachers' job is to foster that potential."

A number of lecturers also described the teacher-student relationship as one of unequal status. For example, one interviewee said, "students are the receivers, we are the distributors". Similar points were made by other lecturers:

"I am here to transmit knowledge, I am not here to satisfy their wants."

"The teacher-student relationship is a one-way channel. The teacher is there to deliver knowledge to the students. Students can make requests but not demands. They do not have the right to criticize since they do not have good powers of judgement."

These views stem from the perception that students are not able to properly judge what is good or bad for them. For example, in one department, students wanted their workload reduced while their lecturer felt it was in their interest to do more. However, this does not mean that lecturers tend to ignore what students say. Most interviewees said that they should still listen to their students since they still have some valid points to make.

Quality Assurance Mechanisms

When asked about the effectiveness of the current Quality Assurance Mechanisms in enhancing academic quality, all interviewees across the ranks started with the premise that the procedures, processes and policies compelled staff to think about academic quality issues when these were first introduced in 1996. However, not all the mechanisms were useful and neither had they helped staff develop their own commitment to academic quality. Senior managers stated that there had to be a process of review, and that more attention should be given to the monitoring of teaching and learning. The ARC ex-officio member admitted that there was 'an element of staleness' in the mechanisms and that people were beginning to see some of the mechanisms, e.g. the Course Quality Annual Returns, as 'another thing to do at the end of the year'.

These views have been echoed by principal lecturers, senior lecturers and lecturers.

One senior lecturer who had been closely involved in the departmental quality initiatives complained that the mechanisms had been 'formalised or fossilised'. She further explained that

'we are just concerned about figures. Within our department, peer reviews are just another formality. Some people even resist it. Course evaluation is also another formality where students just mark '3' (a mediocre grade) for every response on the questionnaire. And the whole purpose of this exercise is management by exception, to single out the problematic cases. '

Lecturers felt that more could be done in terms of follow-up activities. This would only be possible with more clerical support and a reduced workload.

One reason given for why the mechanisms had not been effective in enhancing academic quality was that, in the 1998/99 academic year, heads of department and principal lecturers, in particular, had been heavily involved in the amalgamation of the technical institutes and technical colleges. As a result, the drive for academic quality which started in 1996 lost some of its momentum. A senior lecturer who had been heavily involved in departmental quality initiatives pointed out that, instead of waiting for improvements to be made with the coming of IVE, quality issues should be worked out in the process of re-organisation. "Unfortunately" she laments, "this has not happened. The concentration has been on reorganization and quality issues get neglected."

Another reason could have been the general lack of commitment on the part of staff. The processes, procedures and policies were purely mechanistic. However, as one senior manager pointed out, what breathed life into it was a concerted effort among senior staff, a commitment of the whole organisation towards academic quality, and a conducive environment, namely one of service-orientedness and openness that could encourage all staff to take more initiatives. In other words,

'a quality culture should breathe life into the process. People will just do things properly and go through the motions, but the only way they will be committed is that they must be convinced.' Senior lecturers were generally dissatisfied with the speed at which top and senior management had pushed for course delivery through information technology. They felt that staff were not ready for this and that there should be more quality control on this mode of teaching.

However, the fact that staff had to report on their courses (even if it meant going through the motions in some cases) created an awareness of the need to maintain academic quality. One principal lecturer (a course leader) notes, "some people if not for something else, only for the student survey, will pay a lot of attention to their work".

When asked if the results of the student surveys could be watered down by students circling middle-of-the-path answers in the questionnaire, a principal lecturer who sat on the Development Committee, argued that the survey was still valuable in identifying the 'extreme cases- the very good and the very bad'. It was mentioned that people actually paid a lot of attention to measures like the student survey, since it reflected on their teaching. As a result, 'staff make sure that they prepare their lessons and their lecture notes more carefully.' However, surveys could be abused. One lecturer noted that students tended to give middle-of-the road responses to the survey questions. In some instances, students were not interested in giving their feedback or did not understand what was expected of them. One lecturer gave the example of one student completing a whole pile of survey forms on behalf of his classmates. Another lecturer said students thought that the responses required of them was a true/false answer when they were actually asked to indicate their degree of agreement with given statements of judgement on the courses by circling the appropriate numbers.

Other measures such as the Course Quality Annual Returns (CQAR), which are completed by the course leaders, did not seem as valid. Course leaders had to award subjective and objective grades to subjects in their own course. One interviewee who sat on the Academic Review Committee noted that staff tend to give Bs and Cs to their courses so that the subjects would not be spotted at Academic Review

Committee level. In any case, how these grades were derived were highly subjective since each department set its own criteria for awarding grades.

One principal lecturer, who had close contact with students through organising various student professional development activities, said that Staff-Student Consultative Committees and student interviews were considered to be not very useful. He explained that Chinese students tend to be passive and unwilling to express their views. In addition, student representatives tend to air their personal views but not necessarily the views of fellow course mates. Most of the time, it was the lecturer who did most of the talking at Staff-Student Consultative Committee Meetings. That was perhaps why this interviewee suggested that it was more useful to gather the opinions of students through day-to-day contact with them.

Similar comments were forthcoming from senior lecturers and lecturers. A senior lecturer who was in charge of his department's evening studies unit said that, at Board of Studies meetings, students only touched on superficial topics like the canteen or the photocopier. Lecturers also indicated that, although Board of Studies meetings provided a forum for discussing course-related issues, students were often intimidated by the presence of lecturers in the room and therefore did not speak their minds. This situation was aggravated by the fact that most of such meetings were conducted in English, a language that most students did not feel comfortable in using. Some staff also felt that there was insufficient follow-up on points made at such meetings. Students were also concerned that such information could be used against them.

One lecturer pointed out the danger of departments using the quality assurance mechanisms as a measure of judging staff performance. He stressed that it would be particularly dangerous if the results were biased and used as the only measure of performance.

One servicing department lecturer pointed out that, at student interviews, questions could be angled in a way that would lead to answers that interviewers wanted.

A principal lecturer and member of the ARC said that academic quality initiatives should be management led and that more empowerment should be given to lower rank staff in implementing academic quality policies.

Several views on how to improve the situation were given. A senior lecturer in charge of departmental evening studies said that management should assure staff that results obtained were purely for the purpose of improving a course, not for punishing individuals in order to get their commitment to using the quality mechanisms properly. Another staff who had been involved in quality issues at academic committee level also suggested making sure that students were heard beyond Course Boards. This interviewee recommended that 'we should have a culture in which students can have their very real voice and that means they have a stake.'

A senior lecturer, who was also on the Academic Review Committee and a computer expert, suggested that improvements could be made on a macro level by setting up and using a Management Information System (MIS) to simplify the administrative tasks. He suggested that this should ease administrative workload so that staff could really concentrate on academic issues.

Lecturers recommended that more should be focused on the teaching and learning process. In addition, they also felt that the system should reward good teaching with incentives such as promotions and awards.

Management of Academic Quality

When asked how academic quality had been encouraged in the campus, all four groups of interviewees consistently pointed to the time when quality initiatives were first introduced by the Academic Board. When the Academic Policy was first endorsed by the Technical Colleges Academic Board, management gave it a very high priority. Departments were also asked to establish their own departmental quality policy and staff felt that their future depended on their attitude and performance. During that period, academic issues were widely debated and staff awareness about

academic issues were raised. As one senior lecturer put it, there was a feeling of 'shaping one's destiny.'

However, this climate was overtaken by the development of IVE. Management had shifted its focus and therefore side-stepped quality issues. Also, lecturing and supervisory staff felt that the heavy administrative workload imposed on them took them away from academic issues. The whole concentration was on procedural matters. One senior manager noted that, at one recent Academic Board meeting, less than 5% of the time was given to discussion of quality issues. Other time was taken up by procedural work. The same interviewee also suggested that, if academic quality was to be achieved, then administrative, procedural work should be reduced to allow staff to divert their energies to academic issues.

The same senior manager also stated that staff were often met with time constraints and managers were constrained by VTC guidelines and a bureaucratic system. He also suggested that, under such circumstances, an awareness of quality should be externally driven by professional bodies, and that departments should see themselves as accountable to the professions.

A senior lecturer mentioned that mechanisms had not been given sufficient time to work before they were replaced by new ones. Yet another senior lecturer stated that, in the process of promoting academic quality, students' interests were often forgotten.

At the same time, the top-down management approach discouraged the airing of views and experimenting in teaching. A point raised by a principal lecturer, who had close interface with senior management was that there was a lack of consultation within the organisation.

'Management adopts a top-down approach in its operation, a loop of consultation and feedback is lacking. Often, there is downward dissemination

of information but no corresponding upward feedback. Any initiative is basically a top-down directive, and staff do not own it.'

A senior lecturer also commented that the management culture was not conducive to implementing quality initiatives because management did not empower staff and did not decentralize or devolve responsibility sufficiently.

One lecturer in a servicing department lamented that:

"Everything is top-down, there is no channel to express views. In order for people to be committed to academic quality, there must be channels for people to voice their opinion to the 'gods'."

Another lecturer also complained that under this system, there was 'no freedom to experiment or develop new methods of teaching.'

Other factors identified as hindrances to quality management include the attitude of management. As one senior lecturer noted, "top management has to be quality-minded for quality initiatives to work". Directives on quality initiatives had to be given top-down. This was not often the case. He even pointed out that at present, some heads of department were major 'stumbling blocks'.

One principal lecturer, who had been heavily involved in quality initiatives on a campus-wide level, said that the system did not adequately reward high performance. Instead, promotion was given on the basis of seniority. The culture thus de-motivated people who showed potential and who were willing to work.

Emphasis had been increasingly placed on research and writing, which some lecturers felt were not appropriate for an institution of this level.

On the issue of resources, senior managers, principal lecturers, senior lecturers and lecutrers generally thought that the correlation between physical resources and academic quality was weak. They felt that staff attitude was more important in maintaining academic quality. Senior managers thought that the college was well resourced by international standards. The issue was therefore not one of resources but how effectively and efficiently resources were deployed. They also expressed the view that the emphasis should be placed on other factors. One of these was the attitude of staff. As one senior manager put it: "resources is a convenient argument against quality". In a similar vein, another senior manager said that if people believed that they could not have academic quality without the resources, the lack of resources would affect them. However, if they believed that academic quality depended more on the relationship between teachers and students, then resources would become relatively less important.

Senior lecturers and lecturers were vocal about the importance of staffing in relation to academic quality. Some senior lecturers felt that there was a strong correlation between the way resources were deployed and the level of academic quality. One argument put forward was that lecturers and senior lecturers were given a heavy administrative workload, on top of their teaching. By employing more administrative staff, academic staff could be freed to focus their time and attention on academic issues. For example, if more clerical and administrative support could be provided, staff could then 'be freed to spend more time improving their teaching notes, and meeting weak students on an individual basis.'

However, a senior lecturer who came from a management background cautioned that 'just having the numbers is not enough. Willingness and commitment of staff are also very important. This in turn depends on the quality of staff, their previous working background and exposure'.

Interviewees across the ranks believed that the correlation between physical resources and academic quality was weak. One example that was cited by a great number of interviewees of senior lecturer and lecturer level was the use of information

technology. Most felt that the use of IT did not necessarily enhance teaching. One lecturer even felt that 'the administration had 'thrown too much money at IT'. One principal lecturer who had been using IT on her own accord even before it was promoted, stressed that if IT was not properly integrated into courses, it may hinder rather than help course delivery.

One interviewee, a senior lecturer and course leader, pointed out that

'....just by introducing information technology into teaching was not going to improve academic quality'.

