

Developing a Quality Assurance Model in Further Education and Vocational Training: A Case Study of the Bahrain Training Institute

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STATEMENT OF ORIGINAL AUTHORSHIP

I hereby declare that this doctoral thesis is entirely original. This does not contain any published or unpublished texts which have not been duly acknowledged. No help was sought or received in the preparation of the thesis from any one outside the supervisory team.



ABSTRACT

This thesis investigates the effective dimensions of developing a quality assurance model in Further Education Institutions and Vocational Training Sectors. The research seeks to assess, through a case study of Bahrain Training Institute, how a newly established training institute adapts and assimilates quality assurance systems processes into its training and learning environments. Using action research techniques this case study analyses continual conceptualisation, implementation and evaluation of quality assurance actions over time.

The cyclical process through time involves development of a model of quality assurance systems processes, implementation and evaluation. The study covers the period of the training year 1997 / 1998 to 2000 / 2001, during which major quality initiatives were taken. Owing to the nature of this research and study of the complexity of organisational behaviour and change with active intervention, a case study design is adopted. This research approach involves a triangulation of multiple research designs, methods and analyses, which comprise Action Research Group Process, Survey Instruments (questionnaires), and Focus Group Interviews. The qualitative and quantitative data pertaining to a series of themes, but originating from different sources and methods are pitted against one another and the extent of convergence is sought to be established through triangulation. Triangulation helps in cross-checking the evidence and facilitates production of a full and balanced study. Also, it is a dialectical device for theory building. Particularly, when the behaviour of a complex organisation is being researched, triangulation is an essential strategy.

The study finds that a strategic model of quality implementation emerges as a response to the inputs from the dynamic environment, the aspects of which are particularly ascertained by the actions of committed staff. This thesis concludes with the identification of areas of future research.

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ABBREVIATIONS

ANSI	American National Standards Institute
AR	Action Research
ARG	Action Research Group
ASQC	American Society for Quality Control
BEM	Business Excellence Model
BS	British Standards
BTI	Bahrain Training Institute
DE	Average Quality Score for Employers Evaluation
DS	Average Quality Score for Staff Evaluation
DT	Average Quality Score for Trainees Evaluation
E	Employer
FE	Further Education
HE	Higher Education
HEI	Higher Education Institution
HRD	Human Resource Development
HRM	Human Resource Management
ISO	International Standards Organisation
PAR	Participatory Action Research
PDCA	Plan – Do – Check – Act Cycle
QA	Quality Assurance
QAA	Quality Assurance Agency
S	Staff
SERVPERF	Service Performance
SERVQUAL	Service Quality
SPSS	Statistical Products and Service Solutions
T	Trainees
TPFR	Total Positive Frequency Response
TQE	Total Quality Education
TQM	Total Quality Management

CHAPTER ONE: INTRODUCTION

1.1 Toward the Research Problem

During the last two decades, consciousness of quality on the part of the manufacturers, service providers, governments, consumers and the general public has grown exponentially. Along with this, the discourse on quality has also intensified. A large volume of literature dealing with various aspects of quality has emerged. This includes the writings of quality gurus like Deming (1986; 1993), Juran (1999), Juran and Gryna (1993), Crosby (1984; 1996), Feigenbaum (1991) and others. These works are generally profound in contents and, the quality gurus' institutes of training attracted thousands of practising managers. The quality discourse generated many comments and analyses. To encapsulate their principles, the gurus have used their own favourite phrases like "meeting and exceeding the expectations of the consumer", "customer satisfaction", "fitness for use", "freedom from deficiencies", "zero defects", etc. These also evoked attempts at further development and interpretation, (e.g. Beam, 1997). Again, writers like Gore *et al.* (2000), Giroux and Landry (1998) sought to typologize the major writers and their approaches.

The writings on quality inspired some empirical testing of the theories of total quality management (e.g. Guimaraes, 1996; Tata, *et al.*, 1999; Terziovski and Samson, 1999). These empirical studies yielded only conditional confirmation of the quality theories. The critics of Total Quality Management (TQM), both ideological and empirical, like Wilkinson and Wilmot (1998), Tuckerman (1998), Harari (1993a and 1993b) also emerged.

The quality discourse soon engulfed the service sector. While Deming (1986, 1993) and Juran and Gryna (1993) say that their principles and prescriptions of quality could be easily translated to the service sector, the quest for quality in the latter has been more elusive and difficult. While the customers could be easily identified, it has been difficult to derive operational and observable features of a good quality service / product. This problem was sought to be addressed by writers like Parasuraman, *et al.*, (1994) and Cronin, *et al.* (1994) through the approach of grounded theory.

For reasons to be discussed later in this Chapter, the quality principles and prescriptions soon entered, - rather suddenly and dramatically -, the field of education. The definition of quality in education, and the identification of the product and its features, consumers and stakeholders generated a good deal of debate. Some writers like Hendry (1998), Jauch and Orwig (1997) take the position that TQM cannot be applied to education at all. But, the generally held position is that education, too, has to adopt quality principles.

A couple of major issues in the quality discourse have not received the required attention and emphasis. These are the angles of culture, managerial style and above all evolving or developing an appropriate quality assurance model. All these issues are interrelated. Writers like Hofstede (1980), Richards (2001) have emphasised the crucial role of culture in organisational design, management and change.

Writings on how an organisation goes through the process of conceptualising quality in its unique context, and how and through what means the organisation develops a quality assurance model have been few and far between. Early and Coletti (1999:3.2) identify five quality gaps: understanding gap, design gap, process gap, operations gap and perception gap. A design for quality assurance has to be carefully developed and processed.

In the context of education, Lomax (1996) and her co-authors adopt an emancipatory approach to quality assurance in education and decide to "live their" theories. They undertake in their own different school settings Action Research (AR) to upgrade the quality of their teaching / learning. These represent endeavours conceptualised and implemented by the teachers themselves – a kind of grass roots level action. Biggs (2000: v) argues, "Universities all over the world are undergoing massive traumas as the full implications of managerialism are felt". Again, "Quality assurance mechanisms appear to be yet another source of debilitation, rather than maintaining the quality of their teaching" (Ibid.). He argues that 'the almost universal' way of addressing quality teaching, top-down bureaucratic measures are counterproductive. It results in too many committee meetings and too much paper work. Moreover, the ownership of the programmes is taken away from the teachers. According to Biggs, "Quality *enhancement* (original emphasis) comes about from bottom-up, from teachers driven by a genuine desire to improve their teaching" (Ibid.: vi). The method uses workshops and developmental projects.

