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# **Quality and TQM at Higher Education Institutions in the UK: Lessons from the University of East London and the Aston University**

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*Keywords* Higher education, UK, Quality, TQM, Continuous Improvement

## **ABSTRACT**

The objective of this article is to investigate the level of implication of Quality in the University of East London and TQM in the Aston University. The elements of Quality and Accountability are the major driving forces in academic institutions in the UK, and in this respect, the total quality management (TQM) movement has exploded, capturing the attention of educators at all levels. Certainly, higher education embraces the concept of TQM as a set of tools for planning continuous improvement. In wider context, TQM have all sought to achieve fundamental change in organizations. The focuses of these two cases are implication of Quality and TQM programme in the University of East London and Aston University respectively.

## **Introduction**

The paper covers all aspects of the Quality and Total Quality Management (TQM) programme of the higher education sector activities. The article begins by reviewing the literature on Quality and TQM. In particular, it draws attention in some ways to make attention in the universities. This paper will argue that the most effective means of Quality and the introduction of Total Quality Management in higher education sector. TQM programmes have been popularized for changing the culture and performance of higher education institutions.

Total Quality Management means to continuously strive to fulfill or exceed the needs and expectations of external and internal customers (Malek and Kanji, 2000) in all processes in which everyone is committed to their continuous improvement. TQM brings together the best aspects of organizational excellence by driving out fear, offering customer- driven services, doing it right the first time by eliminating error, and maintaining inventory control without waste. TQM was only articulated as a means of achieving a target, which has been set at strategic

level. The paper outlines both the theoretical basis and the practical implementation of the approach.

In last decade an increasing number of higher education institutions have applied TQM concept for effective change and sustained competitive advantage. TQM is continual organizational improvement, small and large, is always possible and is necessary for long-term survival. Opportunities for improvement are recognized primarily by continuing re-examination of all existing constraints on the way that work is done. This paper focuses the advantages of TQM and how TQM can be effectively and efficiently applied in higher education institutions (HEIs). Here, the roots of TQM are examined and Aston University case study is used to demonstrate the results of adopting this management technique.

## **Defining Quality**

Quality concept already exists in higher education (Sallis, 1992). Owlia and Aspinwall (1997, p. 527) advocates, “higher education has entered a new environment in which quality plays an increasingly important role”. Throughout the 1990s, there has been an increasing interest in the nature and predictors of quality in the UK higher education sector. Far from converging on an unproblematic definition of quality, the international quality discourse has exposed the multi-dimensional and contested nature of ideas and practices concerning quality (Barnett, 1992). As Sallis (1992: 173) sees, “Quality is consistent conformance to a standard”. In higher education sector, Baba *et al.* (2001) discussed in the context of Japanese perspective quality control of students and put them into practice. In the higher education context, Quality Assurance Agency (QAA, UK) defined

...quality is a way of describing how well the learning opportunities available to students help them to achieve their award. It is about making sure that appropriate and effective teaching; support, assessment and learning opportunities are provided for them.

(QAA, 2002)

Harvey and Green (1993) identified a number of conceptions of quality and these form the basis for the following observations.

**Quality as excellence:** This conception regards quality as exceptional. It is the preserve of the very best. As Madu and Kuei (1993: 122) believes “quality as the driving force for survivability and competitiveness”. What constitutes ‘best’ tends to be assumed somewhat uncritically and conservatively, which works against institutions and activities that are innovatively non-traditional. Quality as excellence (Ellis, 1993) is a persistent theme in any discussion of university quality.

**Quality as zero errors:** This idea comes from quality being seen as the elimination of faculty units from the production line (Geddes, 1993). It is often thought to have little relevance for higher education. This is surprising given that many processes (for example collection, marking, accurate recording of marks and return of assignments) assume zero errors. The term ‘quality control’ is strongly associated with ‘quality as zero errors’.

**Quality as standards:** Standards usually refer to fairly concrete, conservative and measurable performance targets (Ellis, 1993). “Different universities have been using several evaluation routines to assess students, teachers, and the various courses offered” (Welle-Strand, 2002: 77). Universities approaches to quality may include standards but also need processes for dealing with the consequences of applying standards, for learning from experience and for improving systems, which means that ‘quality’ is not synonymous with ‘standards’. As Caruana *et al.* (1998: 55) notes:

students...demand better quality and may reward those universities that are seen to be able to provide the desired courses and quality standards.

**Quality as fitness for purpose:** Rather than a single ‘gold’ standard upon which all judgments anywhere can be based, fitness for purpose defines quality relative to a specific purpose (Doherty, 1993; Sallis, 1992). Different universities, faculties or support services may have different missions and objectives, and it is against these that they should be judged. Purpose itself then becomes critical, and this is seen as being developed out of the needs of stakeholders of all kinds. As fitness *for* purpose appears to imply that ‘anything goes’, an associated notion of fitness *of* purpose has also been discussed, whereby the comprehensiveness and relevance of purpose is a legitimate area for evaluation.

Barnett (1992) suggests that there are clear general and stakeholder-related differences in how the purpose of higher education is conceived (e.g. as producer of qualified workforce, trainer for research and teaching management system). It is clear that modern universities must meet multiple goals and navigate multiple agendas. It is no longer possible to think of a university defining its purpose and ways of operating without paying attention to the views of stakeholders such as students, staff, employers, community groups, funding bodies. It is also true that many stakeholders groups tend to have an essentially conservative view of quality and so it is the responsibility of innovative universities to lead the discussion of quality in the context of their new operating environments.