'Improving academic quality has to do with a conducive academic culture, good management support and motivated students.'

Another felt that resources could be better channeled and managed. Yet another interviewee suggested that more attention should be placed on course content and course structures.

On the whole, interviewees argued that the VTC should be more focussed in its approach. It should allow more time for staff to focus on students and on their teaching. This point was also echoed in other similar interviews.

Summary

From the given definitions on academic quality, it can be inferred that the more senior the rank, the more likely the interviewee would be concerned with macro aspects of quality. On the other hand, the more the staff were involved in teaching and learning, the more they were likely to concentrate on these aspects.

All staff agreed that academic quality was important but did not think that awareness of its importance had translated into an academic quality culture in the campus. Also, most staff thought that a commitment to academic quality depended on individuals' professionalism and not on rank or responsibilities.

College wide, working relationships were reported to be hierarchical. Across departments the relationships were described as territorial. However, within the departments, the relationships were friendlier and much more conducive to team work.

Most respondents did not accept the concept of treating colleagues as customers. Neither did they accept the concept of treating students as customers. Interviewees did not think that students were knowledgeable enough to make academic judgements for themselves.

Most interviewees felt that the quality mechanisms had helped to raise awareness of academic quality and maintain teaching standards. Beyond that, the mechanisms were perceived to be stale. It was reported that people just went through the motions. However, some staff were wary of the mechanisms as they perceive these to inadvertently take on a policing role.

On the whole, staff felt that management had shifted its attention away from academic quality issues to the formation of the Institute of Vocational Education. This problem was compounded with heavy workloads and procedures. The overall atmosphere was

one that was bureaucratic and lacking in empowerment.

It was generally agreed that the campus was well-equipped but did not think that the provision of physical resources had a strong correlation with academic quality. All interviewees were quick to add that what was more relevant was people. Senior managers stressed the need for the right attitude, while lecturers and senior lecturers tend to focus on the need for higher staffing numbers so that academic staff could concentrate more on teaching and learning.

Chapter 7: Analysis

This chapter discusses the VTC's definition of quality. It also explains the organization's approach to quality management and compares it to efforts made in the school and UGC sectors. The chapter further assesses the quality culture in the Tsing Yi campus and compares it with the aspirations embodied in the VTC Quality Policy. Also, the organizational culture at Tsing Yi is compared against factors for the successful implementation of TQM.

Defining Quality

Official Definitions: ARC Paper (1996) and Departmental Quality Policies

The ARC Paper on Academic Quality defines quality as the extent to which the College enables students to achieve the aims, objectives and academic standards set out in the course documents. Such aims, objectives and academic standards are stated in the College mission which is

to deliver high quality tertiary level education and training, leading to satisfactory employment prospects for students and a foundation for their continued and professional development;

to establish a close working relationship with commerce, industry and the wider community, enabling the students and staff to meet the needs of Hong Kong.

Quality, as defined by the VTC and the College, therefore has a vocational bias. It means enhancing students' employability, and meeting prospective employers' needs by fostering a close relationship with these parties. This definition clearly reflects the customer oriented attitude of the institution.

Taking the cue from the framework set out in the ARC's Paper on Academic Quality: Full-time courses (1996), individual departments developed their own quality policies which focussed on these areas:

- Improving teaching and learning
- Responding flexibly and quickly to the external environment
- Harnessing the commitment of all staff through empowerment and open management
- Involving the learner in improving the process of teaching and learning
- Establishing measurement of success in meeting course requirements
- Encouraging collaboration between all parties (internal and external to the college) in the delivery of the courses.

A study of all the eight departmental quality policy papers shows that the departments developed policies emphasizing the quality assurance of the teaching and learning process and some cursory attention was given to harnessing staff commitment. The means to this was through giving staff open access to information, involving staff in quality groups which review teaching policies and recommend improvement. Other methods included involving staff of all levels in course teams and course-related committees.

From an analysis of the papers written in 1996 (i.e. the ARC Paper on Academic Quality and the eight departmental quality policy papers), it is evident that the College's primary focus was on the quality assurance of teaching and learning. This meant establishing a management system to ensure that standards were specified (Ellis, 1993; Munro-Faure and Munro Faure, 1992). This approach emphasized prevention, external accreditation, delegated involvement, audit of quality systems, cause and effect analysis and quality control (Dale and Plunkett, 1990). The objective was to produce a service that satisfied the customer cost-effectively. Although this approach has its merits, some writers (Ellis 1993a; Hill and Taylor 1992, West-Burnham 1995) point out that, because quality assurance is about conforming to specifications, it plays down the concept of continuous improvement. To a certain extent, this may be true. However, quality assurance need not preclude continuous improvement. It may not be an ultimate goal, but it can be a by-product (Sallis 1992). In fact, Sanders (1995) argues that any quality assurance must have as its main

purpose the continuous improvement of the quality and standards of teaching and learning.

The Departmental Quality Policy papers suggest that their approach to quality is one of incremental continuous improvement (ICI). It can therefore be said that the departmental quality policies had a predominant focus on quality assurance, but there were some leanings towards staff empowerment, open management and continuous improvement. These, however, were not the primary goals of the policies. The policies also focused heavily on internal processes of assuring the quality of teaching and learning, and much less on meeting the needs of the external customers: employers and industry at large.

In addition to outlining the spirit of quality management, the ARC paper (1996) also laid down the mechanisms and procedures for quality assurance, which mainly made use of statistical methods. These included the use of student survey results, and the analysis of final results (standard deviations, mark distributions) to arrive at the grades for Course Quality Audit Reports (CQARs). Although some subjective elements had been built into the system through the use of student interviews, this was not a major part of the process. There are several problems in this approach as education is subjective in nature, and not immediately observable or definable (Fish, 1991; Prisig, 1976; Pring 1972). Nonetheless, given practical constraints, using statistical information to form a general picture should be the first line of action in quality assurance.

All in all, the ARC paper (1996) and the ensuing departmental policies are tightly integrated. They also reflect a very specific, well-defined brief. This is to meet a specified standard of academic quality through a system of quality assurance.

Official Definition: VTC Quality Policy (1997)

In contrast to the ARC paper (1996) and the ensuing departmental policies, the VTC Quality Policy (1997) encompasses a broader area and takes a different approach.

Before considering it, one needs to be aware of the backdrop against which it was written. Since the publication of the consultant's Segal Quince Wicksteed Report (1996), the VTC has been undergoing a number of reforms to bring its courses in line with economic changes and current demands. One of the recommendations made was the articulation of a VTC mission and vision statement, and the subsequent formulation of a VTC quality policy. Another was the amalgamation of the seven technical institutes and two technical colleges (including Tsing Yi) under one entity: the Hong Kong Institute of Vocational Education. In effect, the VTC Quality Policy was written to drive these changes and to create a quality culture. This situation fits three of the four imperatives for introducing quality initiatives given by Sallis (1993). The imperatives are: environmental, social and being accountable. In other words, quality was introduced in response to external pressures.

The VTC Quality Policy addressed macro issues, whereby individual operating units were required to formulate their own quality policies. In this spirit, the ARC paper (1996) and the departmental policies were now subsumed under the VTC Quality Policy (1997). This is also consistent with the Segal Quince Wicksteed Report, which recommends devolution of authority and responsibility to operating units. For the Tsing Yi campus, this meant moving away from a Quality Assurance (QA) model to a Total Quality Improvement (TQI) model (Feigenbaum 1991, Witcher 1990, Hill and Taylor 1991, Sallis 1992). Tobin (1990) defines TQM as a total integration of effort to gain competitive advantage by continuously improving every aspect of organizational culture.

The VTC quality policy works within this frame of thinking. Its objective is to create a culture and a conducive environment whereby students' and trainees' potential can be realised to meet the needs of its customers.

This policy outlines steps towards winning staff commitment towards a quality culture. In turn, it aims to give prominence to quality issues in the face of changes taking place in the VTC. In the VTC Quality Policy (1997), Total Quality Management is defined as

The whole organization working closely together within a support oriented culture/environment to achieve ever increasing excellent performance and service that completely satisfy both internal and external customers by meeting their implicit and explicit needs.

The objective of the policy is to drive continuous improvement. The principles adopted for this are: total involvement, process improvement and customer satisfaction. To enable these to take place, attention is given to leadership, education and training, communications, reward and recognition, and measurement (VTC policy 1997).

To gain total involvement, the policy pledges a TQI Support Culture whereby frontline teaching staff are supported by management and government to deliver high quality teaching and learning processes. The claim that senior management must be bought into a quality culture, and that 'Quality' must be managed, is wholly consistent with views propounded in TQM literature, notably Deming (1986), Juran (1974) and Crosby (1979). However, the VTC's model is not management-led in practice. Instead of taking a proactive role in quality management, senior management sees its task as the creation of an environment for quality by providing administrative support, staff development, curriculum development and academic support. The actual management of quality is left to operating units as a 'bottom up initiative' is expected. Arguably, this enables flexibility and latitude. On the other hand, one questions the practicality of the approach. With time constraints and competing demands, it is questionable whether a quality culture could evolve without senior management's firm hand of guidance. Kotter and Heskett (1992) state that leaders must provide energy for change, provide strategically appropriate direction for the change, provide social influence and support the structure within which change can take place. Bucko (1994) and Troman (1996) also state the need for leadership to take an active role to assure the success of a quality initiative. This approach is not reflected in the policy paper. In addition, although the policy document suggests such a radical change in a working relationship to serve the ultimate customer, it does not specifically address the issue of how the ultimate (or external) customer can be

served.

Although it is difficult to identify external and internal customers (Ellis, 1993a; Hall, 1996; Sallis, 1992), the VTC Quality Policy aims to meet the needs of the ultimate customer. The policy states that, to do this, staff should first identify their internal and external customers. A support structure is also adopted to empower frontline workers. Hence, the term 'a support oriented culture' is used in this policy. Under this paradigm, personnel at every level play their part to support the next level of 'customers'. To put it simplistically, government and senior management provide the right environment, and the necessary academic and administrative support, to teachers and trainers. Teachers and trainers, in their turn, are empowered to support their external customers: students and employers. This model is consistent with the current view expressed in the TQM literature (West-Burnham, 1992, Murgatroyd and Morgan, 1993; Downey, 1994), which advocates maximising the power of those working closest to the customers. However, as the policy is a facilitating document, it does not give specific details about how to meet the needs of customers. This is left in the hands of operating units.

Last, but not least, the Policy also advocates adopting value-added process models. It reasons that an activity is only worth doing if it adds value to the organization. Again, the onus is on individual units to ask themselves if the existing processes add value to the VTC.

Comparison between VTC quality management initiatives and those in the school and UGC sectors

A comparison between the VTC's move towards quality management, and efforts made by the school sector and the UGC institutions, reveals some similarities. These include empowerment by devolution, top management paying attention to quality, greater accountability and process control through mechanisms such as documentation and adherence to procedures, and greater attention to major stakeholders' (government, students, employers) needs.

However, there are also some fundamental differences. In the school sector, quality management has been introduced in a top-down manner, using policies and measures such as School-based Management Initiatives (SMI) and the Quality Education Fund (QEF) to drive the movement. In the UGC sector, quality has been driven by collegial as well as more forceful methods. For example, in the Teaching and Learning Quality Process Reviews (TLQPR), the Review Panel took the stance of the 'critical friend', reviewing only the quality monitoring processes in a collegial manner. Similar processes and sensitivity have been adopted for the Management Reviews. On the other hand, financial pressures have been exerted on research and development through the Research Assessment Exercise and the establishment of Centres of Excellence. In these two areas, funding has been linked to performance. However, as far as the VTC is concerned, it has only managed to establish a quality assurance system in the former technical colleges sector.