Kember (2000: 4-5) employs the distinction between espoused theory and theory in use. According to him the espoused theory is found in policy documents, codes of practice or management statements and the like. Theory in use refers to the way an organisation is conducted. He argues that there is often a mismatch between the espoused theory and the theory in use and the universities particularly are more prone to the mismatch. He continues, "An area where the mismatches between theory in use and espoused theory may be quite common is that of quality schemes" (Ibid.: 4). He urges that while analysing and evaluating quality schemes, three angles are important: the concepts of espoused theory and theory in use, the quality paradigm and costs. His conceptualisation of quality paradigm (Ibid.: 6 ff) is important to this research. He makes a distinction between quality assurance and quality enhancement. Quality assurance is implemented top-down and depends on review and inspection. Quality enhancement is initiated by the academicians themselves and involves voluntary participation. It is a bottom-up approach.

He combines these conceptualisations with positivist, interpretive and critical approaches (Ibid.: 6). What is interesting from the point of view of developing a model of quality assurance (here the phrase is used in the sense of enhancement) is Kember's position that the critical approach uses action research.

Thus, the issues of conceptualising and developing an appropriate quality model, which also takes into account the questions of culture and managerialism, are surging to the fore in the discourse in quality assurance. This research seeks to address these issues in the context of Higher Education (HE) and Further Education (FE).

1.2 Extension of Quality to Higher and Further Education

Traditionally education and training systems have been considered bulwarks of quality. Higher education institutions like universities, for instance, have been viewed as repositories of high scholarship, and excellence of their academic pursuits has been their hallmark. But, this collegial and autonomous pursuit of individualised excellence in quality was shaken by many sudden developments. Overt concern for quality in education and training systems, however, has been a recent phenomenon.

In many countries, education and training are losing the traditional aura attached to them. The resultant demystification has generated an expectation that educational institutions, like any other forms of service, should be answerable to the society, which supports them. In most European countries, there is a growing expectation that institutions should demonstrate the extrinsic value of higher education and further education. The term extrinsic value refers to the usefulness of the outputs of the education and training system to the rest of the society.

The movement for total quality in education is of more recent origin. There are few references in the literature before the late 1980s. Much of the pioneering work along Total Quality Management lines has been carried out by a few community colleges in the USA and by some UK further education colleges. The initiatives in the USA developed somewhat earlier than those in the UK, but in both the countries the surge of interest occurred from 1990 onwards. Many of the ideas associated with quality have been sought to be developed in higher and further education and notions of quality are increasingly being investigated and implemented in schools. There has been a traditional reluctance in much of education to embrace industrial management methodologies and language. Many educationists have disliked drawing analogies between educational processes and the manufacturing processes. That may account for the delay with which the vision of the quality movement reached education. However, there is a growing willingness on the part of the educationists to explore lessons from industry. Recent initiatives such as the growth of education business partnerships have brought education and business closer and have made industrial concepts more acceptable.

Conceptualisation and implementation of quality and quality assurance in the field of higher and further education are riddled with more problems than the other areas of services. In fact, education can be most intangible and elusive of all the services – banking, insurance, health care, hotels, and there are many reasons for this. The contact between a teacher / trainer and a student / trainee is more prolonged and intensive than that of a provider and customer in any other service industry. Identifying who the customer or what the product is has always been a problematic issue. Also, the government is substantially involved in education.

The quality movement, emerging first in manufacturing, then reaching the services, was bound to involve the field of higher and further education. (It is now being applied to government services also). In the context of the United States, Koch and Fisher (1998) say, that TQM has become a rage in higher education.

About 160 U.S. universities were actively involved in TQM and 50 percent of them had quality councils. They further say (Ibid.: 661), "Expressions such as 'culture of quality', 'quality is everybody's job', and 'teamwork', easily fit within the accepted jargon of higher education and have become bywords of university conversations". Idrus (1996) argues, "changes in industry are far from altruistic. They are internally motivated and generated. But in a majority of educational institutions, the rationale for TQM is externally motivated". Although this is true to some extent, the internal and external factors reinforce one another, whether it is manufacturing or service (including education).

1.2.1 Factors Affecting Emergence of Quality in Education

The following factors have affected the emergence of quality in Higher and Further Education:

(a) Changing nature of student intake

Countries are witnessing changing demographics (Kanji, *et al.*, 1999: 358). In some countries the younger age cohorts are expanding. The number of students is increasing (Warren, 1994: 1-2). But, in the developed countries these younger age cohorts are decreasing. With decreasing intake of students, the universities are going all out to recruit the students. Also, the number of part-time students is increasing (Karapetrovich, 1998: 38-39). Thus, whether the student intake is declining or increasing, the educational institutions are under pressure.

(b) Students' choice

In the recent years there is a growing trend of education and training institutions publishing data about certain crucial aspects of their operations and achievements such as performance indicators, efficiency indicators, quality indicators and the like. A study by the Josephs (1997) of the students of a New Zealand business school reveals that the students pay particular attention to the academic reputation, programmes, employability, etc. Availability of such data has made students more discriminating and conscious of the criteria they can use to choose the places of study. This in turn has put pressure on the institutions to deliberately implement quality assurance systems and procedures. Marketing education and one's own institute / university is now a required strategy.

(c) Demand for job oriented skills

Kanji *et al.* (1999: 358) point out that technology is rapidly changing. Karapetrovich (1999) adds that the students are demanding job oriented skills. He further points out that if engineering education is not upgraded, there will be serious repercussions on the economy (1998: 38-39). Kanji *et al.* (1999), Karapetrovich (1998), Idrus (1996) and Warren (1994) argue to the effect that as the industrial restructuring is taking place, the universities have to be sensitive to the environment, and programmes have to be relevant. But many young adults are deficient in skills. Also, the range of programmes has expanded. All these factors have a direct bearing on the quality of education.

(d) The financial crunch

Institutions of higher education and further education in almost all the countries are experiencing financial crunch, due to reduction in funding (Idrus, 1996), rising costs and inflation (Kanji, *et al.* 1999; Warren, 1994). Courtney (1995: 2) adds that it is no longer possible to increase tuition fees and still get good students. The universities are required to provide better education without increasing the costs.

(e) Government concern

With a growing culture of accountability in all aspects, government bodies responsible for funding are requiring institutions to demonstrate their commitment to quality in their education and training provision. For example, in the UK the National (Sir Ron Dearing) Committee of Inquiry into Higher Education (1997) argues that educational institutions would gain more from a corporate approach. A value for money approach is urged.