Organizations using quality management philosophies are placing increasing responsibilities on those working within a process to continually improve that process. In such organizations, all work is composed of identifiable processes. Those who receive process outputs are treated as “customers” whether they are internal to the organization or not.

The current suppliers of manpower have some control over the flow of substitutes through the examination system. Furthermore, the wide-ranging, stringent and constructive nature of quality appraisal panel system for reviewing support services, and the academic course approval and review mechanisms that combine a robust quality and standards assurance approach, make for significant quality enhancement. Recent policies on quality assurance have actually strengthened these powers as individuals to the cultural assumptions of the main providers have effectively captured the institutions concerned with quality assurance (Bauer, 1992; Boaden and Cilliers, 2001; Hart and Shoolbred, 1993; Horine *et al.*, 1993; MacBryde, 1998; QAA, 1998; Williams, 1990). In the higher education sector, the QAA examines a university’s quality strategy, annual quality monitoring process, and quality enhancement and collaboration provision. Academics have another source of power, and that is through their significant participation in the quangos that controls the financial allocations to the university sector.

## **Defining Total Quality Management (TQM)**

The concept of Total Quality Management (TQM) was developed by W. Edwards Deming, influencing the post-war reconstruction for improving the production quality of goods and

services (Williams, 1993). Americans did not take the concept seriously until the Japanese, who adopted it in 1950 to resurrect their post-war businesses and industries, used it to dominate world markets by 1980. By then, most U.S. manufacturers had finally accepted that the nineteenth-century assembly line factory model was outdated for the modern global economic markets. They ultimately became convinced when their “bottom lines began to bleed red ink, as customers the world over registered their preferences for Japanese goods over American products” (Bonstingl 1992: 5). Total Quality Management (TQM) involves a set of general principles about the fundamental culture and norms of practice of a working organization dedicated to quality (Hixson and Lovelace 1992; Sallis, 1992). As Sallis (1992: 173) advocates,

Total Quality Management starts with recognition of the complexity of the issues surrounding standards and offers a methodology for defining and negotiating standards, and ensuring that they are met wherever possible.

TQM (Deming, 1986) attempts to bring together both the participatory nature of organization-wide quality assurance and improvement, and the leadership and management challenge to ensure conditions under which they can thrive. These include: establishing a common purpose, customer focus, adopting a long-term approach; emphasizing staff development including leadership; and, focusing on systematic and continuous improvement. As Eng and Yusof (2003: 64) defined, “... as both a philosophy and a set of guiding principles that represents the foundation of a continuously improving organization. It integrates fundamental management techniques, existing improvements efforts and technical tools in a disciplined approach”. Total Quality Management not only transcends national boundaries it also translates from manufacturing sector into higher education (Helms *et al.*, 2001; Ho and Wearn, 1995; Sallis, 1992). Many of the educational reforms being implemented today are based on this concept, which has been revolutionizing U.S. business and industry for the past decade. Only recently have leaders in education begun to adopt TQM as an operational philosophy (Sallis, 1992). Many educators resist the application of TQM principles to education, claiming that not enough parallels can be drawn between business and education to warrant widespread reforms. Nevertheless, those educational reformers who claim success with TQM maintain that many of its principles are directly applicable to quality in the classroom. They caution, however, that

TQM is not necessarily a “recipe” for success; rather, it provides schools with the tools necessary for organizational restructuring.

There is considerable pressure to change the practices of public sector organizations. TQM is focused on becoming more productive-reducing costs and improving quality (Coate, 1993). TQM is a system of continuous improvement employing participative management and centered on the needs of customers (Jurov and Barnard, 1993; Sallis, 1992). Key components of TQM are employee involvement and training, problem solving teams, long-term goals and thinking, and recognition that the system, not people, produces inefficiencies.

TQM as a cohesive frame of reference for significant improvement of economic and human development in the public sector organizations, on the massive scale, emerged in the USA for the first time in federal government in 1993 (Sinha, 1999). As he (1999: 415) remarks:

...public sector authorities were under enormous pressure to rethink and change their organizational structures and working practices. It can be argued that this is where and how the TQM philosophies started making their entry into the uncharted territory of public sector (government) organizations.

“In the late 1980s, holistic change programmes such as Total Quality Management (TQM) also became popular in the public sector” (Kirkpatrick and Lucio, 1995: 32). The emphasis on the people in the organization reflects some of the principles and values of the TQM approach to the management and improvement process in public sector organization, including higher education institutions (HEIs).

### **Theoretical Approaches to Quality and TQM in Higher Education**

The need to establish and measure performance standards in higher education is widely recognized (THES, 2002; Wright, 1996). Higher education in the UK has undergone enormous growth and changes in recent years and quality and accountability are very much a driving force in today’s academic world (MacBryde, 1998). Britain now has an extensive, diverse, dynamic and innovative higher education system. Whilst these changes have certainly posed challenges for quality assurance, standards and measures of institutional performance, there is no evidence



that they have led to any significant deterioration in the quality of programmes and courses offered either in the UK and abroad (Boaden and Cilliers, 2001; MacBryde, 1998; THES, 2002; QAA, 1998). Quality systems generate a quality culture and this is what is at the heart of successful quality organizations (Hart and Shoolbred, 1993). The UK remains a high quality provider of higher education in all its many modern forms. The Education Reform Act created the framework and the context within which the pursuit of “quality” has begun to flourish. Public sector organizations are also interested in quality, as a way of making the best possible use of finite resources (Garbutt, 1996). Many commentators (e.g. Bauer, 1992; Horine *et al.*, 1993; Williams, 1990) in the higher education field have recognized that the quality concept is applied to higher education. Within this context, Pounder (1999: 156) noted:

A major development in higher education worldwide over the past two decades has been the preoccupation with institutional performance evaluation.