In terms of progress, the school and UGC sectors have made greater strides in the variety and scale of initiatives. In terms of commitment, the leadership in both the school sector and the UGC sector have been more proactive. They have initiated measures and followed them through with rewards. Thus far, the VTC has only an expressed intention by senior management to support a quality policy. Furthermore, the VTC quality policy hints that Quality is to be driven from 'bottom up'.

Quality Culture in the Tsing Yi Campus

Customers

The official documents: departmental quality policies, mission statement, and the VTC Quality policy (1997) all point to the need to meet customer needs. Customers are defined as students and employers. The VTC Quality Policy further introduces the concept of internal customers (students and staff), and external customers (employers). What these imply is that the control role of organizational leadership should change (see Appendix 2). In this new power structure, customers define quality, and are involved in goal-setting, giving real-time feedback, and allocating

resources. This approach is consistent with current TQM literature which calls for maximizing the power of the employees nearest to the customer (Downey, 1994; Hill and Taylor, 1991; Lai, 1998; Muller and Funnell, 1992; West-Burnham, 1992; Murgatroyd and Morgan, 1993; Downey, 1994).

In the staff survey, reactions to these concepts are varied. Participants' acceptance of treating industry or the service sector as customers (82.2%), and responding to their needs (92.2%), is generally high. This is because staff are highly aware of the VTC's role and function, i.e. to train people for the job market. Courses are, to some degree, also dependent on market demands. The survey results also show that principal lecturers and senior lecturers were more inclined than lecturing staff to treat industry as 'customers' and to being responsive to their needs.

Across all ranks, there was widespread disagreement with the notion of treating students as customers. When comparing the means by ranks, it was found that there were no significant differences. A minority of 48.9% agreed with this notion. Staff at all ranks generally did not readily accept the notion of student as customer. This contrasts markedly with the vast majority of staff (92.2%) who agreed that they should be responsive to students' needs. The two sets of results are clearly incongruent. Explanations were sought at the interviews.

What emerged from the interviews was that most staff did not see students as customers but as products of the college, recipients of knowledge. There was also the perception that students did not really know what they wanted and did not have the critical power of judgment. Also, according to a senior manager, in oriental culture, students were expected to respect their teachers. The notion of treating students as customers undermined this paradigm and changed the power relationship. At the same time, in oriental culture, teachers were expected to take on a caring, parental role. Therefore, most staff generally agreed that they had to be responsive to their students' needs.

Similar views are found in the literature. Idrus (1996) points out that academics tend to be self-sufficient and perceive students to be lacking in wisdom and knowledge to influence the content of the course. Lai (1998) argues that the notion of customer rests on the assumption that the customer is a 'rational man who knows what is best for him' (p.3) and on that basis claims that students do not possess the necessary information on the educational delivery process to be treated as customers. He therefore suggests that instead of being treated as customers, students should be seen as stakeholders, 'whose needs, interests and aspirations should be taken into account' (Lai, p.5). Ellis (1993a) also makes a similar point by stating that the needs of the primary customers (i.e. students) might be implied on their behalf by their teacher. On the other hand, teachers have their own views which are likely to be different from those of students.

The VTC Quality Policy further suggests the notion of treating fellow colleagues as internal customers. It argues that by meeting the next person as a customer in a chain of processes, the expectations of the ultimate customer can then be met (Boardman 1998). Sallis (1992) also comments that, when colleagues are treated as customers, individuals in the organization can perform the task to the best of their abilities while, knowing that they can expect reciprocal treatment.

A minority of staff (44.5%) agreed that staff should treat other academic staff with whom they collaborate as customers although a higher percentage agreed that they should be responsive to their needs. Again, survey results show that there were significant differences in the means obtained by rank. Principal lecturers had a higher mean than senior lecturers who in turn had a higher mean than lecturers. It may be that the job nature of managers and supervisors requires them to seek the cooperation of colleagues. They therefore felt the need for a support oriented culture more acutely than lecturing staff whose primary duty was teaching.

Further explanations for this phenomenon were also sought through interviews with staff. It was found that although staff did not accept the notion of treating fellow colleagues as customers, they were not averse to seeing them as peers with whom

they worked together for the students.

Nearly all interviewees reported good relationships and teamwork within the departments. This can be substantiated by the survey findings where a high overall mean was obtained for statement 1.15 (Teamwork among academic staff is essential for ensuring the quality of courses.) amongst all ranks.

A breakdown of the figures shows that principal lecturers had the highest mean. From the interviews, staff at senior lecturer and lecturer levels reported a spirit of friendship, collegiality and mutual help. As one lecturer explained, in Chinese culture, personal influence and good relationships go a long way in enabling a person to carry out his task smoothly, not a customer-supplier relationship or a formal role. Dimmock (1998) also highlights the need to be sensitive to the ethnic culture when implementing changes. In a similar vein, one senior manager comments that, in some departments where the heads are known to manage rigidly and where people relate to each other by rank, staff tend to be passive.

Across departments, there were reports of balkanization (Fullan and Hargreaves 1992), as staff of all ranks admitted that there were struggles for more control over servicing units and resources. In this regard, working relationships tend to be sectional and territorial. Staff complained of working in isolation. Staff also reported tension between parent departments and servicing departments. This was because parent departments made demands that servicing staff (always from another discipline and department) regarded as unrealistic. In short, relationships across departments were described as 'distant' or even 'hostile'. No interviewee indicated that there was collegial collaboration across departments.

Cheng and Cheung (1997) define 'quality' as the character of the set of elements in the input, process and output of the education system that provides services which completely satisfy both the internal and external strategic constituencies by meeting their explicit and implicit expectations. In Tsing Yi's case, the notion of the external

customer is more readily accepted because of the 'competitive' and 'survival' imperatives that Sallis (1992) points out. In order to compete with similar institutions and survive, the Tsing Yi campus really has no choice but to listen to commerce and industry. Indeed, that was also the tenor of the Segal Quince Wicksteed (Asia) Limited consultant's report (1996).

Although campus wide, there was a consensus that external customer needs should be met, there was greater difficulty in accepting the notion of the internal customer. This could be because implementing such a notion requires a drastic paradigm shift in the power relations between staff and leadership, between department and department, between staff of different ranks, and between staff and students. This may run contradictory to the existing culture where decisions rest squarely on the shoulders of senior managers, where there is sectionalism within departments, where there is a high level of consciousness about rank, and where there is the traditional acceptance that the teacher knows best.

The present climate is not something that can be changed overnight even if management wills it. The preference of management and staff alike is to retain the status quo.

Processes Improvement- Quality Assurance Mechanisms

To implement its quality policies, a college-wide infrastructure was set up in 1996 to oversee the quality assurance of courses. The VTC Quality Policy (1997) also calls for attention to be paid to the individual stages in the work process, as this can reduce the variability of the output and improve the reliability of the process. These are all consistent with the TQM spirit embodied in the literature. Deming (1986), in his seven point action plan, advocates constructing an organization as quickly as possible to guide continual quality improvement. In discussing the application of TQM to vocational education, Muller and Funnell (1992) also mention that putting in place clear operational procedures is just as important as having a strategic plan. The ARC Paper on Academic Quality (1996) proposed the establishment of two committees whose function was to oversee quality assurance of the college and its courses. The

Academic Review Committee's purpose was to monitor and evaluate how well the College, as a whole, achieved its aims and objectives as stated in the course documents. The Academic Planning and Audit Committee (APAC) was concerned with the auditing and monitoring of courses.

Juran (1974), in discussing the management of quality, points out the need to organize to reach goals, implement plans to meet identified goals and policies, and to report on progress. Crosby (1974) also sets down, in his 14 steps of quality management, the requirement for providing a systematic way of addressing problems.

The ARC Paper outlines measures to be taken to sustain and improve the standard of the courses. Course leaders are required to submit a course summary report to APAC at the end of an academic year. This report summarizes the evaluation of the course drawn from findings taken from year-end results, progression rates, staff-student consultative meetings, student interviews, returns from student evaluation forms, discussion at boards of study meetings and at boards of examiners meetings.

Apart from documentation of progress and action, a number of activities were organized to create an awareness of quality. Juran (1974) also highlights the need for building an awareness of the need and opportunity for improvement. In the College's context, this was implemented through organizing forums for debate on quality, as well as peer reviews of teaching. This awareness was most acute perhaps because all the courses in the College had to be validated in 1996. Academic Quality was a major topic discussed at many validation meetings, and the issue was addressed in course documents presented for validation. An ARC representative was also present at validation board meetings and acted as the internal validation panel member. For this practical reason, more than anything else, academic quality was given great prominence.

On the whole, staff had faith in the two quality committees (i.e ARC and APAC). In the survey, a high percentage of staff indicated that the policies decided by the ARC and APAC had an impact on academic quality, and that they were satisfied with the ways in which the policies had been implemented.

However, the views on individual mechanisms were more divided. A sizeable number of staff cast doubts on the course monitoring system and the peer review system. These doubts had also been echoed at interviews with staff. On the other hand, they were more positive about the various mechanisms involving feedback from students. This is found in the high percentage of respondents agreeing that student course evaluations and student interviews were useful for improving a course.

On the whole, staff reported working in an environment of mutual cooperation and trust, but a significant minority of staff, particularly from the lecturer grade, were sceptical that actions were taken based on feedback obtained. This could be correlated with the general perception among a large group of respondents that management and academic staff did not work in partnership to provide quality courses.

Interviews with staff at various ranks showed even less positive views about the quality assurance mechanisms than what was indicated in the survey results. The general view across the ranks was that the mechanisms had created an awareness of academic quality, but the practices had not translated into an academic quality culture in the College. Principal lecturers and senior lecturers pointed out that staff were simply 'going through the motions', or 'jumping through the hoops'. Some staff have also complained that the procedures had been 'formalized or fossilized'. Principal lecturers, senior lecturers and lecturers also felt that too much emphasis had been given to the process of data collection, but not enough to teaching.

Although the survey results showed that staff were more positive about collecting feedback from students than they were about mechanisms, some staff across all ranks still questioned the value of student feedback. Staff felt that some students did not take the course evaluation seriously, or did not even understand what it was about and therefore gave invalid responses. At Board of Study meetings, students often touched

on peripheral topics like the canteen or the photocopier either because they felt intimidated by the presence of their lecturers, or feared that they would be blacklisted by them. Staff at senior lecturer and lecturer ranks were somewhat suspicious of the feedback because they felt that students could be easily manipulated into responding in a certain way at interviews that would bias information against their lecturers. For example, questions could be angled in a certain way to force a certain answer, which could in turn be misinterpreted. Senior lecturers and lecturers were also concerned that such information could be unfairly used against lecturers.

Doubts were also cast on academic staff. Some principal lecturers made the point that academic staff could manipulate the quality grades such that they were neither exceptionally good nor bad so that the course they teach would escape any notice by APAC.

Several reasons have been given for the situation described above. The most important one is that, with the amalgamation of the technical colleges and technical institutes under IVE, energies that hitherto had been concentrated on quality issues had now been channeled into the re-organization of courses. As a result of this move, there was now an increase in the administrative workload, and there were now more reporting channels. As IVE is a new entity, staff have also been encouraged to raise its profile through organizing training courses for the public, carrying out consultancy work and writing papers. Senior managers and principal lecturers, who bear most of these responsibilities, felt this most acutely. Therefore, leadership and higher level support for quality initiatives diminished. Staff across all ranks recognized that quality initiatives started off very well, but the active leadership, interest and support for them has dwindled. In a similar vein, a senior lecturer pointed out that the creation of IVE was an excellent opportunity for the VTC to give academic quality an even greater prominence, as one of the main agenda items was the restructuring of courses. However, discipline boards had been too caught up with other logistical details and sidestepped academic quality issues.