(f) Public accountability

Those who fund higher and further education are trying to hold the institutions accountable for the money they receive (Kanji, *et al.* 1999; Warren, *et al.* 1994). The tax payers all over the world are becoming conscious of whether their money is being prudently spent or not. This concern extends to the educational field also, where the governmental assistance and investment are heavy. The public in general, and the tax payers in particular strongly feel that the managers and teachers of educational institutions should be held accountable for the quality of education the students receive.

(g) Requirements of the private sector

When the quality of education and training is not up to the requirement, the private sector has to spend more money on training and education of their own staff. In other words, the HE and FE institutions may find that their stakeholders are becoming competitors, offering their own educational training programmes (Warren, *et al.* 1994; Idrus, 1996). Idrus (1996) adds a few more points in the context of the United States. It was found that the achievements of the US students were low. About 40 percent of the New Yorkers could not read *New York Times*. Davies (1997) argues that the manufacturing world has entered the post-Fordian era. "Old skills barriers are breaking down and new divisions between core and periphery are being created".

Higher and further education are converging. New responses are expected from the HE / FE institutions in a society that is market - and consumer - driven. These responses should also take into account the life chances of the individuals. Kanji *et al.* (1999) add that traditional methods of educational excellence are giving way to new methods. The authors conducted an empirical study of 60 Malaysian and 72 U.S. higher educational institutions to ascertain the reasons for adopting TQM. Malaysian reasons differed from those of the U.S. In Malaysia the following factors were important: (i) to meet foreign partner expectations, (ii) to increase market share, (iii) to compete for funds, and (iv) to pursue the core business. The U.S. factors were: (i) to satisfy the industry requirements, (ii) to upgrade the student performance, and (iii) to increase revenue and ensure self-reliance.

We find that various forces like changes in demography, changes in students' preferences, an increasingly fastidious market, the societal and governmental demands for quality and value for money, difficult financial circumstances, and compulsions of competition are all making the HE / FE institutions search for quality.

1.3 The Aim and Objectives of the Study

1.3.1 The major objectives of the study

Section 1.1 discussed and analysed the state of the current discourse on quality. It was pointed out that the aspects of developing a quality assurance system in education with special reference to organisational culture and management style have not received much research attention. This research particularly seeks to assess how a newly established training institute adapts and assimilates quality assurance systems processes into its training and learning environments.

More specifically, the purpose of the research is to:

1. Ascertain how a training institute continually conceptualises, operationalises, organises and implements its quality assurance systems.

2. Find a way to design and develop a suitable model of quality assurance system processes acceptable to the concerned groups.

3. Establish to what extent the quality assurance processes are dynamic, innovative, learning from their feedback and responsive to the internal and external requirements.

4. Evaluate and interpret the evolution of quality as an institute capability, rather than externally introduced.

5. Identify the interrelationship between development of quality assurance system and the wider management processes and styles.

1.3.2 Research Questions of the Study

The above objectives need to be translated into actionable research questions. These research questions correspond to five distinct dimensions of quality assurance, which are as follows:

Dimension 1 - Conceptualisation and nature of quality assurance in Higher Education (HE) and Further Education (FE)

Q1 How have the theories of quality assurance been operationalised and implemented in HE and FE?

Dimension 2 - Competitive Environment

Q2 What have been the interactions of BTI with its stakeholders in regard to implementation of quality assurance systems in a competitive market environment?

Dimension 3 - Internal Cultural Dynamics

Q3 What is the nature of the involvement of the different groups in the development, implementation and evaluation of the successive quality assurance action plans?

Dimension 4- Implementation and Emergent Systems

Q4 How successful has the implementation of the BTI quality assurance systems been and what is the nature of the emerging model of quality assurance?

Dimension 5 - Management Style

Q5 How has the BTI managerial approach evolved, in terms of managing quality assurance systems and processes?

1.4 The Original Outcomes of the Research

This research examines systematic planning for organisational change so that a sustainable and promising model of quality assurance systems processes can be developed and implemented in education and training sectors. After examining the interfaces among organisational change, its culture and management styles, it seeks to develop a model of quality assurance through the participation of the concerned parties. This is achieved through action research techniques in a multi-cultural environment. In this way it strengthens action research theory also. Its theoretical and practical contributions may be summed up as follows:

1.4.1 Theoretical Contributions

- Examining the inadequacies of definitions of quality in HE / FE and formulating a more suitable definition,
- Stressing the importance of the phased nature of development of a quality assurance systems model and clarifying the processes of action research, and
- Signifying the inseparability of organisational change, culture and managerial style, which necessitate the participation of the stakeholders.

1.4.2 Practical Contributions

- Demonstrating how the internal impulses for pursuit of quality can be fully channelised and utilised,
- Development of an acceptable model of quality assurance systems processes which others (in the national and regional context) can adapt to their situations, and
- Analysing the complex processes of conducting action research in a multi-cultural environment.

1.5 Justification for the Research

With unstable oil prices, the economies in the Gulf region are taking a number of measures to diversify sources of national wealth. The general trend is to move from an extractive or mineral economy to a production / service oriented economy. All the Gulf countries, with varying degrees of planning and speed, are seeking to diversify their economies. Bahrain, which is comparatively less endowed with oil resources than the other Gulf countries, has been at the forefront not only in its effort to diversify into new areas but also in adopting a market economy approach. Also, this diversification of the economy is sought to be achieved through the private sector – both local and foreign. Economic Development Board of Bahrain states (2001: 3), "...(B)ut, early acknowledgment on the part of the government that oil resources could not generate sustainable economic growth led to the well-engineered diversification programme that has yielded today's broad economic base, where oil refining and manufacturing co-exist with sophisticated financial, commercial and service sectors".

In the current market oriented paradigm, the emphasis is on competitiveness through quality. The new economic policies and scenario make severe demands in terms of quality on the education and training sectors, which provide human resources. This can lead to a more deliberate pursuit of quality and development of human resource, supportive of the direction the overall economy is taking.

One of the first steps in re-engineering education is reviewing the key concepts of total quality improvement and examining ways to appropriately apply them in education. In order to judge the overall success of the policy, it is necessary to derive empirical indicators / measures of educational quality so that the necessary data on allocated resources and educational quality can be compiled. This research will bridge the gap between the industrial and educational quality systems so that the process of re-engineering in education can be adopted by examining the nature of the quality systems in industry and services and the evolving models appropriate for education.

1.6 Locale of Research

Bahrain Training Institute (BTI) has been selected for conducting this study. Founded in August 1992, BTI is a leading provider of high quality training in a variety of areas in business, engineering, technology, art and design. BTI pursues a policy of balanced excellence, linking theory to practice in training that is innovative, rigorous, flexible and relevant to the needs of employers in the Kingdom of Bahrain.