The transition of higher education from the elite and exclusive, to the mass and inclusive has transformed its relationship with the society that it serves. There are new stakeholders with expectations to be met and information needs to be satisfied: families whose children are the first generation to go to university, employers recruiting in the graduate labour market for the first time, and mature students looking to higher education to equip them with the skills to cope with uncertain and rapidly changing job prospects.

Higher education consumes a substantial share of national resources. Those who make that investment, whether government on behalf of the taxpayer or individuals paying their own fees, are entitled to expect value for money and a worthwhile opportunity. Improvements in efficiency and effectiveness do not necessarily imply improvements in quality (HEQC, 1994; para 53). It is appropriate therefore to begin a description of institutions’ internal quality assurance processes with the responsibilities of individual academic staff. In the UK individual members of faculty are accountable to:

- their students;
- their subjects or disciplines;
- their vocations (teaching, research, administration);

- their colleagues;
- their professional bodies;
- their institutions (QAA, 1998)

These professional accountabilities are accompanied and reinforced by a number of formal institutional mechanisms, which aim to accomplish the effective discharge of these accountabilities by:

- Drawing attention to the stakes involved in public education and its administration;
- Instituting examples of good practice so as to generate a greater enthusiasm for creative ways by which student outcomes can be favorably influenced.
- Addressing the role of teachers and conducting staff appraisal so that staff receives regular structured feedback on their performance.
- Establishing parallels between TQM as it applies to business on the one hand and to teaching on the other.
- Identifying essential building blocks or attributes for TQM oriented teaching.
- Actually applying these attributes to teaching at both the undergraduate and graduate level; and
- Establishing for educators and educational administrators what TQM can do for them by analyzing data obtained as student feedback on course evaluations and on an educational questionnaire administered to students.
- Admission policies, which ensure only those students capable of benefiting from particular programmes are enrolled.

- Assessment regulations and mechanisms, which ensure that only students who reach the required level of attainment receive awards.
- Monitoring and feedback processes which ensure that opportunities are taken to improve the quality of what is offered.
- Staff selection and development, which ensures that only suitably, qualified and trained staff teaches students or conduct research or administration;

(Babbar, 1995; QAA, 1998)

The UK government spends some three billion pounds annually for supporting the direct costs of the higher education sector. It is therefore one of the major stakeholders in higher education and is rightly concerned in obtaining value for money and ensuring the competitiveness of the UK economy by encouraging the provision of a highly educated workforce. The government established a quango; the Higher Education Funding Council for England (HEFCE), a body that distributes government funding and ensures that the quality of courses offered in all universities and colleges in England is regularly inspected. If the quality of these courses is not approved and failure is subsequently rectified, government funding is withdrawn.

There are two other external stakeholders with interest in higher education, these being students and their families, and prospective employers in industry, commerce and the professions. These stakeholders' interests are protected as part of these processes of course assessment and institution audit. Van der Wiele and Brown (2000) conclude that:

...the quality management philosophy continuous to be a central focus of the business and mechanism for contributing to better performances.

Through these mechanisms the higher education institutions seek to demonstrate the quality of their courses, and monitor them through a process of continuous improvement, which means courses undergo development to take account of new knowledge and improvements in learning environment. HEQC notes:

This treatment of quality has allowed us to offer contributions on the structure of academic programmes and the student learning experience; make proposals thinking in the efficient and effective management of resources within and between institutions; and comment on the cultural impact of change for institutions.

(HEQC, 1994: para 57)

In the current information era, a great paradox is to be found. Continuing to improve access to education and training is of paramount importance. Identifying and discriminating knowledge from information requires the willingness to accept contributions from the grand expanse of world viewpoints.

The TQM approach began in the UK's private sector in the mid-1980s and by 1991, being advocated for use in higher education (Krikpatrick and Lucio, 1995; Marchese, 1991). Academic institutions have started to explore the potential for applying the TQM philosophy to education and teaching practices (Bonser, 1992; Hall, 1996; Keller, 1992; Lomas, 1996). As Williams (1993: 229) define the origin of the TQM in HEIs:

... in the number of organizations in the United States and the United Kingdom in response to growing financial pressures on higher education institutions that, during the 1980s, increasingly found themselves are being required to behave like commercial enterprises in a fiercely competitive market. Commercial competition and its partner, value for money, involve a combination of quality and price. Market pressures for quality enhancement and price reduction, and a perceived need for collective action to prevent exaggerated claims about quality misleading consumers and damaging public perceptions of the sector as a whole, provide the context for the rapid growth of interest and the possible application of TQM in the management of universities.