TQM literature highlights the importance of quality initiatives being management-led. In the College, this has not been the case. One poignant example is that, although the ARC Paper on Academic Quality stipulated that the departmental quality policies were to be reviewed and revised every three years, this guideline has not been followed through. The quality policies were due for review in 1999, but department heads have allowed that deadline to slip by.

Despite the criticisms and problems with implementing the quality mechanisms, they are still useful in several ways. As one PL points out, despite the fact that the feedback only shows up the exceptionally good and exceptionally bad cases, they have made staff more aware of the need to be professional in their course delivery and in the preparation of teaching notes.

Criticism has also been made about the mechanisms concentrating too much on data collection and insufficiently on teaching. However, a study of the course summary reports of the 1996/97 and 1997/98 academic years, and the CQAR action points, were predominantly concerned with teaching. These included teaching methodology, course management, assessments, and students' motivation and learning styles. A comparison of the CQAR action points in 1996/97 and 1997/98 showed that most of the problems raised in the 1996/97 action points were dealt with. In addition, in the summary of the CQAR review exercise, it was further noted that departments were satisfied that the exercise was beneficial for improving the quality of courses.

A comparison of information taken from various sources; survey, interviews, and documents, shows that contradictory views about the effectiveness of the quality assurance mechanisms exist. One possible reason for this phenomenon could be that, as pointed out in earlier sections, staff of different levels defined academic quality culture differently.

Nonetheless, it can be noted that the quality assurance measures serve their designated purpose. In fact, a point which staff have overlooked is that, in the face of organizational restructuring, the well-established infrastructure of committees, reporting procedures, and follow-up actions have contributed greatly to maintaining the stability and standard of courses. However, beyond this, for a TQI-type of quality culture to emerge, leadership and practical support should be more proactive. This is still found to be wanting.

Akin and Hopelain (1986) stress that strong leadership is required to guide cultures that adapt to the environment. Kotter and Heskett (1992) suggest that leaders must provide the energy for change, give strategically appropriate directions, social influence, support and structure. However, at Tsing Yi, such leadership is now channeled to issues other than quality. In addition, departmental quality committees and teams have quietly slipped into the background, and their functions have been overtaken by the more enduring course teams and boards of study which deal with the routine and operational matters.

Staff Involvement in Academic Quality

The ARC paper (1996) refers to harnessing staff commitment through teamwork and committee structures. The VTC Quality Policy (1997) goes further by advocating the active leadership of senior management, utilizing the talents of all employees in the organization, and empowering them. This is to be achieved by strong leadership, education and training of staff, a supportive structure, clear communication channels, rewarding and recognizing those who successfully apply the quality process, and measuring quality in that process.

Alignment of Vision, Mission, and Goals across All Levels

Caldwell and Spinks (1992), Sporn (1992), and Sallis (1993) state that, in order for a strategy to be implemented successfully, there has to be a strong culture to drive it. A strong culture is characterized by a high degree of congruence between the values and goals of the organizational members, the hierarchical integration, and the strategies.

One aspect of this is an alignment of vision, mission and goals.

Through interviews with staff at various levels, it was found that senior managers and middle managers (i.e. PLs) gave definitions of academic quality which closely resembled the official line. According to these two groups, quality meant 'fitness for purpose' and 'doing things in the most cost effective way' (Juran 1974). Both groups of staff also stressed the importance of meeting the needs of customers and conforming to their requirements. (Crosby 1974). In the words of one senior manager:

TQM should be that all activities should circle around a client-server relationship.

Both groups identified their customers as students, employers and the VTC.

While most senior lecturers and lecturers gave definitions that concurred with the official line, and both groups acknowledged the need to meet customer needs, some senior lecturers and lecturers tended to define quality in terms of the teaching and learning process. Below are some examples of such definitions:

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richness of experience that a student cohort goes through – the environment in which they learn, the support mechanisms and the quality of resources (senior lecturer)
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teaching well (lecturer)

parallel learning on the part of the teacher (lecturer)
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Although staff appeared to have different approaches to quality (due to their rank and work exposure), the definitions they gave collectively show a close integration of values and goals across ranks in the Campus.

Staff Commitment

Another criterion for successfully cultivating a quality culture is staff commitment (Hart and Shoolbred, 1993). Figures obtained from the survey results indicate a high level of professionalism and commitment to teaching. From the survey, it can be seen that there was a high level of awareness of the College mission (82.2%) and a high level of support for it (87.5%). In addition, the vast majority of staff (94.5%) saw excellence in teaching as their top priority, and were committed to it through professional development (87.5%) and putting extra effort outside normal working hours to ensure high quality of teaching (94.5%).

However, although the overall means obtained for statements relating to staff's commitment towards teaching (i.e. 1.1,1.2, 1.3, 1.4, and 1.5) were very high, there was a noticeably strong correlation between means and rank. As indicated by the means, the higher the rank, the higher the level of commitment. This picture, however, does not concur with the general perception of staff at all ranks. At the interviews, staff of all ranks expressed the view that rank and level of involvement had little influence on commitment to academic quality. It was felt unanimously that it was the professionalism of staff that carried things through and influenced their commitment to academic quality most. However, interviewees tended to have a rather negative view of staff of other ranks. Senior managers and middle managers felt that senior lecturers and lecturers varied in their commitment to academic quality. On the other hand, senior lecturers and lecturers perceived senior and middle managers to be only paying 'lip service' to academic quality, but really focusing attention on costing. Senior lecturers and lecturers are particularly resentful that, while a lot of money had been allocated to improving the physical resources, especially information technology, there was no attempt to provide additional administrative or clerical support to free up lecturers for more academic related tasks. The prospect of increased class sizes, with no additional academic appointments, was another bone of contention.

In varying degrees, the departmental quality policies and the VTC Quality Policy (1997) place emphasis on harnessing the commitment of staff through involvement.

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The VTC Quality Policy expects no less than total involvement from staff. Staff generally agreed to this view. The survey shows that staff of all ranks (98.9%) saw that it was their personal responsibility to maintain high academic standards, not just that of senior staff. Also, the vast majority (94.4%) felt that quality assurance should come from all academic staff, not just from senior staff. However, a breakdown of the responses by rank showed that principal lecturers had a higher mean than senior lecturers, who in turn had a higher mean than lecturers. Arguably, this suggests that the higher the rank, the greater the responsibility and accountability staff had for the course administration and academic decisions of the Tsing Yi campus. Hence, a sense of ownership was more highly developed amongst senior staff.

Course Management

weed that responsibility and the corresponding authority had been appropriately egated to course teams to run their courses. The means varied by rank and were and to be significant. All principal lecturers (100%) agreed with statement 3.1:

In the whole, responsibility is appropriately assigned to course teams to run their appropriately appropriately assigned to course teams to run their appropriately appropriately assigned to course teams to run their appropriately

registered very strong dissatisfaction with these aspects of quality management:

gement, resources and recognition. The majority of staff did not think that there

high degree of openness between management and staff on how the courses

be run. Most staff also did not believe that their views on how the courses

be run were taken seriously. This view contrasts significantly with the

ms stated in the ARC Paper on Academic Quality, as well as in the VTC

Paper. The ARC paper stipulates that staff commitment should be harnessed

open management, giving staff ownership of quality improvements and

bility for improving the process of teaching and learning. The same message

din the departmental quality policies. The intention is to 'bring staff into the

making process' through course teams and committee structures, and bring

mocratic processes', 'negotiated decisions, open consultations', as well as a

ıd

The correlation between physical resources and quality was seen by all ranks to be a more tenuous one. One example given was that of Information Technology (IT). Staff expressed scepticism over the introduction of course delivery through IT. They felt that it was the teacher, not the medium, that made the difference. If a teacher was not a competent IT user, the quality of course delivery would even suffer through using IT.

Recognition

Glover (1993) comments that, when implementing TQM, it will be necessary to 'put some teeth' in the new approach. Translated into real terms, this means evaluations, subsequent pay increases and bonuses (Glover, 1993; Hart and Shoolbred, 1993), as well as social power and status (French and Raven, 1959; Hart and Shoolbred, 1993; Lam, 1996). Glover (1993) points out that, without change in management evaluation and reward policy, TQM will never be taken seriously. Hence, Muller and Funnell (1992), in discussing vocational education, point out the importance of promoting from within to senior ranks rather than from without.

Similarly, the VTC Quality Policy also advocates the use of rewards and recognition for successful implementation of TQI. However, although most staff put delivering quality courses as their top priority, and claimed that they were committed to improving themselves professionally, nearly half of the survey respondents felt that good teaching was not given its due recognition. This was echoed in interviews with lecturers. The system and the commitment of staff were found to be incongruent in this respect.

The VTC advocated rewarding and recognizing those who successfully applied the quality process. However, interviews and survey findings show that teachers felt that high quality teaching had not been given its due recognition. In fact, one senior lecturer mentioned that, at one time in the history of the campus, staff felt that quality mattered to their careers, but this sense had since evaporated.

Role of leadership

Although the VTC Quality Policy calls for leadership to buy into the quality policy and lead by example, the TQI paradigm itself seems to absolve leadership of this role as it places much of the onus on a bottom-up approach. Leadership takes on only a secondary, supportive role. This has been noticed by staff. Interviewees claimed that quality was very important but were less certain if other people, including top management, were giving the issue a high priority. In fact, one interviewee commented that TQM was just another label. Glover (1993) reports similar problems.

One reason that has been cited by staff of various ranks was that leadership had been so caught up with restructuring that they have neglected quality issues. Some interviewees also commented that, instead of using TQI to drive the current restructuring, it was put aside. This is evident in the absence of quality assurance in one organization-wide academic committee's brief. Another telling sign is that, although the 1996 ARC paper stipulates that the departmental quality policies were to be revised triennially, no action had been taken.

Knight and McCabe (1996) noted that quality is marginalized due to external pressures. Interviews show that staff were highly aware that the pressure to pay attention to quality was not as great as it had been before the restructuring took place. As a result, staff were only driven by their own professionalism and values. It was therefore up to leadership to formulate a quality strategy and ensure that the organization stayed on course in the wake of external pressures (Sallis, 1993). Similarly, the case of American public schools, which significantly improved their performance (Weller, 1997), illustrates that top-down initiation and strong commitment from leadership is a critical factor.

Quality Monitoring Mechanisms

Committee structures and mechanisms to maintain the quality of courses pre-date the VTC Quality Policy. As revealed through the interviews and survey findings, staff generally had faith in the quality maintenance role of the existing mechanisms. They

had also acknowledged the fact that extreme cases (i.e. the very bad) were noted and problems were rectified. Beyond this, however, staff questioned whether some of these mechanisms could bring about value-added input, or whether they were merely procedural. Staff also indicated that the existing mechanisms could not drive continual improvement. When TQM was seen as being superimposed on the 'real' work processes and decision making, it was unlikely to succeed in an organization (Glover, 1993). Finally, the measurement of quality pre-dates the VTC Quality Policy and it is still viewed with some askance. In particular, staff questioned whether figures gave the entire picture, and whether education could be measured in this way. Some staff also questioned the extent to which students should be treated as customers, and the practicality of taking students' views on board. Murgatroyd and Morgan (1993) and Dill (1995) have expressed similar views.