BTI is committed to the development of high quality Bahraini human resources to support the development aspirations of the citizens of the Kingdom of Bahrain. It aims to revitalise the traditional work ethic to serve the needs of a modern technology-based society. In doing so, BTI aspires to contribute to the plans of the Ministry of Labour and Social Affairs to establish training and HRD as an industry in the Kingdom of Bahrain.

BTI is arguably the only training organisation in the Gulf region that has deliberately relinquished its public sector persona and adopted a private sector ethos to function in a semi-autonomous mode. The Institute is attempting to develop a quality management system to assist the transformation and to ensure its survival in a highly competitive environment. The lessons learned from BTI's experience can be valuable to other countries in the Gulf region, which are increasingly looking to privatisation as a solution to the challenges of Human Resource Development and localisation of the workforce.

BTI is the apex training organisation in the Kingdom of Bahrain. Its functioning is marked by its special role: it is an autonomous training organisation operating under the Ministry of Labour and Social Affairs. Because of its autonomous nature, it is expected to perform under free-market conditions and generate resources by attracting individual and corporate clients through the quality of its training programmes. A quality orientation, thus, is no mere ornamentation but a vital ingredient of its strategy to prosper in a highly competitive training environment.

BTI's organisational structure provides for decentralised professional work within an overall training management system. There are eight major functions **(see Figure 1)**: Training (Business, Technical, Corporate, Art and Design), Administrative and Financial Services, Trainee Affairs, Quality Assurance and Product Design, Research and Development, Staff Development and External Relations. Eleven departments handle training: Computer and Information Technology, Communication and Language Studies, Business Management and Supervisory Studies, Entrepreneurship Development, Mechanical and Chemical Technology, Electrical, Electronics and Instrumentation Technology, Building and Construction Technology, Occupational Health and Safety, Fashion and Clothing Technology, Jewellery Design and Goldsmithing and Graphic Design. There are approximately 340 full-time teaching / training and support staff and 4000 full-time equivalent trainees.

As the Deputy Director for Training and reporting directly to the Director General, the researcher provides leadership to academic / training operations of the Institute. He is involved in policy formulation, decision making, direction and management of all the divisions of the Institute. At the level of interface with the trainees, - regular, corporate and special programmes, - he seeks to ensure optimum delivery of training and enhance quality. He plans training programmes, oversees curriculum development and evaluates the effectiveness of training. He ensures that the programmes offered by the training departments meet national and international quality assurance standards.

At the level of the Institute, he ensures that the action plans and budgets are constantly monitored and achieved. He plans, organises and manages all the financial, human and physical resources. He prepares long term strategies and work plans for the development of the training departments. He liaises with the employers in all the sectors of the Bahraini economy, and ascertains their training imperatives and requirements of human resource development.

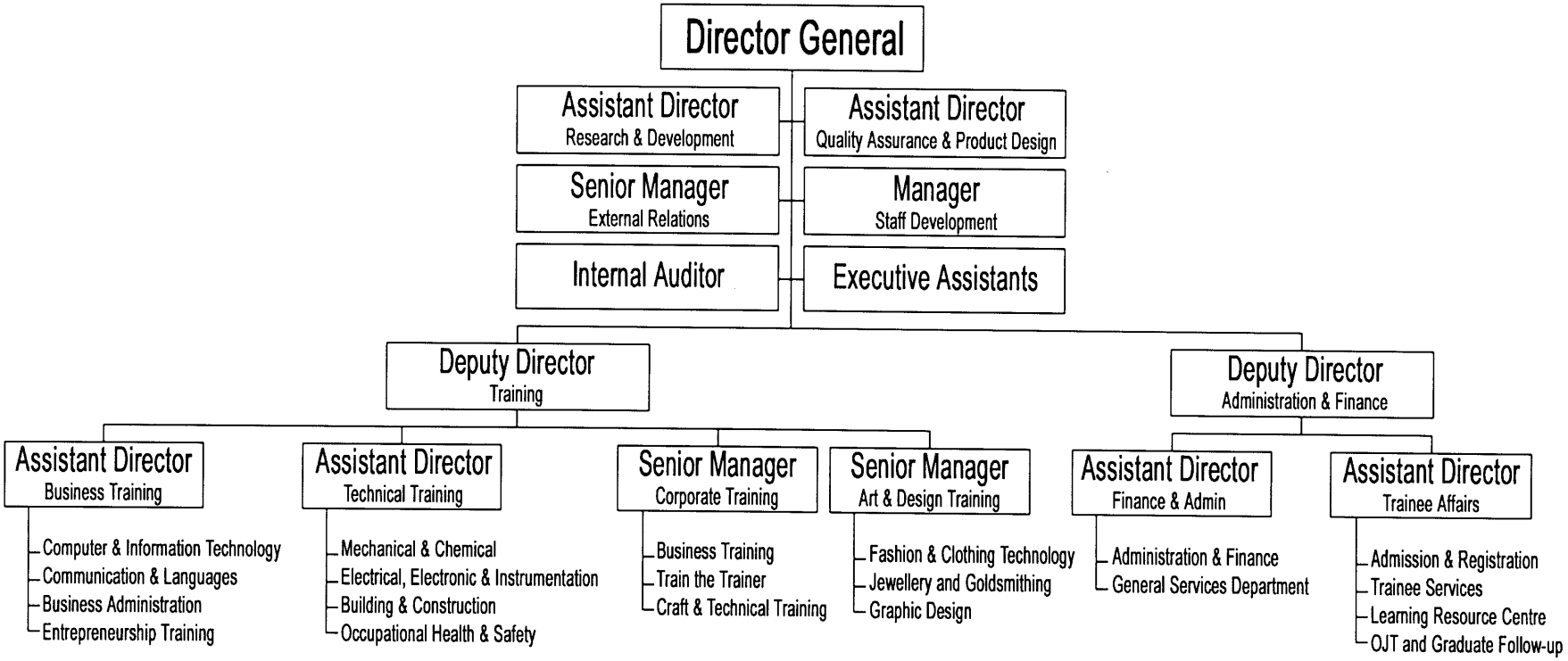


Figure 1 - Organisational Structure of BTI

At the national level he continually interacts with the policy makers in the government and its various councils. He contributes to the promotion of human resource development drive. Also, he represents the Institute at the national and international forums.