The crucial focus of TQM in higher education sector always has been on nonacademic activities (Koch, 2003). According to Babbar (1995) the TQM philosophy can be applied in its fundamental elements effectively to teach in ways that facilitate student motivation, involvement, effort, learning, performance, and most of all, their ability to contribute. However, the interpretation of TQM within higher education sector is not unproblematic. As Lindsay (1994: 63) identifies some of the major issues confronting TQM in universities as being “widely dispersed power, loosely defined roles and structures, and fundamental conflict about organizational goals and processes”.

Kanji and Bin Al Tambi (1999) also stress that the process of TQM in the UK universities is slow, the approach offers institutions a process for improving services and enhancing customer satisfaction for students and other stakeholders. The placing of the student at the center of the process of improving quality is relatively new in HEIs, but the process of improving services to students in HEIs need to consider strategies for developing accessible information as recent studies have identified the importance of information in quality improvement (see Coate, 1993). As Geddes (1993: 357) advocates:

The TQM concept, its tools, techniques and language, are for the most part alien to experience and ethos of higher education in the United Kingdom.

### **Experiences of Quality and TQM in Higher Education Institutions**

In the higher education sector Quality and TQM has been adopted in many parts of the world including U.S., UK, and Australia. Many universities began implementing Total Quality strategies under an administrative leadership and shied away from classroom and curriculum issues (Brigham, 1993). Examples of success in TQM can be obtained from description reports on cases such as: University of Wisconsin-Madison, U.S. (Hansen, 1993; Nagy *et al.*, 1993); Clemson University, U.S.; Rochester Institute of Technology, U.S.; Oregon State University, U.S. (Coate, 1990, 1993; McMillen, 1991); University of Wollongong, Australia; Texas Southern University; Harvard College; University of Tennessee; and Ohio State University; Virginia Commonwealth University (Cowles and Gilbreath, 1993); University of Wolverhampton, U.K. (Doherty, 1993); and South Bank University, UK (Geddes, 1993).

Nagy *et al.* (1993) described the use of the TQM approach by the University of Wisconsin-Madison Management approach to restructure the graduate school admissions process. University of Wisconsin-Madison has distinctive aspect was its application of the Total Quality Improvement (TQI) to the curriculum development process (Hansen, 1993). As Hansen (1993) described TQI approach to an individual course and review its key elements, namely, customer focus, student involvement, and continuous improvement. This is followed by each of these elements was operationalised: customer focus, through an emphasis on proficiencies in using customer knowledge; student involvement, through team-oriented research projects; and continuous improvement, through ongoing course and instructor evaluations.

In the USA, Clemson University has had success-applying TQM in different areas. In particular, in 1993 the programme initiated, the Continuous Quality Improvement (CQI) Programme in the college of Engineering at Clemson University is an integrated effort of faculty, staff, students, and administration in applying the principles of quality management and continuous improvement in everything they do.

The Rochester Institute of Technology (RIT) is in a very competitive area for school of business. TQM represents a fundamental change in the way it managed. The RIT committed to an 11-steps program identified by colleges of Business and Engineering to integrate TQM into curriculum, including a process for assessment and advisement. Faculty needed to be converted to TQM. This was approached in three ways:

- Informational: Reading materials were made available.
- Training: All faculty and particularly all staff went through a four day training seminar presented by Xerox Corporation.
- Experience: Representatives from industry are regular visitors to campus. The key question they answer is what do you expect of graduates?

Not all the results are in yet on this TQM endeavour. Quantifiable measures are part of the long-range evaluation plan, but RIT has just begun. Indicators are positive so far. Oregon State University (OSU) became one of the first research universities in the United States to introduce the TQM methodology into its administrative structure in early 1990s. As Coate (1993: 312) advocates, “TQM... experience to help in the organizational restructuring and process reengineering required by deep budget cuts in Oregon higher education”. Beginning with finance and administration, quality improvements teams were introduced and achieved significant improvements in process effectiveness and efficiency (Coate, 1990, 1993). OSU has recognized for its commitment to search for a new management paradigm in the midst of a major downsizing and focus initially on the administrative side of the institution (Coate, 1990, 1993; McMillen, 1991). OSU has had success-applying TQM on the nonacademic setting. At Oregon, the intention was always to implement TQM on an organization-wide basis because of declining financial resources. For example, in 1991, as a result of Ballot Measure 5, state general fund

assistance is reduced by \$12.5 million. In this context, College of Education and Home Economics are merged and several departments are targeted for closure, including Journalism, Religious Studies, and General Science. The TQM programme also began in a period when the organization was downsizing. OSU employed a through top-down approach to the implementation of TQM, using quality function deployment to identify customer requirements and translate these into university processes (Coate, 1990, 1993; Fulop and Rosier, 1995). Coate (1993), in particular, identified six barriers to TQM implementation at OSU; they were scepticism, time, language, middle management, university governance, and dysfunctional units.

Texas Southern University (TSU) introduced TQM activity, which is known as TIGER SPIRIT 2000 Programme, is to establish four (4) management training activities that are designed to improve the leadership and practical critical skills of new and middle managers who are responsible for fostering the development experience of TSU employees. This component of the TIGER SPIRIT 2000 programme is based on the following long-term primary goals:

- Improve productivity, effectiveness and efficiency of university service by department and better utilization of talents, abilities and potential of employees.
- Help employees to develop their knowledge, skills and abilities so that they might become better qualified to perform the duties of their present jobs and advance to more responsible positions.
- Provide for the development of managers capable of organizing and developing effective management systems for the accomplishment of each division's goals and objectives.
- Prepare employees to deal more effectively with the growing customer service demands faced by organizations worldwide.