Culture and the Successful Organization

To implement TQM successfully, it is important to build and develop an organizational culture that is conducive to collaboration, participation, and collegiality. (Whitaker 1993, Bucko 1994, Watson, et. al 1995). Collaboration comes through a spirit of connectedness and cohesiveness (West-Burnham, 1992; Whitaker, 1993; Fullan and Hargreaves, 1992). As its name implies, Total Quality Management cannot happen in isolation. For it to succeed, it has to have the total involvement of all concerned and the unity of purpose (Sallis 1993). Deming (1986) comments on the need for driving out fear, and breaking down barriers across departments.

The research findings have shown that a sense of connectedness and cohesiveness existed within teams, course boards and departments. In other words, to use Fullan and Hargreaves' (1992) classification, there was a culture of 'comfortable collaboration' within teams, course boards and departments. On a campus wide basis, however, staff were acutely aware of a 'balkanized' culture, where delineation took place at interdepartmental level. These differences had arisen due to different discipline areas and the struggle for resources. This roughly mirrors Sergiovanni's (1994) portrayal of a multi-culture situation where there exists several subcultures, each seeking to promote and maintain its values.

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The second factor for success is participation. To achieve this, there must be a sense of being part of a whole (VTC Quality Policy, 1997) so that there is unity of purpose which can then enable responsiveness to internal and external customers. Mink, Owen and Bright (1993) call this an 'adaptive culture'. Such a culture can be found at these three levels: individual, group and organization.

Similarly, Caldwell and Spinks (1992), as well as Sporn (1996), also introduce the concepts of 'strong' and 'weak' cultures. A strong culture typically demonstrates a high degree of congruence between the values and goals of the organizational members, the hierarchical integration and the strategies. It provides a conducive environment for successful and effective implementation of a strategy. This concept is also akin to Sallis' (1993) discussion of unit optimization, vertical alignment and horizontal alignment.

On other hand, weak cultures are characterized by loosely linked sub-units or groups, each having specific cultures which can be contradictory to each other.

The College is unified in that staff are on the whole fully aware of the College mission and are committed to it in various ways. Individually, staff display a very high level of professionalism and a genuine concern for quality in teaching. This point has been noted in the Segal Quince Wicksteed (Asia) Limited Report. This is further confirmed by the present research findings which shows that staff placed teaching and learning as their top priority, and were highly aware of their mission to meet employers' needs.

Understandably, however, within the broad agreement of purpose, there are different emphases. Principal lecturers, whose job involves course management, liaise more directly outside the departments and are directly involved in college-wide policies. Their outlook was therefore more in line with official thinking. On the other hand, senior lecturers' and lecturers' work tended to be confined to their departments and

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delivery through IT include doubts about whether IT teaching is more effective than conventional teaching. In addition, staff have voiced concern about the speed at which IT is introduced.

It does appear from these issues, use of IT and staffing, that the overall capacity to change has been 'chaotic' and 'separated' (Murgatroyd 1988, Whitaker 1993). This situation has come about because management has not built a culture conducive to collaboration, participation and change (Whitaker 1993) even when this is essential to gaining staff co-operation. On the other hand, the case studies on Buckpool School (Hampton 1994), Heathland School (Samuel 1997), and Wisewood School (Sisum 1997) serve as useful examples of how proactive leadership, systematic strategic planning, and staff and student participation can lead to success in the implementation of quality management.

Lastly, a successful TQM culture should be characterized by a sense of collegiality. Watson et. al (1995) point to the need for maintaining a collegial environment in higher education to ensure the successful implementation of TQM. However, this does not always happen. Collegiality is often sacrificed in the wake of quality management and ensuing accountability measures (Moses 1995).

As part of the VTC, the Tsing Yi campus has a hierarchical and rank conscious culture. This has permeated decision-making processes, work processes and communication. As a result, there is a culture of 'blame'. The interviews show that senior managers and principal lecturers thought that staff were not sufficiently committed, while senior lecturers and lecturers felt that management was only paying lip service to academic quality.

In addition to this, staff make the decisions or have to execute decisions made at headquarters level. All other staff are expected to follow the decisions. This makes staff resent the fact that top-down measures are imposed on them without a startup stage where a genuine partnership and a conducive school culture can develop. This

problem has been recognized in the literature (Murgatroyd and Morgan, 1993). Another side effect from this is that, because decisions are out of the hands of individuals, people may feel a sense of diminished responsibility as they do not truly own the decisions. In discussing how to win staff commitment, French and Raven (1959) and Lam (1996) refer to the need to award 'social power' to those that could provide expert knowledge.

In discussing the successful implementation of SMI, Chan (1997) observes that teachers must be willing, committed and supportive of any innovation to work. Conversely, in describing a school that implemented change without success, Tang (1998) used words such as 'reluctance to participate, 'unclear operational procedures', 'insufficient trust and openness between leadership and staff', and 'lack of empowerment'. With such mistrust and lack of openness, it is difficult to have a collegial atmosphere.

In terms of resource allocation, senior lecturers and lecturers are particularly resentful of the fact that while more money has gone into physical resources, funds for employing more teaching, administrative and clerical staff have been capped.

Lecturers also resent the fact that they have to carry a heavy administrative load.

Bucko (1994) and Tang (1998) warn that any initiative that appears to carry with it a heavy administrative workload tends to meet with little success.

Apart from workload, recognition must also be given where it is due. Hart and Shoolbred (1993), French and Raven (1959) and Lam (1996) all point to reward (in the form of merit pay or promotions) as a powerful tool for harnessing staff commitment. Funnell and Muller (1992) also encourage the vocational educational sector to promote from within. The present study, however, shows that almost half of the respondents (48.9%) did not think that good teaching, which is the main business of the organization, was given its due recognition.

Summary

When quality management was first introduced to the Tsing Yi campus through the ARC 1996 Quality Policy and the departmental policies, the focus was on quality assurance in teaching and learning. This was understandably so, since the focus was on maintaining the standards of courses. However, since the restructuring of IVE took place, the scope of quality management has moved towards harnessing staff commitment to change and continuous improvement. The role of leaders was to create a 'support oriented' culture, so that operating units could work out the details themselves. TQI, as put forward by the VTC Quality Policy, was a far more ambitious and all encompassing plan. The existing ARC academic policy (1996) became subsumed within it.

The differences between the Tsing Yi and VTC quality policies, and that exercised by the school and UGC sectors, can be expressed in terms of scope, progress, and involvement of leadership. It is proposed that the VTC Quality Policy be driven by bottom up initiatives. Instead of taking an active role, leaders are expected to be in the background, providing a supportive function. The chapter further describes the quality culture in the Tsing Yi campus and compares it with the aspirations embodied in the VTC Quality Policy. It points out that while a committee structure and related mechanisms are in place, management issues such as ensuring the follow through of courses of action, more active leadership, and a more open, two-way communication have not yet been developed. It also points out factors that hinder the successful implementation of quality management. These factors include giving in to external business pressures, and an inherited hierarchical organizational culture. Lastly, the organizational culture at Tsing Yi is compared with factors for the successful implementation of TQM. These factors include a spirit of collaboration, participation achieved through unity in purpose at individual, group and organizational levels, and collegiality.

Chapter 8: Conclusion

This chapter presents the main findings from the documentary analysis, the surveys, and the interviews. From the findings, a profile of the quality initiative of the IVE (Tsing Yi) campus is drawn, and compared against the models found in the literature and official documents. Next, the significance of the study is discussed and recommendations are made.

Preamble

The study has been able to meet the main objective of the research, which is to draw a profile of the Tsing Yi Campus academic culture. Using the paradigm that culture refers to the attitudes, values and beliefs of staff, and to visible and audible behavioural patterns and structures (Nias 1989; Schein 1985), these areas were studied:

- staff values and beliefs in relation to TQM principles
- staff perception of the College's quality-related activities and mechanisms
- the structure and role, policies, practices and management of quality
- the extent to which the academic quality climate effectively helps to deliver quality courses
- factors which can bring about a synergy between professionalism among staff and the current academic quality practices

In drawing up a culture profile, the study specifically attempts to answer these questions:

- 1. What is the senior management's definition of academic quality?
- 2. What is the rank and file academic staff's definition of academic quality?
- 3. What is the current academic quality culture of the Tsing Yi campus?
- 4. What are the current academic quality practices in the Tsing Yi campus?
- 5. To what extent does the current academic quality culture match the aspirations of staff, students and senior management?

6. To what extent do the current academic quality culture and practices bring about quality courses ?

For question (1), a documentary analysis was carried out on all official documents relating to quality policies and mechanisms in the VTC. In addition, confirmation and clarification were sought from members of the senior management of the IVE (Tsing Yi campus) through interviews.

For question (2), information was sought mainly from interviews with lecturing staff of the IVE (Tsing Yi campus), as well as through survey findings.

Question (3) was answered mainly through study of the official documents relating to the quality mechanisms in the VTC, the consultant's report on the VTC, staff union reports, and publications in the press. The information found in the documentary analysis was then corroborated with findings resulting from interviews with staff at all levels in the IVE (Tsing Yi) as well as from the survey.

Answers to question (4) were found mainly in documents relating to VTC quality policies, practices and mechanisms. Clarification, confirmation, and opinions about the practices were also sought from staff during the interviews, as well as through the survey findings.

Answering question (5) involved drawing a profile of the organizational climate for TQM in the IVE (Tsing Yi) and comparing it with official statements about quality (found through documentary analysis and interviews with senior staff) and staff views (found through documentary analysis, as well as interviews and surveys with lecturing staff).

Question (6) was answered mainly through a study of the documents relating to the quality policies, mechanisms and practices.

Main Findings

From the research, a profile of the Tsing Yi campus emerged: In terms of vision and mission, it was found that most staff were familiar and committed to it. However, on a deeper level, one finds a difference in focus and emphasis. For example, with the notion of 'quality', senior management's definition was more in line with TQM concepts such as customer focus, fitness for purpose, meeting employers' needs. On the other hand, frontline staff's views tend to be more focussed on teaching, teaching well, excelling in the teaching and learning process. It is recognized that such a difference in focus does not necessarily imply contradictory views, but rather, complementary stances in the organization. However, both sides (senior staff and operational workers) need to appreciate each others' views so that they can support each others' cause more effectively, and bring about greater organizational alignment and synergy.

Apart from the difference in the focus on aspects of 'quality', the current academic quality culture at the Tsing Yi campus contains other strengths and weaknesses. One of the strengths is that a 'platform' for quality presently exists in the form of an established structure and mechanism for quality assurance. A fairly large majority of staff do not agree that these mechanisms bring about effectiveness in course delivery, mainly because they are mostly retrospective and statistical in nature. Also, they seem to serve more of an administrative than a pedagogical function. However, there is recognition that they raise staff awareness of quality issues. In addition, they help to highlight extreme cases of bad practices and offer an avenue for redress. Also, in the wake of uncertainties caused by IVE restructuring, the quality mechanisms have ensured that standards are met.

Another aspect of that 'platform' is an official organizational policy on quality. This provides the basis for creating a quality culture, which endorses the principles of total involvement, process improvement and customer focus. Granted that the TQM route is a long, never ending process, the academic culture at Tsing Yi has certain positive features that can enable its success. These include a hardworking and committed staff who are willing to put in extra time to deliver quality teaching and who are willing to

upgrade themselves through training and further education. In addition, working relationships at team and departmental levels are congenial. There is also general acceptance of employers as customers and a strong indication of willingness by staff to be responsive to students, fellow colleagues and employers.

On the other hand, there are certain aspects of the Tsing Yi culture which need to be improved for TQM to be successfully implemented. These include a top-down management approach, a lack of openness between management and staff on how courses should be run and a lack of two-way communication which undermines the principle of total involvement.