All the above responsibilities and experience have enabled the researcher to acquire a critical awareness of the importance of quality assurance. He began to appreciate that holistic quality measures had to be adopted. He came to the conclusion that individual pursuit of quality in training - or any other area – would lead to dissipation of energy and efforts. He began searching for answers to the various quality related questions and issues and sounding his colleagues.

Thus, a manager assumed the persona of a researcher. He would bring to bear his experience as a manager on his role as a researcher. He learnt to look at his managerial responsibilities from the vantage point of a researcher. There was a smooth alternation of these two roles. But they were kept distinct. How he led his team of committed and enthusiastic colleagues in this research endeavour has been explained in Chapter 3 (Section 3.7) and Chapter 4 (Section 4.2).

BTI is taking the quality path to become competitive and in many aspects is a pioneer of such initiatives in the Gulf. A study of this approach for developing a fresh model of quality assurance system processes will not only assist BTI to evaluate its own current approach but also provide other training institutions with a tested approach to quality management.

1.7 Quality Management Systems at Bahrain Training Institute

Since its inception in August 1992, BTI has been striving to improve the quality of services to its stakeholders and has achieved a great extent of success. The quality of services has improved by going beyond the minimum requirements of the stakeholders and focusing on their future expectations. BTI stakeholders include the trainees, staff, employers, Government and the society.

The main service that BTI furnishes is providing vocational training of excellence to job seekers and those seeking to upgrade their skills. BTI has emphasised this point in its vision and mission as follows, which were adopted by the Board of Directors:

Vision: *"BTI will be an internationally recognised centre of excellence for vocational training and human resource development".*

Mission: *"To provide high quality customer driven vocational training and entrepreneurship development opportunities in the most efficient and flexible manner to the Gulf region".*

Training programmes at BTI are designed to provide trainees with an environment for skill development as well as academic achievement. This rationale has underpinned the development of quality and is embedded in the total organisational structure from upper level management to the module facilitators. From the beginning BTI has institutionalised an infrastructure of teams and facilitators that challenges orthodoxy through quality planning, quality control and continual quality improvement.

Since its inception in 1992 until the present day, institutionalised structuring of BTI has been an evolving process. It has a well earned reputation for providing both private and public sector industry with qualified entry level employees. Ed-Excel (UK), an awarding body of most BTI vocational qualifications, recognised BTI as a Regional Centre of Excellence in 2001.

BTI has maintained and improved the quality of its training programmes through established quality systems. These quality systems have been designed and tailored to meet the external bodies' requirements as well as to fulfil BTI's own mission. BTI believes in continual improvement driven by well-established built-in review and evaluation processes and considers the quality assurance and quality enhancement / improvement activities as essential and integral parts of all programmes. Quality is maintained by the continuous improvement of:

- management system,
- curriculum design and delivery,
- delivery methods and strategies,
- assessment methodologies,
- trainee selection and placement,
- staff selection and development, and
- physical resources.

BTI's policy towards quality is not limited to meeting the requirements of the external bodies only. The staff strongly believe that excellence in quality is to be pursued as the mission of the Institute and not merely as a requirement. To ensure that the standards and guidelines provided by the BTI quality management system are fully understood and implemented, BTI operations have been managed through established Quality Assurance Division, Operational Committees and Steering Committees.

1.8 Review of the Literature

In order to lay a theoretical foundation for this study, a review of literature of quality assurance, - both theoretical and empirical - , was undertaken. The major purpose of this is to identify research on the development and application of quality assurance in Higher Education (HE) and Further Education (FE). Three themes directed the survey of the literature.

The first theme focuses on the concept of quality and the theoretical debate concerning quality. Secondly, the major quality models are investigated. Thirdly, conceptualisation of quality in the educational context is examined. The review of the literature is presented in Chapter 2.

1.9 Research Methodology and Design

This study entails research questions to answer which data will have to be collected from multiple sources: stakeholders such as employers, staff, trainees, and the management system. It will examine over time what the impact of the various measures was, what lessons were learned from what results, and how the further policies and actions were adopted. Therefore, we are studying planned organisational changes, in which a case study approach involving actions research becomes the best methodological strategy.

The major aspects of research methodology and design of the study are: research approach and procedures, time frame of BTI case study, action research (AR) as a methodology, action research group structure, process and practice at BTI, design of survey instruments, focus group interviews, and triangulation of the findings. Together, these constitute the case study, which will be discussed in detail in Chapter 3.

1.10 Organisation of the Thesis

The thesis is organised and presented in five chapters **(see Figure 2)** which are as follows:

1. In Chapter One, the background of the study is presented. The importance of quality studies in Higher and Further Education institutions is analysed. The aim and objectives of this research are also presented. This Chapter introduces the research problem and research questions. The justification for this research and a brief preview of the literature review and the methodology and design used are also presented. Thus, the objective of this Chapter is to set the scene for the thesis.

2. In Chapter Two, conceptualisation of quality, their application to higher and further education and the related issues of culture and management style are discussed. This chapter aims at laying a theoretical foundation for this study.

3. In Chapter Three, the research methodology and design employed for this study are discussed.

4. Chapter Four focuses on the data analysis of the action research group, the survey instruments (questionnaires), focus group interviews, data analysis triangulation and discussion of the findings. The objective is to analyse the data and interpret the results.

5. Chapter Five presents the results of the study by seeking to answer the research questions. The strategic model of quality assurance systems and processes in the context of further education institutions and vocational training sectors, which emerged from the research, is discussed. Conclusions and implications for further research are also presented. The objectives of this Chapter are to summarise the findings of the data analysis triangulation of the study, and to discuss the possible limitations and to propose future directions of research.

References and Appendices are attached at the end of the thesis.

1.11 Summary

This chapter sought to lay the foundation of the study. It examined the main elements of the discourse on quality and identified the strengths and weaknesses of the discourse. It discussed the factors responsible for emergence of quality related issues in education. Against this background the research questions have been stated. The locale of the study was identified. This chapter also gave a synoptic view of the ensuing chapters.