The Harvard College also introduced TQM programme in order to improved library services. The Harvard College Library created a task force, which rewrote the library's vision statement, and considered changes that would have to be made in order to develop a new organization

culture- one that highlights the changing nature of staff roles and responsibilities in an era of pervasive change (see, for example, Clack, 1993). With the help of consultants, Harvard learned about TQM, and found that its principles of service excellence, teamwork, ongoing training and skill building, process focus, continuous improvement, and co-operation across boundaries could help them make the changes they needed.

In 1992, the University of Tennessee (UT) has had successfully implemented TQM programme in the academic areas, particularly at MBA programme. Such a change effort has occurred at the College of Business Administration at the UT. At Tennessee, the Dean of the College of Business Administration convened a faculty task force to create a vision for a new MBA programme, and to lead the college in the creation of that programme. The vision for the new MBA programme contained are: a top priority on customer value, an integrative, cross functional emphasis, a lifelong commitment to learning, analytical skills, an understanding of systems, a sense of the true responsibilities of managers, a sense of organizational reality, and enhanced interpersonal skills and leadership skills.

In the mid-1990s, the Ohio State University introduced Continuous Quality Improvement (CQI) approach, which made a commitment to become more efficient, less bureaucratic, and more responsive to changing needs-as well as to be cost effective in their daily operations. At Ohio, the University made a commitment to provide ongoing, continuous improvement in their services and management of University resources. To accomplish this, Business and Finance undertook a programme of CQI, which continues to inform and inspire their staff. The University began by providing a five-day CQI programme for all staff in all departments of Business and Finance: over 1200 full-time regular employees. This programme encourages and recognizes continuous quality improvement in their overall operations.

In 1991, Virginia Commonwealth University (VCU) has implemented some major improvements programmes using the TQM approach. As Cowles and Gilbreath (1993: 282) note, “the potential benefits to TQM to VCU as a means for improving student/faculty/staff morale, increasing productivity, and delivering higher quality services internally, as well as to students and other external customers”. These have included improvement of a personnel action



processing form, creation of a campus computing service request tracking system by using a systematic approach to problem solving consistent with the TQM concept of continuous improvement, potential cost savings and development of an alumni programme activities (Cowles and Gilbreath, 1993; Owlia and Aspinwall, 1997). The pilot programmes have taught lessons about the process of change.

The University of Wollongong (in Australia) Library introduced a formal TQM programme in 1994. Prior to 1994, planned organizational change and development achieved a cultural, structural and staffing framework, which includes most of the elements fundamental to the success of TQM. Having achieved large-scale change, it was timely to consider a longer-term management programme, more appropriate to the current environment, which would continue to facilitate improvement in every aspect of the Library's operations. At Wollongong, TQM programme is entitled Quality and Service Excellence (QSE) and has two main objectives:

- Develop excellent Library services through the implementation of a TQM programme.
- Develop a systematic approach to documenting the improvements in client service, which have been achieved to date, as well as providing a basis for measuring future gains.

Doherty (1993) described the TQM implication in the University of the Wolverhampton, U.K. and then to develop a Quality Assurance System to an international quality standard (ISO 9000). One of the most successful of these has been the self-styled *Command Module*, which is a standing Quality Implementation Team (QIT) comprising both academic and administrative staff which set itself up to provide improved MIS data in respect of student numbers, recruitment, target attainment and so on. However, Doherty (1993: 330) stress:

Communication about the changing systems and dissemination of TQM skills throughout an organization the size and complexity of the University of Wolverhampton was, and still is a very difficult task.

In the spring 1992, the London South Bank University introduced the TQM programme. As Geddes (1993) and Owlia and Aspinwall (1997) described application of the TQM approach to

one aspect of the administration of South Bank University, the relationship between student as customer and university as supplier. This technique includes development of service quality standards and agreements for each service, support, and academic department. To create these quality service agreements, 32 separate customer-supplier working groups (CSWGs) were established at South Bank University (Geddes, 1993; Owlia and Aspinwall, 1997).

## **Research Methodology**

The research objective of the article and the relative paucity of previous empirical research suggest that a partly exploratory and a partly descriptive research design is best suited to the project. A useful way of packaging such a study is through the adoption of case study approach. Case study is the ‘fact’ of any particular issues, the contents of which require an in-depth focus of the social sciences area to understand its phenomenon on the basis of it being an individual problem (Leedy, 1997). One of the essential characteristics of using the case study approach is that it focuses on “one instance of the thing that is to be investigated” (Denscombe, 1998). The advantage of the case study over other methods is that it attempts to be comprehensive, and involves the researcher in describing and analyzing the full notes, “one of the advantage cited for case study research is its uniqueness, its capacity for understanding complexity in particular contexts”. Apart from generalization, other criticisms can be that the case study method is a less rigorous form of inquiry, based on the accumulation of information and there is a lack of discipline in what Smith (1991) described as the logically weakest method of knowing. Mitchell (1999) states that the basic problem in the use of case material in theoretical analysis.

Case studies can do a whole variety of things. Indeed, Bonoma (1985) argues that case studies prove valuable in situations where existing knowledge is limited, often providing in-depth contextual information, which may result in a superior level of understanding. Furthermore, case studies prove advantageous when the focus of the study is *not* typicality but the unusual, unexpected, covert or illicit (Hartley, 1994). This study takes the account on Quality and TQM in higher education sector, which focuses on in depth analysis of respectively University of East London and Aston University in the UK.