Furthermore, non-acceptance of the concept of students and colleagues as customers weakens the chain of work processes and may compromise the final product delivered to the ultimate customer. The whole quality improvement process does not directly involve students. Although student views are solicited, they are not part of the quality process because they are treated as 'end-products' and not as 'co-producers' of learning. Even when student feedback is solicited, students are not really treated as customers. In this regard, quality management seems to have stopped at staff level and not brought to student level. The situation is further aggravated by balkanization (Fullan and Hargreaves 1992) at inter-departmental level. This undermines the principle of process improvement as expounded in the official VTC Quality Policy Paper.

Although teaching is the ultimate business of the organisation, most staff felt that management did not provide recognition for good teaching. In addition, management does not take into account staff views, especially in the way teaching resources are deployed. All these lessen the motivation for staff to be involved in what they are doing.

Also, although the official line is that management has to be actively supportive of TQM, and that it would provide leadership in implementing TQM, this has not been

evident, mainly because energies have been channeled from instituting quality to a focus on restructuring. The foregone discussion basically shows the strengths and weaknesses of the culture at IVE(Tsing Yi), in relation to the implementation of TQM. The information is summarised in Figure 9.1:

Strengths	Weaknesses
Staff are personally committed to the institutional vision and mission	Staff do not think that colleagues in other ranks really care about quality
 Staff are well-qualified Staff are willing to upgrade themselves Staff are familiar with TQM precepts Staff are competent There is good working relationship at more 'local' (i.e. departmental, team) 	 The level of commitment to the institutional vision and mission appears to vary with rank Interpretation of what 'quality' means varies with rank Balkanisation exists across departments
 Staff are willing to be responsive to their students, colleagues and potential employers 	 A two-way communication between staff and senior and top management is found to be wanting Staff are unwilling to accept the
Staff show a high level of acceptance for the concept of the external customer	concepts of student as customer, and colleagues as customers
Existing quality mechanisms serve to heighten staff's awareness of quality issues	 Senior and top management does not provide active leadership in quality management
Existing quality mechanisms serve to identify extreme cases of bad practices	 Senior and top management does not actively provide incentives for quality management
	 Existing quality mechanisms only signal extreme cases of bad practices, but do not give any feedback for continuous improvement

Figure 9.1 Strengths and Weaknesses of the Culture at IVE (Tsing Yi)

TQM Model in the Tsing Yi Campus

The picture drawn thus far shows fledgling attempts by an institution to introduce quality management through the TQI/TQM route. In this process, it has faced internal and external pressures brought in by inherent cultural and micro-political factors, as well as changes in the VTC.

A comparison of the IVE (Tsing Yi campus) culture and the quality culture expounded by West-Burnham (1992) and Sallis (1993) exhibits some of the start-up problems that organizations face when implementing quality measures. The situation presented in the case study is not a bad state of affairs, just a typical one. Such problems have also been highlighted elsewhere in the literature (Murgatroyd and Morgan, 1993; Dill, 1995; Glover, 1993; Capper and Jamieson, 1993). For example, staff have indicated almost unanimously that they were aware of and committed to the mission and vision. However, although the VTC's vision is to meet the external customer's needs, the research findings show that senior and middle managers seem more inclined to identify with this vision than staff of lower ranks. In addition, surveys show that in many areas, the more senior staff show more positive responses to the current academic quality culture than staff of other ranks. Essentially, implementing TQI is a question of fostering a support-oriented culture to ensure its success. This means strengthening the linkages at unit (i.e. teams, departments), horizontal (interdepartment), and vertical levels so as to meet the goal of serving the ultimate customer.

In discussing the implementation of TQM in schools, West-Burnham (1992) describes a quality culture which has these characteristics: there must exist a chain structure, where there is a strong sense of interdependence, and where quality permeates into each process and all aspects of the organization. This calls for a common vision and a commitment to working towards the same vision. This concept is akin to Sallis' (1993) model of goal alignment. Features are characterized as having unit optimization, vertical alignment and horizontal alignment as well as a single command for each process.

There is therefore a need to bring aims and goals closer, and vertically aligned, so that other forms of alignment, at horizontal and unit levels, can also be achieved. Collectively, the 'recipes' offered by West-Burnham (1992) and Sallis (1993) include: a value-driven and customer focus approach, an understanding of the organization's strategy by all staff; clear, preferably written standards of quality; a process that is managed by constant feedback and measurement; open, frank and purposeful communication; and finally, proactive leadership. This is not dissimilar from the TQI framework proposed by the VTC.

Based on the preceding discussion, it can be concluded that, to enable the IVE (Tsing Yi) to implement TQI successfully, some preliminary steps must be taken. These are discussed below.

The Role of Top and Senior Management

Firstly, senior and top management need to recognize the difference between the existing quality culture and the TQI culture which it officially endorses. In the light of the hurdles that the organization has to cross to attain TQI, top and senior management should first examine whether TQI is a necessary and viable management tool, and whether it is still genuinely committed to the philosophy in spite of the difficulties.

It should also ask itself what it hopes to achieve from TQI/TQM. It should recognize that TQI is a value, not a tool. Therefore, it should attach importance to continuous improvement, to the same degree that importance has been attached to restructuring. In other words, TQI should not be subsumed within restructuring. Under existing conditions, top and senior management have not shown sufficient commitment to TQM as a value. Rather, it has treated TQI with pragmatism and expediency.

Finally, senior and top management should take an active role in the quality initiative, and not leave matters to operating units. In other words, the energy, the ballast, should be generated from top and senior management.

Strategies to Achieve Synergy between Organizational Culture, Academic Practices and Mechanisms

Once senior and top management can genuinely affirm their commitment to TQI, they should then work towards fostering front line staff commitment, and aligning staff goals. While capitalising on the strengths identified in Figure 9.1, they should also ameliorate the areas of weakness which have also been identified. Through this action, tighter linkages and better integration throughout the work process could be achieved. Ultimately, there can be a better synergy between the organizational culture, academic practices and mechanisms.

Essentially, senior and top management should channel their energies into developing these two areas: the 'hardware' or infrastructure (i.e. setting up the organisational structure, systems, communication channels, and guidelines) and the 'software' or human resource management (i.e. changing the power relationships of internal customers, breaking down departmental barriers, creating a collegial environment, and raising awareness of quality).

The former, the 'hardware', provides a conducive environment for changes in the culture. This deals with the systemic, structural, procedural aspects of the culture. The latter, the 'software' are to harness better staff commitment, and build a sense of 'connectedness' and integration (Whitaker, 1993; Fullan and Hargreaves 1992, Murgatroyd and Morgan, 1993). This deals with the 'how staff relate to each other' (Nias 1989) aspect of culture. This is graphically expressed in Figure 9.2.

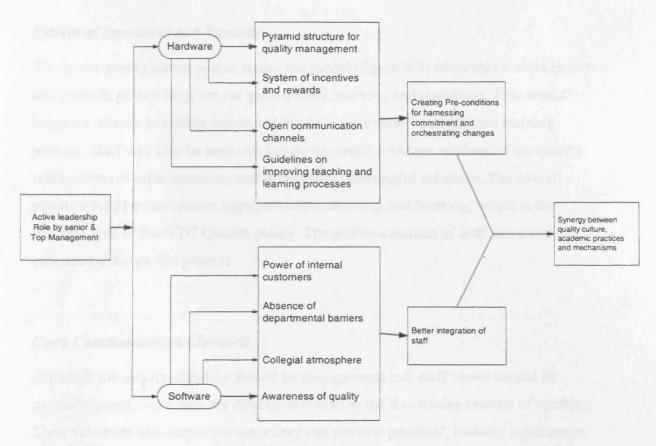


Figure 9.2 TQM Model in the Tsing Yi Campus

Structure for Quality Management

It is necessary to create an infrastructure, or 'hardware' for harnessing commitment and orchestrating changes. The VTC Quality Policy calls for a support structure (refer to figure 4.3), where top and senior management does not take an active role in quality management, and where quality policies and mechanisms are left to the device of operating units. In the IVE (TY) context, this is not a workable model, especially since the institution operates within a bureaucratic environment (i.e. the VTC). Such a structure may give the impression that management is not paying attention to quality issues and shifting responsibilities to the lower levels of operation. As suggested by the proposed model (see Figure 9.2), a more viable option would be for active leadership for quality to come from the top. This would signal clearly that quality is given high priority.

System of Incentives and Rewards

To accord quality issues proper status, the model (figure 9.2) advocates that incentives and rewards should be given for good quality teaching and initiatives. This would heighten interest in quality issues and improve the overall teaching and learning process. Staff will also be motivated to go beyond the routine motions of the quality mechanisms to raise questions and bring about meaningful solutions. The overall results would be continuous improvement in teaching and learning, which is the ultimate goal of the VTC Quality policy. The professionalism of staff can also be enhanced through this process.

Open Communication Channels

Although the quality initiative should be management led, staff views should be carefully heard, since they are directly involved in the day-to-day matters of teaching. Their views are also important since they can provide practical, realistic solutions to problems. In other words, a quality culture should be sustained through an open two-way communication between management and staff. Also, by opening a two-way communication channel, and by taking heed of front line staff views, a sense of ownership can be built. Through this process, horizontal and vertical alignment can be achieved. Unity in purpose sets a useful pre-condition for change (see Figure 9.2).

Although this is endorsed in the VTC Quality Policy (1997), documentary analyses have consistently shown that staff perceived the management to adopt a hierarchical, centrally controlled, one-way communication channel. The survey response were also negative in statements relating to management style and consultation. On the whole, staff do not feel that they have been consulted, and therefore they do not feel that they own the quality policies.

Guidelines on Improving Teaching and Learning Processes

Existing guidelines should be reinforced with more attention given to improving the teaching and learning process.

Survey findings show that only 40% of staff thought that the existing mechanisms brought about improvements in the quality of courses, and many were sceptical of the validity of using a quantitative method to measure something as intangible as education. Therefore, the model proposes that management addresses the issue of how to extend quality initiatives from the existing ones based on a retrospective, administrative approach, to one that directly affects the process of curriculum delivery and which provides feedback in real time. This could close the gap which presently exists between management's expectations and front line staff's expectations about what should be done about quality in education. Effectively, this brings quality management to the operational levels. In other words, TQI should be allowed to permeate all levels of staff by relating to teaching and learning more explicitly.

The introduction of more teaching related quality mechanisms creates a pre-condition for staff to place more emphasis on the teaching and learning process, as they know that teaching and learning processes (and not simply results) have to be accounted for. Since teaching and learning is an issue that is close to the hearts of most lecturers, an emphasis on this area would bring it more in line with policies and bring about changes more effectively (see Figure 9.2).

Power of 'Internal' Customers

In the current culture, staff generally agree that they should be responsive to their colleagues and students but a significant number resist applying the customer concept to them. This is a particularly serious flaw since this could result in the breakdown of a work process. Through a more stringent monitoring system, more authority could be vested in the colleague in the next step of the work process so that the 'internal' customer could be given more consideration.

Students should also be directly involved in the TQI process, as active agents and not as passive recipients. As there is general disagreement that students should be treated as 'customers', and since this is perceived to alter the power relationship between students and lecturers, students should be viewed as 'co-producers' of their own

learning, not final products. The concept does not imply an inverted superior/subordinate relationship between lecturer and student as perceived to be the case with the concept of student as customer. This concept also does not come into conflict with the Confucian tradition of respecting one's teachers. On the other hand, the concept implies that students assume responsibility for their own learning. This role is taken up by students in defining their learning processes, identifying problems in the learning process, and taking steps to improve the learning process. Giving feedback to lecturers may be one of many methods to overcome learning difficulties.