The structure of the thesis is summarised in **Figure 2** below:

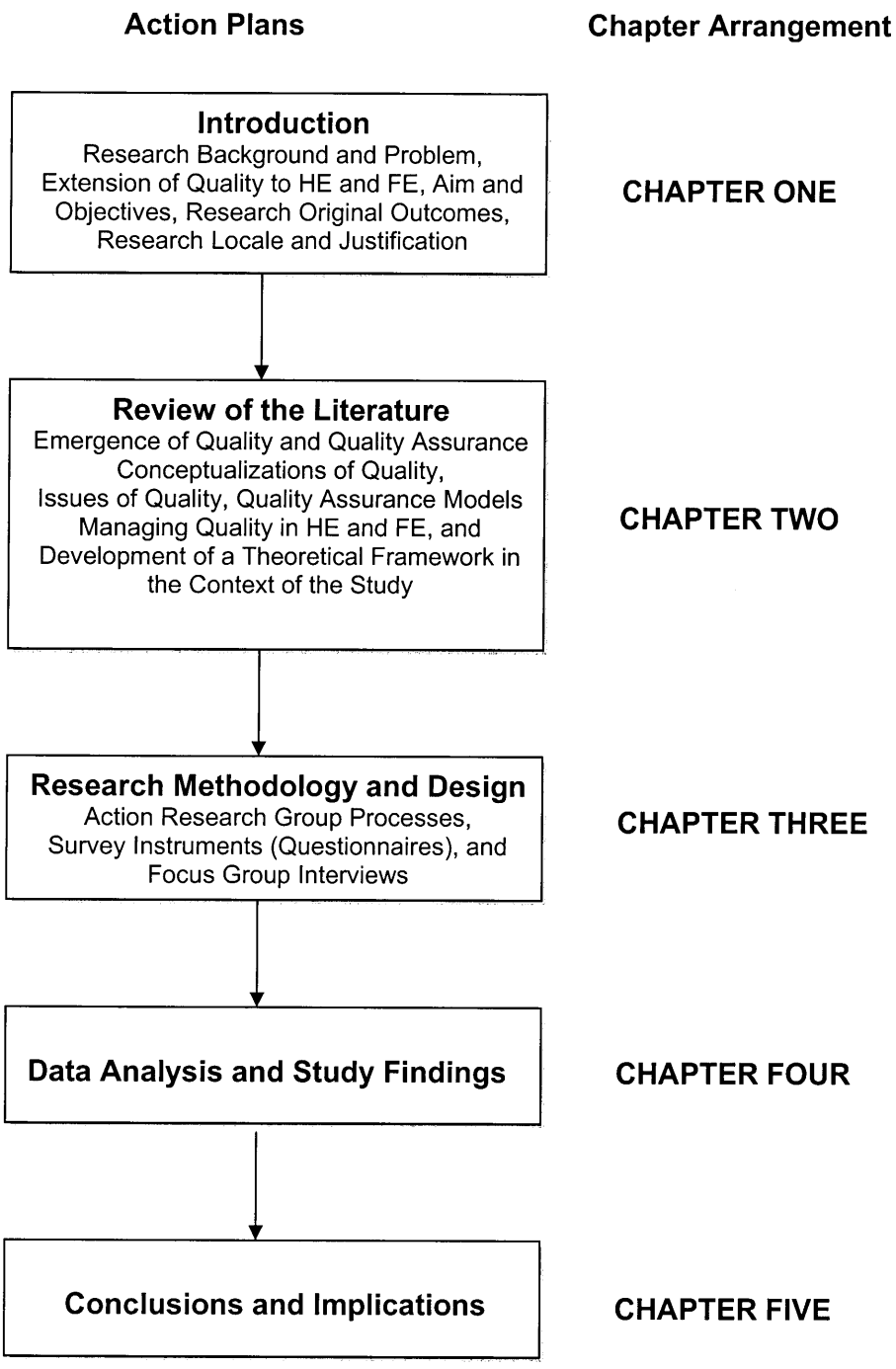


Figure 2 - The Structure of the Thesis

CHAPTER TWO: REVIEW OF THE LITERATURE

2.1 Introduction

Ever since quality and assurance of quality started dominating the discourse of manufacturing and service (including even education), many definitions and conceptualisations of the terms have emerged. While in manufacturing different aspects of quality have been stressed, their adaptation in service, particularly in education, has been a good deal slippery. Even if the elements of definitions of quality and the models of assurance are agreed upon, the actual implementation and the results may vary. After all, implementation of a quality assurance system, in a self-sustaining way, is an exercise in social engineering or reorienting organisation behaviour. All these factors have resulted in voluminous literature- prescriptive, theoretical, analytical, empirical and also critical. Hence the review of literature will discuss:

- Emergence of quality and quality assurance,
- Conceptualisations of quality,
- Convergences and divergences in conceptualisations of quality,
- Issues of quality,
- ISO and quality,
- Quality in manufacturing and service,
- Approaches to quality in Higher Education and Further Education,
- Social, political and cultural contexts of HE and FE Institutions,
- Quality Assurance and Managerialism, and
- Development of theoretical framework in the context of the study.

2.2 Emergence of Quality and Quality Assurance

Down the ages, all consumers have desired to get products and services worth their money. Juran (1999:2.8) suggests, "Quality is a timeless concept. The origins of the ways to manage quality are hidden in the mists of the ancient past. Yet we can be sure that humans have faced problems of quality". But, it took periodic crises to get the concept of quality analysed thoroughly and evolve systems to assure it. The analysis of quality is still incomplete and will remain so. The systems of quality assurance are still tentative and will remain so. But, controversies apart, there is no denying that the concept of quality has moved centre stage. Many factors are responsible for it.

a) As Evans and Lindsay (1996:6-7) say, in the immediate aftermath of the Second World War, there was a shortage of civilian goods. This made the producers accord top priority to increased production, regardless of quality. If 100 good items were required, the production line would produce 125 items, knowing full well that about 25 would be rejected at the inspection stage. Still, poor quality items remained even after inspection. Also, it was a seller's market. But, now, as Feigenbaum (1991:34) argues, the situation has changed "... from consumer beware to producer beware".

b) Meanwhile, the Japanese adopted the quality philosophies and systems of Deming and Juran and also evolved their own. By 1980's they started flooding the American markets with superior goods. This made the U.S.A., the West and other countries wake up. As Juran himself tells Ettore (1994), "The Americans had enormous purchasing power and a pent up demand that went on and on". The view of the senior managers, who were entirely focused on finance, was, "We are selling things". The threat of Japanese competition started changing the attitudes.

Oakland (1995) argues that competition is the main driver of quest for quality. He says, "Whatever type of organization you work in - a hospital, a university, a bank, an insurance company, local government, an airline, a factory -, competition is rife: competition for customers, for students, for patients, for resources, for funds" (Ibid.:4).

c) Since the seventies, the consumers have also started becoming quality conscious.

d) While the assembly line production continued, the product components and mix changed. This had an unprecedented impact on quality. As Godfrey (1999: xiii) argues, the growth of the importance of quality is attributable to increasing complexity of our products and the systems in which they participate and "to unprecedented potential for disruption" when these products fail.

e) Research has shown that those companies which have close customer relationship are most competitive and profitable (Sallis, 1993; Tang and Zairi, 1998a; 1998b).

f) With the new regime of international trade, many industries have to face stiffer competition.