The objective of this study is achieved through two case studies, which provide both depth and reliability (see, for example, Harris and Ogbonna, 1998; Marchington and Harrison, 1991; Sturdy, 1992). The two case universities in selected for a number of reasons, their types in the higher education sector, their location and size, and their managerial and academic style.

## **Case Study One: Quality at the University of East London**

### **Background**

Warren (1997: 82), stated that “in the UK over the last twenty-five years, there is a growing feeling that (universities) have begun to loose their way after many changes to ‘university’ from ‘polytechnic’ status in 1992”. The 1992 Further and Higher Education Acts doubled the number of UK universities (Gibbs *et al.*, 2000; Irvine, 1997; Jary and Parker, 1995; Mackay, 1995; Schuller, 1995; Shattock, 1996) and following this legislation; the University of East London became a new university (designated in 1992). The University operates from three major sites in the Greater London region comprises on five faculties. Today the University is one of the new institutions of higher education in the UK with over 15,500 full-time and part-time students. The University attracts the majority of its UK students from Greater London and the South East. About 30 percent are from overseas, including the European Union. The background of its students is varied, and the University is justifiably proud of its achievements in securing access to Higher Education for “non-traditional” students, including mature students without conventional academic qualifications and those from ethnic minority groups. The University of East London has developed its Mission to focus on its participation in a diverse community in order to meet the needs of communities and enterprises in the Greater London region.

### **Quality at the University of East London**

The Quality Assurance Agency (QAA) watchdogs have criticized the University of East London quality for its “disturbing” neglect of staff development and training. Limited resources have led the University to focus on other priorities and ignore important staffing issues, the QAA said after an audit in 2000. The QAA audit criticized the university for failing properly to monitor its human resources requirements: “The system for collating staff development and training needs had fallen into abeyance... Development needs and corporate training requirements (such as

raising awareness of equal opportunities, or health and safety requirements at work) might be overlooked”. The mechanism for ensuring that staff development policies were being adhered to “is apparently disregarded in some units and modified appreciably in others, without institutional consideration or approval of these deviations”. The QAA recommended proper monitoring procedures. The QAA recognized it was a question of resources. The University had prioritized spending on IT, the library, teaching accommodation and a personal tutor system. “Consequently there has been a diminution in the resourcing of other areas”, including the discontinuation of some key areas.

The University of East London’s Research Committee is responsible for advising the Academic Board on all matters concerning the University’s research policy and for the development and implementation of policy relating to research students. In order to maintain quality the University’s Academic Board has established several quality committees such as the Quality Assurance and Enhancement Committee (QAEC) to monitor the quality of course provision and a Service Quality Sub-Committee to monitor the quality of learning support and other central services. Nevertheless, the Senior Management Team center of the University, through QAEC, Academic Board and, operating through its QAD, exercises direct responsibility for key quality assurance processes including those relating to the validation of new programmes, collaborative links and subject review. The QAEC is responsible to the Academic Board for the oversight of all matters, which have an impact on maintaining and, where possible, enhancing the quality of the student experience, and assures the academic standards of taught programmes. It aims to ensure that there are appropriate procedures for the assurance of quality within the University and for the promotion of quality enhancement in both teaching and non-teaching areas.

In parallel with the system for quality assurance, the University has established a system for quality enhancement called Quality Improvement in Learning and Teaching (QILT). This is a relatively new development within the University. The initiative is a significant element in the University’s strategy for quality enhancement and dissemination of good practice, with projects identified for funding in line with the University’s corporate priorities. Every department has at least one project under way designed specifically to improve the quality of learning and teaching. Examples of QILT projects include the production of study guides for individual units, the

introduction of a new approach to learning and teaching, and development of a study unit. The QILT focuses on the empowerment of the course team across all the boundaries to facilitate a dialogue centered on learning and teaching.

The Services Quality Sub-Committee is accountable to the Quality Assurance and Enhancement Committee. Its role is to make recommendations on the development of appropriate quality assurance procedures for central services and to oversee the implementation of the policy in that area. The QAA in its 2000 audit report said that University of East London could be confident of the quality of its degrees. However, the University of East London's standards were very low and furthermore the University also has a poor employment record. Recently, Woodhead (2001: 4) stressed that:

Before 1992, when the Further and Higher Education Act gave university status to the polytechnics, the higher education sector had a recognizable identity. Now, it has none. The difference between, say, the University of East London and the University of Cambridge are so great it is hard to see how the same title can be employed to encompass both institutions. That may not be a politically correct thing to say in these academically egalitarian times, but it is true. And much the same may be said about the degrees that universities award. It is, for example, undoubtedly easier to secure a first-class degree in some than in others.

Does it matter that the concept of a "university" has been emptied of meaning and that standards of assessment in higher education have been stretched to the point where there is no common currency? If everyone understands what has happened and where we now stand, then the answer is that it probably does not. Employers do understand. So, it is the Cambridge and not the University of East London graduate who is likely to get the best job.