To enable students to become co-producers of their own learning, TQM methods should be taught to them, so that they can use these tools in their analysis of problems, and in their problem-solving processes. Such a method has been demonstrated in the case of Mt. Edgecombe High School. Furthermore, this motivates students to align their achievement goals more closely to the teaching goals of their lecturers, as well as the goals of the institution. Lozier and Teeter (1996) also show how students take responsibility for their own learning.

With greater attention paid to internal customers, more views may be taken on board. This allows for greater responsivenss and ultimately, better integration of staff (see figure 9.2).

Absence of Departmental Barriers

Sallis (1993) suggests inter-departmental collaboration as a way to break barriers. However, a pre-condition to that is mutual trust and respect, and an attitude of service. This should be done incrementally, in small steps, and with a great deal of sensitivity. Senior and top management should also discourage departmental strife and balkanization through a more transparent and equitable distribution of resources. A structure based on cross-disciplinary teams and not departments could also bring about better integration of staff (see figure 9.2).

Collegial Atmosphere

By maintaining a two-way communication between staff and management, and with the removal of balkanisation through more apparently equitable distribution of resources, management can demonstrate to staff respect for their area of specialization. An absence of balkanisation can also be more conducive to collaboration.

Awareness of Quality

Awareness of quality can be heightened through training and education. Staff are generally well-qualified professionals in their own fields and many are pursuing further degrees to improve their skills and knowledge. This converges with the findings which show that staff are committed to improving themselves through professional development. In addition, most staff come from commercial and industrial sectors and have been exposed to TQM in varying degrees. Despite this, however, more should be done to provide training in TQM methods, so that staff can understand the language, management tools and strategy of management better. This can bring about better vertical alignment or integration of staff (figure 9.2).

To raise consciousness and participation in TQM at front line staff levels, there should be forums for debate on how policies should be revised in the light of new developments. The importance of debate has been raised by the UGC (1996) which points out that the improvement of explicit processes begins with greater self-consciousness, at all institutional levels, about the improvement and assurance of teaching and learning quality. Such self-consciousness should involve vigorous discussion and debate about teaching quality issues.

Significance of Findings

The significance of the study lies in the following areas:

1. It widens the body of knowledge about quality movements in the Hong Kong educational sector. Currently, there is published literature on quality initiatives

in the UGC institutions. These include information on the Teaching and Learning Quality Process Reviews, reports on the Centres of Excellence, Assessments on Research, and Management Reviews. From the school sector, there are published reports and papers on the School-based Management Initiatives, the Quality Education Fund, and the Education Commission Report No. 7. In comparison to these two sectors, literature on vocational education in Hong Kong (of which the Vocational Training Council is the main provider) is very limited.

- 2. It widens the body of knowledge about using quality initiatives to drive reorganization of personnel and curriculum in an educational institution in Hong Kong. The current literature on quality initiatives in Hong Kong shows that in almost all cases, quality initiatives have been externally motivated by accountability, environmental and survival imperatives. However, in the schools and UGC sectors, quality initiatives have not been adopted as a vehicle for change as has been the case with the VTC.
- 3. As one of first campuses in the Hong Kong Institute of Vocational Education to implement quality initiatives, Tsing Yi is more experienced than most campuses in quality matters. Other campuses can therefore benefit from what has been learned about the Tsing Yi campus, so that many of the hiccups in the implementation of TQI might be avoided.
- 4. Apart from adding to the body of knowledge about Quality Initiatives in Hong Kong, the study has also highlighted the problems of using quality initiatives to drive organizational restructuring. In attempting to introduce something as far-reaching as Total Quality Management, most organizations would first survey the organizational climate to find a fit, or an optimum point where culture and strategy meet, before implementing the strategy on a full scale. The present case study is potentially useful in informing the process of implementing total quality initiatives.

- 5. As with literature on quality initiatives in Hong Kong educational institutions, this study also recognizes the limitations of taking a quality assurance approach to bring about continual improvements. The study recognizes that the mere existence of a set of mechanisms and activities is no guarantee of quality. TQI tools and mechanisms should permeate all levels of the organization, for all to have a sense of ownership over them. The study further highlights the need for vertically aligned quality mechanisms involving all levels to create a condition for continuous achievement.
- 6. For a quality culture to emerge, there has to be synergy between the parties concerned, as well as effective adoption of practices and mechanisms. To bring about this synergy, the human factor is of utmost importance. The present study makes suggestions on how that synergy could be brought about. For example, it highlights the importance of using training and education as a tool for raising awareness of quality.
- 7. The study also stresses the importance of student involvement in achieving continuous improvement in the teaching and learning process. By suggesting the concept of 'student as co-producer of learning', it has overcome the problems of treating the student as customer, a paradigm which is perceived to upset the power relationship between students and teachers and which is unacceptable to most teaching staff.

Recommendations

Central to the Total Quality Initiative is leadership. The VTC Quality Policy (1997) also acknowledges this by stating that the first pre-requisite for the policy to work is that senior management should buy into the policy. However, the current framework for a support-oriented culture, although intrinsically essential, is inadequate. Apart from creating a support-oriented culture, senior management should be seen to be at the helm, actively leading the quality movement. With this basic assumption, the following recommendations are made:

- 1. To ensure that quality mechanisms are truly effective in their quality assurance role, and that continuous improvements can be brought about, there must be a quality culture, where caring for quality is a value that all in the institution genuinely embrace. This can only be brought about by senior management. In other words, senior management must be seen to give priority to quality in various ways (e.g. rewarding and recognizing those who implement TQI successfully) in order to gain full vertical alignment to the organization's mission.
- Senior management should ensure that two-way communication channels with staff are open so that managers can keep their ears to the ground and implement policies that fit the cultural context, and harness staff commitment and sense of ownership.
- 3. As front line workers and professionals in their own fields, academic staff are most qualified to say what works and what does not work for them. Therefore, senior management should be more respecting of professional judgments and professionalism. It should consult with staff and act on feedback, as appropriate.
- 4. Senior management should endeavour to break down barriers between departments. Since balkanization often arises from disputes over resources, and each department guards its own disciplinary interests, it is up to management to provide a fair and equitable system whereby departments perceive fairness in

resource allocation and re-direct their energies towards horizontal alignment of mission. Another way could be the incremental introduction of inter-departmental collaboration.

- 5. Senior management should re-visit the issue of deploying resources and not simply insist that information technology should replace classroom teaching without giving careful thought to pedagogy. The current bone of contention about applying information technology to teaching has been that management has not given sufficient consideration to pedagody, and therefore is perceived to be uncaring about quality.
- 6. Senior management should also indicate clearly what the VTC mission means in respect of treating students as customers. It should also try to win academic staff support for this concept, or for the alternative model of student as co-producer outlined in this chapter, to bring them into alignment with organizational goals. Presently, staff are opposed to this idea.
- 7. Senior management should give clear operational guidelines on how the needs of external customers could be met as this is not always obvious. By doing so, academic staff could be more aware of their position in relation to the overall organizational strategy, and staff could align their work to the mission of the VTC and the institution more effectively.

Summary

The documentary analysis shows that the ARC Policy Paper (1996) works on a quality assurance paradigm, while giving some cursory attention to harnessing staff commitment, continuous improvement and meeting customer needs. Although these three issues are expanded on and given greater prominence in the VTC Quality Policy (1997), there has been little change in practice. This is mainly because senior management's attention has been diverted to re-structuring. Therefore, quality initiatives have been neglected. This, together with the initial scepticism about the quality mechanisms and the organizational culture, has impeded quality developments.

Recommendations are therefore made in these areas: senior management actively leading quality management, developing a quality culture which should then permeate the quality mechanisms, consulting staff and acting on feedback where it is fitting, breaking down barriers between departments, giving more pedagogical consideration in the introduction of information technology, clarifying the concept of treating the student as customer, setting clear operational guidelines on how to meet external customers' needs, and enabling academic staff to see the part they should play in the overall organizational strategy.

(approximately 55,000 words)

Appendix 1. Titles of Documents Analysed

Documents relating to the Official Stance

- 1. Academic Quality: Full-time Courses, 1996.
- 2. Department of Business Administration Paper on Quality Policy, 1996.
- 3. Department of Computing and Mathematics Paper on Quality Policy, 1996.
- 4. Department of Construction Paper on Quality Policy, 1996.
- 5. Department of Design Paper on Quality Policy, 1996.
- 5. Centre for English and Communication Paper on Quality Policy, 1996.
- 6. Department of Electrical and Electronic Engineering Paper on Quality Policy, 1996.
- 8. Department of Mechanical Engineering Paper on Quality Policy, 1996.
- 9. Department of Manufacturing Paper on Quality Policy, 1996.

Monitoring of Academic Quality

- 1. APAC Review of CQAR, 1996/1997
- 2. Course Performance Review, 1997/1998.
- 3. Course Performance Review, 1997/1998.

Documents Relating to VTC Strategic Plan and Implementation

- 1. Meeting with Heads of Departments of Technical Colleges and Principals of Technical Institutes, May 1996.
- 2. A memo on the VTC Quality Policy- A Route to Total Quality Improvement, 3 February 1998.
- 3. Strategic and Organisational Review of the Vocational Training Council- A Final Report to the Secretary for Education and Manpower (Executive Summary), August 1996.
- 4. Vocational Training Council Annual Report, 1997/1998.
- 5. Vocational Training Council Total Quality Improvement: A Quality Policy, 1997.

6. Vocational Training Council Proposed Vision, Mission, Goals and Strategies, 1997.

Documents relating to the Overall Organizational Culture: Factors that Work for and Against a Quality Culture

- 1. VTC Staff Newsletter, July 1999.
- 2. Staff Union Survey, April 1999
- 3. Student Union Declaration on the Formation of IVE, 1998.
- 4. PTU News, 16 September 1999

Appendix 2. Framework for Documentary Analysis

Dep	partment	1. Teaching and Learning	2. Flexibility	3. Harnessing the commitment of all staff	4. Involving the learner	5. Measurement of success	6. Collaborative partnership
1.	Business Administration						
2.	Computing and Mathematics						
3.	Construction						
4.	Design						
5.	Electrical And Electronics						
6.	Mechanical Engineering						
7.	Manufacturing Engineering			1811			
8.	English and Communication						

Appendix 3. Questionnaire- Pilot Study

Flat A3, Knight Court 38 Shing Tai Road Chai Wan Hong Kong

12 October 1998

Dear Colleague,

Re: Research on Academic Quality Culture

I am writing to seek your help in piloting my questionnaire on Academic Quality Culture in the Technical Colleges. This questionnaire survey forms part of my research work which is done to fulfil the requirement for completing my doctoral studies (Ed.D) at the University of Leicester, U.K.

I would appreciate it very much if you would complete the attached questionnaire. It should not take more than 10 minutes to do so. Please send it back to me in the stamped envelope provided by 30 October 1998. The return address is already given.

Please be rest assured that all information provided by you will be only used for academic purposes. You can also be sure of complete confidentiality. Your name will never be used in any way, and final reports will include only combined totals and general categories.

Should you have any questions or comments, please call me at 2436-8403 (during office hours) or 2556-0226 (after office hours).

Once again, thank you for your help!

Lee Ming Cherk Researcher

Questionnaire

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The objective of conducting this questionnaire survey is to find out about the academic quality culture in the Technical Colleges.

Section I - Personal data

Please tick where appropriate.