As Juran and Gryna (1993: pp. 2-3) sum up, the reality emerged through five basic business conditions: competition, changing customer, changing product mix, changing product complexity and higher levels of customer expectations. Sallis (1993) suggests that the idea of quality also went through the stages of quality control (1960-80); total quality movement, TQM (1980-90); and the culture of continuous quality improvement (1990 onwards).

2.3 Conceptualisations of Quality

The concept of quality can be as baffling as it is ancient. Evans and Lindsay argue (1996:10-12), that the concept has been approached from many perspectives: (a) Judgmental criteria which stress transcendental superiority; (b) Product-based criteria which are a function of a particular measurable characteristic, like the number of cylinders in an automobile engine; (c) User based criteria, which translate into fitness for intended purpose; (d) Value based criteria, which resemble conformance to specification.

All these approaches to quality overlap and are not mutually exclusive, if we supply the invisible link of survival and success in the market. This is very much related to consumer satisfaction. Reaves and Bednar (1974) analyse a series of definitions of quality, their origin and contemporary significance. They list quality as excellence, quality as value, quality as conformance to specifications, quality as meeting and / or exceeding customers' expectations. Each definition has its own strengths and weaknesses. In order to ascertain the common factors underlying the various approaches to the conceptualisation of quality, the thoughts, analyses and prescriptions of the celebrated thinkers in the field need to be examined and analysed.

A Deming

It is inevitable that an exercise of this nature should begin with W. Edwards Deming. He gravitated to his new approach to quality through his disillusionment with teaching statistical quality control to engineers and factory workers. His contribution to the discourse of quality may be summarised as follows:

i) Deming advocated a "never ending cycle of product design, manufacture, test and sales, followed by market surveys and then re-design and so forth" (Evans and Lindsay, 1996: p.61).

ii) He enunciated 14 principles of quality. These are: 1) Create a vision and demonstrate commitment, 2) Learn the new philosophy, 3) Understand inspection, 4) Stop making decisions purely on the basis of cost, 5) Improve constantly and forever, 6) Institute training, 7) Institute leadership, 8) Drive out fear, 9) Optimise the efforts of teams, 10) Eliminate exhortations, 11) Eliminate numerical quotas and management by objective, 12) Remove barriers to pride in workmanship, 13) Encourage education and self-improvement, and 14) Take action.

Deming goes on to identify "seven deadly diseases" that obstruct the quest for quality. These are: (i) Lack of constancy of purpose; (ii) Emphasis on short term profits; (iii) Evaluation of performance, merit rating, or annual performance; (iv) Mobility of management; (v) Running a company on visible figures alone; (vi) Excessive medical costs; and, (vii) Excessive costs of warranty and lawyers.

He distilled these prescriptions and analyses into "profound knowledge". This consists of (i) appreciation for a system; (ii) understanding of variations; (iii) theory of knowledge, and (iv) psychology. A discussion of the four principles of profound knowledge will help us to put the 14 points and the "deadly diseases" in a proper perspective.

A system is an interrelated set of roles and activities, which further the aim of an organisation. The stakeholders, employees, customers, suppliers and community constitute an integral part of the system. Also, a system is embedded in an environment, which impinges on the system and the system interacts with the environment. Any malfunctioning on the part of a subsystem will affect the other subsystems.

Deming was vehemently opposed to the vertical division of responsibilities and advocated horizontal cross-functional teams. The conceptualisation of organisation of a system sets the stage for the concept of variation, - a concept which is intrinsically related to the ideas and analyses of the other quality gurus. Elimination of variation is the first step to quality assurance, and to achieve this an organisation has to function along the 14 points. According to Deming, there are two types of causes of variation. Common causes of variation are those which are inherent in the process of production: wear and tear of machines, errors of observation, etc. and their complex interactions. According to him they occur at random, but their cumulative effect is stable and can be predicted statistically.

These account for 80 to 90 per cent of the observed variation. They are not easily detectable. The remaining 10 to 20 per cent of variation is the result of special causes of variation, also called assignable causes: e.g., a bad batch of supply. They are easy to detect. To treat a common cause as a special one or a special cause as a common one would both be a mistake. The third aspect of Deming's profound knowledge is the theory of knowledge. He advocates an epistemology of organising experience, involving explanation and prediction. The fourth aspect is psychology. He advocates intrinsic and extrinsic motivation of people.

Evans and Lindsay (1996:68) observe that very little of Deming's system of profound knowledge is original. They add (Ibid.: 82), "Many people have criticised Deming because his philosophy is just that: a philosophy". They argue (Ibid.: 60-61) that he never defined or described quality precisely, although in his 1993 book he stated that a product or service possesses quality if it helps somebody and enjoys a good and sustainable market. This can be reconciled with both consumer satisfaction and fitness for use.

Sallis (1993) points out that Deming's is not a sequence of steps for implementing quality, rather a series of exhortations to management about what to do and what not to do if the organisation wants to prosper. Anderson, *et al.* (1992:472) argue, "Despite the apparent effect of these 14 points on both the industrial world and the practice of management theory around the world, there is very little evidence of the Deming management method in the formalisation and advancement of management theory". The authors have sought to coax management concepts and propositions from Deming's 14 points. The 14 points were broken down into 37 points and given to 7 expert panel members. Using the Delphi technique, the authors sought convergence of those points. Seven major defining concepts emerged: like visionary leadership, internal and external co-operation, organisational learning, process knowledge, employee fulfilment, and customer satisfaction. They link them into 4 propositions, involving leadership, internal co-operation, learning and quality.

B Juran

Juran travelled almost the same path as Deming. Juran does not couch his prescriptions in highly philosophical terms. He and Gryna (1993:3) define quality as customer satisfaction. They suggest (Ibid.) " fitness for use" as an alternative short definition. Their explication of the definition includes satisfaction of not only end users, but also merchants, as well as internal customers. Customer satisfaction would depend on the desired product features and freedom from deficiencies.

Beam (1997) comments, "The term product satisfaction avoids the association with worth or grade or luxury. Thus a Chevrolet may be built to as high quality standards as a Cadillac, even though greater luxury may be associated with the ownership of a Cadillac".

To Juran and Gryna, freedom from deficiencies also meant products free of defects and errors at delivery, during use and during servicing. They further argue (1993:5), "Freedom from deficiencies refers to quality of conformance", - a statement similar to that of Crosby. Again, their statement (1993:60-61) that variance is the root cause of the defects, is redolent of Deming. Juran and Gryna (Ibid.:40ff) distinguish between chronic and sporadic causes of poor quality.