## **Case Study Two: TQM at the Aston University**

### **Background**

The Aston University has its origins in 1895 as the local Municipal Technical School (1895-1927), Central Technical College (1927-1951) and College of Technology (1951-1956). In 1956 it became the first designated College of Advanced Technology (1956-1966) and as a result of the proposals of the Robbins Committee on the Higher Education, plans were laid to transform the institution into a technical university in 1966. The first phase of a major redevelopment

project began in 1967, which was to provide new teaching, administrative and housing accommodation for staff and students at the University. In conjunction with the local city and Lloyds Bank plc it established the Aston Science Park in 1982. Since the autumn of 1996, and the appointment of a new Vice-Chancellor, the university has undergone extensive organizational and structural changes described as ‘dramatic and rapid’, which have been designed to put ‘in place the foundations and infrastructure upon which to build’ and to facilitate the achievement of the University’s Mission and objectives.

### **TQM at the Aston University**

Concern for ‘quality’ and ‘quality circles’ (Clayton, 1993; Loffler, 2001; Samuels, 1991) at the Aston University and elsewhere had become part of universities’ managerial, if not institutional, culture by the late 1980s. As Clayton (1993: 363) notes:

For over a decade the theme of ‘Quality’ has been embedded in Aston’s strategic plans for long term security and success during times of unremitting and drastic change brought about by the national policy to restructure the Higher Education system.

Writers (Donnelly, 1999; Holloway *et al.*, 1999; Kotler and Fox, 1995; Morgan and Murgatroyd, 1994; Sinha, 1999) observed the application of TQM to the public sector and proposed that success in such application required an institutional culture in which:

- Innovation is valued highly;
- Status is secondary of performance and contribution;
- Leadership is a function of action, not position;
- Development, learning and training are seen as critical paths to sustainability; and
- Empowered to achieve challenging goals supported by continue development and success provided a climate for self-motivation.

(Morgan and Murgatroyd, 1994)

TQM involves total commitment from everyone in the search for continuous improvement, individually and collectively in order to improve organizational performance and change (Holloway *et al.*, 1999). That commitment helps to reduce cost, eliminate programmes, re-

examine cost-effectiveness, and generate performance measurement criteria for individual departments, start using new technologies, and so on (Sinha, 1999). As Kotler and Fox (1995: 45) comment: “Total Quality for an educational institution includes but goes beyond administrative services”. TQM can be seen as intensification of management’s efforts to exercise control over academics’ work by attempting to elicit an involvement in a number of groups addressing particular ‘quality’ issues (Burdon, 1997; Parker and Jary, 1995; Pitman, 2000). The development of TQM at the Aston University, and probably elsewhere, is characterized by an uneasy relationship with the established constitutional bodies of the university; for example, the Senate, or faculty boards. TQM activities are reported periodically to the Senate and implicitly endorsed in that they appear as part of institutional academic plans submitted by the university to the UFC after admittedly late and brief consideration by the Senate. The Vice-Chancellor has rigorously promoted TQM and it features high in the remit of the Director of Staff Development. Indeed, the Vice-Chancellor has become prominent in the advocacy of TQM throughout the university generally, and has provided a guide for the CVCP (currently known as University of UK), as well as being Chair of the CVCP’s working group on quality. The policy was intended to reform public services and TQM was to form part of the agenda for change:

The language of quality played a pivotal role in terms of legitimating government efforts to reorganize the public sector.

(Kirkpatrick and Lucio, 1995: 25)

In 1991, University Quality Council was established, consisting of senior academic and administrative staff, and this has defined the university’s basic processes and critical success factors, also advising on the applicability of TQM concepts. It has arranged training courses for all staff on Quality Awareness and Quality Management Tools, and has established Process Councils, which have initiated a wide variety of quality improvement projects.

In 1993, the university participated in an academic audit conducted by the Higher Education Quality Council (HEQC), at the time of which, it was in the ‘very early stages’ of implementing a TQM system. The university had established Quality Council, process councils and quality improvement projects within its TQM arrangements. These measures facilitated some changes made by the university, including new arrangements for staff development (Clayton, 1993), the

integration of the Staff Development Unit (SDU) within the University's Human Resources function, and enhanced support services for overseas students.

The HEQC audit (Quality Audit Report) indicated, however, that a serious limitation to the university's former adoption of a TQM approach had been 'that it (had) existed alongside and apart from the formal university committee/representational structure, and resource allocation mechanisms'. Whilst TQM appeared to have been of more significance to the work of support services than to academic departments and schools, the evidence in the university's base room and in the accounts demonstrated that aspects of the university's experimental development of TQM, continued to be relevant in particular circumstances. An example would be, the work of Library and Information Services (LIS). The LIS represented on staff-student consultative committees (SSCCs) and school boards and their sub-committees, and continues to find value in the University's former TQM arrangements, deploying a variety of formal and informal feedback mechanism developments under them (Clayton, 1993).

The HEQC audit stated that the University's commitment to the Investors in People Initiative (IIP) had now replaced TQM as a significant vehicle for quality assurance and enhancement throughout the university's support services. As Clayton (1993: 365) advocates, "Aston's approach to Quality Management is a very 'pure' one". The report of the HEQC audit, published in January 1994, commended 12 features of the University's practice, including its formation of an Academic Audit Group.

- 'to monitor.....processes for quality assurance of programmes';
- the University's commitment to a Total Quality approach to quality management and the implementation of process councils to stimulate quality improvement;
- and the creation of a 'working group to encourage and recognize initiatives in teaching and learning'.