1.	My	rank falls under this category
		a. AL, L, SL
		b. PL and above
2.	Му	total length of service in the VTC is:
		a. Below 6 years
		b. 6-9 years
		c. 10 years and above
3.	My l	length of service in the Technical College sector is
		a. Below 3 years
		b. 3 years and above
4.	Othe	er than the Technical College sector, I have
		a. not worked anywhere else in the VTC
		b. worked in a Technical Institute
		c. worked in a Training Centre
		d. others:
5.	respo	r my years in the Technical College sector, I have been given the following onsibility(ies) at one time or another. (Please tick where appropriate. It is ible to tick more than one box.)
	П	a. membership on course teams
		b. class tutorship
		c. year tutorship
		d. subject leadership
		e. course coordination
		f. course leadership
		g. membership on one of the academic committees (e.g. ARC, APAC, Development Committee)
		h. Others (please specify:)

Section II

Instructions:

On a scale of 1 to 5 (1= strongly disagree; 5=strongly agree), please *circle* the number that indicates your response to each of the statements below. Please consider each statement in the context of the Technical Colleges.

1. Values, Beliefs, and Attitude towards Academic Quality

		Strongly Disagree				Strongly Agree
1.1	I am familiar with the Technical Colleges' mission.	1	2	3	4	5
1.2	I am committed to the Technical Colleges' mission.	1	2	3	4	5
1.3	As an academic staff, my top priority is to deliver quality courses.	1	2	3	4	5
1.4	I feel morally responsible for the quality of courses that I teach.	1	2	3	4	5
1.5	I am committed to taking training courses in order to develop myself professionally.	I	2	3	4	5
1.6	Where necessary, I put in extra time outside normal working hours to deliver a high standard of teaching.	1	2	3	4	5
1.7	Maintaining high academic standards is every academic staff's responsibility, not just that of senior staff.	1	2	3	4	5
1.8	Initiatives in quality assurance should come from all academic staff, not just from senior staff.	1	2	3	4	5
1.9	Academic staff should care for their students' entire well-being, not just for their academic performance.	1	2	3	4	5
1.10	Academic staff should treat students as their customers.	1	2	3	4	5
1.11	Academic staff should treat the industry or service sector as customers.	1	2	3	4	5
1.12	Academic staff should treat other staff with whom they collaborate as customers.	1	2	3	4	5
1.13	Academic staff should be responsive to their students' needs	1	2	3	4	5
1.14	Academic staff should be responsive to their industry or service sector's needs.	1	2	3	4	5

		Strongly Disagree				Strongly Agree
1.15	Academic staff should be responsive to the needs of staff with whom they collaborate.	1	2	3	4	5
1.16	It is necessary to engage external agents for monitoring the quality of courses.	1	2	3	4	5
1.17	Teamwork among academic staff is essential for ensuring the quality of courses.	1	2	3	4	5

2. Structure, Policies, Procedures and Practices for Academic Quality

		Strongly Disagree				Strongly Agree
2.1	Policies decided by the academic committees (i.e. ARC, APAC) impact directly on the quality of courses.	1	2	3	4	5
2.2	The way academic policies in the Technical Colleges are implemented impact directly on the quality of courses.	1	2	3	4	5
2.3	At the Technical Colleges, academic staff work in partnership with management to provide quality courses.	1	2	3	4	5
2.4	On the whole, the present course monitoring system can effectively maintain the high quality of courses.	1	2	3	4	5
2.5	Periodic review of courses at Board of Studies level can effectively maintain the high quality of courses.	1	2	3	4	5
2.6	Peer review ensures that staff learn good teaching practices from each other.	1	2	3	4	5
2.7	Analyses of final results give a clear indication of how effectively a course has been run.	1	2	3	4	5
2.8	Feedback from student course evaluation is useful for improving a course.	1	2	3	4	5
2.9	Feedback obtained from student interviews is useful for improving a course.	1	2	3	4	5
2.10	Based on feedback, actions are often taken to improve a course.	1	2	3	4	5
2.11	At course team level, I enjoy a spirit of trust and mutual co-operation with my colleagues.	1	2	3	4	5

3. Management of Academic Quality

		Strongly Disagree				Strongly Agree
3.1	On the whole, responsibility is appropriately assigned to course teams to run their courses.	1	2	3	4	5
3.2	On the whole, authority is appropriately delegated to course teams to run their courses.	1	2	3	4	5
3.3	There is a high degree of openness between management and academic staff on how courses should be run.	1	2	3	4	5
3.4	Staff views on how courses should be run are taken seriously and acted upon.	1 -	2	3	4	5
3.5	Resources are deployed in such a way to ensure a high quality of course delivery.	1	2	3	4	5
3.6	High quality teaching is given its due recognition.	1	2	3	4	5

Appendix 4. Revised Questionnaire

7 December 1998

Dear Colleague,

Re: Research on Academic Quality Culture

I am writing to seek your help in responding to my questionnaire on Academic Quality Culture in the Technical Colleges. This questionnaire survey forms part of my research work which is done to fulfil the requirement for completing my doctoral studies (Ed.D) at the University of Leicester, U.K.

I would be very grateful if you would complete the attached questionnaire. It should not take more than 10 minutes to do so. When you have finished, please send it back to me in the enclosed envelope. A response from you by 24 December 1998 will be greatly appreciated.

Please be assured that all information provided by you will be only used for academic purposes. You can also be sure of complete confidentiality. Your name will never be used in any case, and final reports will include only combined totals and general categories.

Should you have any questions or comments, please call me at 2436-8403 (during office hours) or 2556-0226 (after office hours).

Once again, thank you for your help and I look forward to hearing from you.

Lee Ming Cherk, SL(ECS)/TYTC Researcher

Questionnaire

Objective:

The objective of conducting this questionnaire survey is to build a profile of the academic quality culture in the Technical College.

Section I - Personal data

Please *tick* where appropriate.

1.	· · · · · · · · · · · · · · · · · · ·	
	a. Workshop instructor	
	b. Assistant Lecturer	
	c. Lecturer	
	d. Senior Lecturer	
	e. PL	
2.	My total length of service in the Vocational Training Council (including the	
	technical college) is:	
	a. Below 6 years	
	b. 6-9 years	
	c. 10 years and above	
3.	My length of service in the Technical College sector is	
	a. Below 3 years	
	b. 3 years and above	
4.	Other than the Technical College sector, I have	
	a. not worked anywhere else in the VTC	
	b. worked in a Technical Institute	
	c. worked in a Training Centre	
	d. worked at the VTC Headquarters	
5.	During my years in the Technical College sector, I have been given the follow	/ing
	responsibility(ies) at one time or another. (Please tick where appropriate. It is	
	possible to tick more than one box.)	
	a. membership on course teams	
	b. class tutorship	
	c. year tutorship	
	d. subject leadership	
	e. course coordination	
	 b. class tutorship c. year tutorship d. subject leadership e. course coordination f. course leadership g. membership on one of the academic committees (e.g. ARC, APAC, 	
	g. membership on one of the academic committees (e.g. ARC, APAC,	
	Development Committee)	
	h. Others (please specify:)	

Section II

Instructions:

On a scale of 1 to 4 (1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree), please *circle* the number that indicates your response to each of the statements below. Please consider each statement in the context of the Technical College.

1. Values, Beliefs, and Attitude towards Academic Quality

		Strongly Disagree	Disagree	Agree	Strongly agree
1.1	I am familiar with the Technical College's mission.	1	2	3	4
1.2	I am committed to the Technical College's mission.	1	2	3	4
1.3	As an academic staff, my top prioirty is to deliver quality courses.	1 -	2	3	4
1.4	I am committed to developing myself professionally by taking training courses.	1	2	3	4
1.5	Where necessary, I put in extra time outside normal working hours to deliver a high standard of teaching.	1	2	3	4
1.6	Maintaining high academic standards is every academic staff's responsibility, not just that of senior staff.	1	2	3	4
1.7	Initiatives in quality assurance should come from all academic staff, not just from senior staff.	1	2	3	4
1.8	Academic staff should treat students as their customers.	1	2	3	4
1.9	Academic staff should treat the industry or service sector as customers.	1	2	3	4
1.10	Academic staff should treat other academic staff with whom they collaborate as customers.	1	2	3	4
1.11	Academic staff should be responsive to their students' needs	1	2	3	4
1.12	Academic staff should be responsive to their industry or service sector's needs.	1	2	3	4
1.13	Academic staff should be responsive to the needs of staff with whom they collaborate.	1	2	3	4
1.14	It is necessary to engage external agents (e.g. groups, individuals outside the course teams) to monitor the quality of courses.	1	2	3	4
1.15	Teamwork among academic staff is essential for ensuring the quality of courses.	1	2	3	4

2. Structure, Policies, Procedures and Practices for Academic Quality

		Strongly Disagree	Disagree	Agree	Strongly agree
2.1	Policies decided by the academic committees (i.e. ARC, APAC) impact directly on the quality of courses.	1	2	3	4
2.2	The way academic policies in the Technical Colleges are implemented impact directly on the quality of courses.	1	2	3	4
2.3	At the Technical Colleges, academic staff work in partnership with management to provide quality courses.	1	2	3	4
2.4	On the whole, the present course monitoring system can effectively maintain the high quality of courses.	1.	2	3	4
2.5	Periodic review of courses at Board of Studies level can effectively maintain the high quality of courses.	1	2	3	4
2.6	Peer review ensures that staff learn good teaching practices from each other.	1	2	3	4
2.7	Analyses of final results give a clear indication of how effectively a course has been run.	1	2	3	4
2.8	Feedback from student course evaluation is useful for improving a course.	1	2	3	4
2.9	Feedback obtained from student interviews is useful for improving a course.	1	2	3	4
2.10	Based on feedback, actions are often taken to improve a course.	1	2	3	4
2.11	At course team level, I enjoy a spirit of trust and mutual co-operation with my colleagues.	1	2	3	4

3. Management of Academic Quality

		Strongly Disagree	Disagree	Agree	Strongly agree
3.1	On the whole, responsibility is appropriately assigned to course teams to run their courses.	1	2	3	4
3.2	On the whole, authority is appropriately delegated to course teams to run their courses.	1	2	3	4
3.3	There is a high degree of openness between management and academic staff on how courses should be run.	1	2	3	4
3.4	Staff views on how courses should be run are taken seriously and acted upon.	1 -	2	3	4
3.5	Resources are deployed in such a way to ensure a high quality of course delivery.	1	2	3	4
3.6	High quality teaching is given its due recognition.	1	2	3	4

Appendix 5. Interview Schedule

OBJECTIVES

The objectives of this interview is to gain an in-depth understanding of the academic quality culture in the IVE (Tsing Yi) campus.

Academic Quality

- 1. How would you define 'academic quality'?
- 2. On a scale of 1 to 10, how important is academic quality in this campus? Do you think this rating varies with rank and involvement with academic quality issues?
- 3. In your opinion, to what extent staff are committed to a culture of academic quality?

Working Relationships

- 1. How would you describe working relationship a) among academic staff b)between staff and students in this campus?
- 2. Quite a number of staff have difficulty in seeing a.) their students b.) other academic staff with whom they work as "customers". Why do you think that is the case?

Quality Assurance (QA) Mechanisms

- 1. How effective are the existing QA mechanisms for enhancing academic quality?
- 2. What improvements would you like to see in the mechanisms with the coming of IVE?

Management of Academic Quality

- 1. In this college, how has a culture of academic quality been encouraged, and how has it been hindered?
- 2. Do you see a strong correlation between the way resources are deployed and the level of academic quality in the Tsing Yi campus?

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