By the end of August 1994, it was by no means clear that the Aston University's management, even using TQM and Trading Company Model (TCM)<sup>1</sup>, would be able to develop a strategy, and ensure the commitment of academic staff that would not only balance the budget but also put the institutions research effort in a strong enough position to improve its competitive performance for the 2001 RAE. Though some departments might be able to improve their research ratings, it is possible that Aston will be squeezed.

## Discussion and Conclusions

This paper has attempted to use two case studies of the UK higher education sector to raise broader questions about the way in which Quality and TQM in response are conceptualized. Attempting to understand 'quality' in higher education is problematic because the notion of higher education itself is a subject to considerable debate. Many academics' (e.g. Bauer, 1992; Horine *et al.*, 1993; Williams, 1990) in the higher education field have recognized that the quality concept is important and needs to be applied to higher education. Therefore, a major development in higher education world-wide over the past two decades has been the preoccupation with institutional performance evaluation (Pounder, 1999). It is appropriate; therefore, that some higher education institutions have practiced their own forms of quality assurance procedures with the responsibilities of individual academic staff along with QAA practices. The HEFCE, policy reflected that the quality of programmes offered in all higher education institutions in England is regularly inspected. Through these procedures the higher education institutions seek to demonstrate the quality of their programmes, and monitor them through a process of continuous improvement in learning environment (Babbar, 1995).

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<sup>1</sup> The Aston University had anticipated and prepared for national changes in funding methodology and emphasis by instituting a Trading Company Model (TCM) for the management of its financial affairs, which became effective in August 1992. This strategy had been preceded by similar moves at other UK universities. In essence, the TCM requires that heads of departments to specify in detail their requirements from extra-departmental support services, e.g. the Library and Information Services, Information Systems, Estates and Buildings, the Secretary-Registrar's Office, and the Continuing Education Service. In the early 1990s (1992-1993), overhead charges were distributed according to simple formulae, involving student numbers, space occupied, etc. The next step was to negotiate Services Level Agreements (SLAs) between academic departments and support services, defining levels of core and supplementary services that were required and could be financed. Greatly improved understanding of the university's finances in general, and of departmental finances in particular, resulted during the 1992-93 academic year from the introduction of the Trading Company Model. Limited progress was made towards SLAs.

TQM in its most successful implementations is as much a management philosophy as a method of increasing productivity while simultaneously reducing cost. Sinha (1999) notes that TQM is a strategy for continuous improvement and change. Many writers (Bonser, 1992; Hall, 1996; Keller, 1992; Lomas, 1996) considered that higher education institutions have exploited the potential for applying the TQM philosophy to education and teaching practices. The TQM philosophy can be applied in its fundamental elements effectively teaching in ways that facilitates student motivation, involvement, effort, learning, performance, and most of all, their ability to contribute (Babbar, 1995). The implementation of Quality, or the TQM organization concept, in the UK higher education sector faces a number of dilemmas. In higher education, administrators and managers often see the remedy to the crisis in organization in terms of the need for more funding to increase staffing, improve infrastructures, purchase new equipment and undertake research and so on (Babbar, 1995). The TQM as a tool for improving public sector productivity has commented on the difficulty of achieving quality and productivity in the public domain without increasing costs. As Kirk (2000: 14) stress, “organizations have not found it so easy to implement and to achieve the expected benefits”. In higher education sector, TQM involves total commitment from everyone in the search for improvement, in order to improve institutional change that helps to reduce costs, eliminate programmes, generate performance measurement criteria for individual departments and peer reviews of teaching and research (Holloway *et al.*, 1999; Koch, 2003; Kotler and Fox, 1995; Sinha, 1999; Wilson, 1998). The TQM focuses on improving systems and processes through team efforts to achieve continuous improvement and organizational learning (Palmer and Saunders, 1992). Finally, TQM is seen as a means of introducing subtle changes in attitudes, values and beliefs and to change some work practices in organizations (Collard, 1990). This approach to quality assurance has placed additional pressure on higher education institutions to devise and sophisticated and comprehensive planning procedures.

The TQM should be purpose driven. Be clear on the organization’s vision for the future and stay focused on it. TQM can be a powerful technique for unleashing employee creativity and potential, reducing bureaucracy and costs, and improving speed, service and efficiency.

TQM emphasis on quality and continuous analysis of tasks to improve performance (Sallis, 1992). TQM should be seen as a process, not a program. It should be integrated into ongoing agency operations, and the focus should be on how an organization can better accomplish its goals and objectives. Hyde (1992) listed the following implications regarding TQM implementation in the public sector. First, basic quality measurement systems have to be developed. These need to be accessible to all levels, and, in fact, must be designed and implemented with employee involvement. More specifically, any unions in the organization must be substantively involved. Consistent with a system perspective, budgeting and resource allocation system will need to be realigned to fit with the TQM culture: TQM cannot be used as a mechanism to simply cut costs or rationalize cutbacks. The same is true of human resource management system: work may be redesigned to implement self directed work teams; performance appraisal and compensation systems may be change to reward team based performance; and massive training for managers, supervisors, and workers will be necessary. Finally, thoughtful attention needs to be paid to the ways in which customer feedback is used.

## **Concluding Remarks and Future Research**

In summary, future research in this area, with the help of survey research and based on the findings of existing qualitative studies, should seek primary to enhance our understanding of existing theory and contribute to its further development. Subsequently, qualitative studies may once again be used to verify the relationship which will have been identified. Thus, there is a need for interplay and dialogue in triangulation research approach.

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