The chronic quality problems, like Deming's common causes, are cured by continuous higher improvement. The sporadic causes, like Deming's special causes, are cured by restoring the status quo. Sallis (1993:43) observes, Juran believed that 85% of the quality problems are due to the poorly designed processes.

Juran's quality trilogy comprises quality planning, quality control and quality improvement. Like Crosby, Juran and Gryna (1993:22-23) discuss the costs of ignoring quality. Apparent costs are reprocessing, rejects, sorting, inspection, customer returns, warranty expenses, and downgrading of products. Hidden costs are: lost sales, process overtime, paper work errors, lost discounts, delays, etc. Juran and Gryna add (Ibid.: 24), "As quality conformance increases from zero per cent to 100 per cent, costs of appraisal plus prevention rise slowly, but the total costs decline". Juran, being more down to earth than Deming, advocates an understanding of the organisational culture. He reveals in the interview to Ettore (1994) that reading anthropologist Margaret Mead sensitised him to the problem of cultural resistance to change. Juran seeks (Juran and Gryna, Ibid.:240-241) to expand the concept of customers. The external customers should include both current and potential. Internal customers include all functions impacted by the product at both the managerial and work force levels. But, he insists that internal customers are not captive customers. Finally, he advocates implementation of quality through a project by project approach. He also urges theorisation about quality problems.

C Crosby

Crosby (1996:24-29) argues that many erroneous notions have developed about quality. Some of these are: (a) Quality means goodness, delighting the customer, luxury, shininess or weight; (b) Quality is intangible and therefore, not measurable; (c) There is an economics of quality, involving trade-offs; (d) Workers are the source of quality problems; (e) Quality originates in the quality department. He defines quality in terms of zero defects and conformance to requirements. He further argues (1984:84), "The performance standard must be zero defects not that is close enough".

Crosby points out (1984:67),"Appraisal is an expensive and unreliable way of getting quality...what has to happen is prevention". Also, he defends himself (1996:48ff.) that he never said conformance to specifications, but "conformance to requirements". The earlier quality assurance programmes were negative and narrow. There is a need for recognition of importance of quality, establishing a quality management programme in every operation and eliminating surprise non-conformance. Applying quality does not mean managers blindly picking up the Baldrige criteria and filling them up. This only produces "proper-sounding verbiage" (1996:40). Companies often fail to accomplish quality assurance for the following reasons even though they appear to be determined (1984:53-54): (a) The effort is called a programme, rather than a process; (b) All effort is aimed at the lower level of organisation; (c) The quality control people are cynical; (d) Many times people are teaching the ideas that caused the problem in the first place; and (e) Management is impatient for results.

Writing in a non-technical style, Crosby (1984:89) says, he has developed the Crosby vaccination serum for quality. Its ingredients are: (a) integrity; (b) systems including the common language of quality; (c) communication: information about the importance of quality and its achievement; (d) ability on the part of each person to identify errors; and (e) proper policies and operations. He calls (Ibid.:52) an organisation with quality operations a hassle free organisation, where all the people learn how to do all the things in " an orderly, energetic and accurate fashion". To reach that stage an organisation has to pass through a quality grid (1996:32-33). The grid involves a progression through the following stages: (a) management commitment; (b) quality improvement team; (c) quality measurement; (d) cost of quality evaluation; (e) quality awareness; (f) corrective action; (g) zero defects planning; (h) supervisor training; (i) zero defects day: (j) goal setting; (k) error cause removal; (l) recognition; (m) quality councils; and (n) do it all over again.

Crosby sets (Ibid.: 57-71) great store by what he calls " complete transaction rating". These transactions may range from having a telephone call answered to the concept of a new product or service. "There are hundreds and thousands of them, each constructed on millions of specific requirements in even the smallest of the company" (Ibid.). He advocates building of an organisational culture in which "transactions are accomplished completely and efficiently for the first time" (Ibid.). He advocates cultural change in an organisation to facilitate adoption of quality systems. Crosby's constant *mantra* is to eliminate the costs of reworking, recalls of products, and protect and increase market share; thus quality is free. But, it has been pointed out that as we approach the stage of zero defects the costs of quality increase. Also, the zero defect day sounds like an exhortation.

D Feigenbaum

Feigenbaum (1991) expands the concept of consumer satisfaction and expected features of a product. He defines quality (Ibid.:7) thus: "The total composite product and service characteristics of marketing, engineering, manufacture and maintenance, through which the product and service in use will meet the expectations of the customer". He stresses the features like reliability, serviceability, maintainability and even attractability.

He continues (Ibid.), "When all other product characteristics are balanced in, the 'right' quality becomes the composite which provides intended functions with the greatest overall economy, considering among other things product and service obsolescence - and it is this total customer satisfaction-oriented 'quality' that must be controlled". To him quality is customer determined. According to him, (Ibid.:59-61), the following 9 M's are the fundamental factors affecting quality: markets, money, management, men, motivation, materials, machines and mechanisation, modern information methods, and mounting product requirements.

2.4 Convergences and Divergences in Conceptualisations of Quality

In their assumptions and analyses regarding quality and its assurance, the thinkers discussed above share many commonalties, and have some differences.

a) All of them point out that quality must be assured, or the organisation will perish.

b) They all, in some way or another, define quality as customer satisfaction, though, Deming used the phrase toward the end of his career. Even Crosby, with his ideas of zero defects, etc., can be interpreted in terms of customer satisfaction through zero defects.

c) Elimination of variations is the process by which quality can be assured. Both Deming and Juran analyse in greater detail the types of variation and, in fact, both of them impute 85 per cent of the quality problems in an organisation to the systemic or chronic causes. Neave (1996) says, Deming raised it to 98 per cent in his later years. Deming's "fitness for intended purpose", Juran's "freedom from deficiencies", or "fitness for use", Crosby's "conformance to requirements", or "zero-defects", and Feigenbaum's "reliability, serviceability, or maintainability" cannot be conceptualised without the elimination of variation. But, Feigenbaum does not dwell in detail on these aspects.

d) All of the above thinkers reject inspection as a means to achieve quality. All of them argue that quality should be built into the product from the design stage. All of them advocate variants of plan, do, check, and act cycle. Again, they also agree on continuous improvement.

e) They all view the organisation as a system. While Deming advocated breaking down of the vertical functional barriers, Juran developed the concept of internal customers. In fact, by involving all the stakeholders, the thinkers wish to dilute the organisational boundaries.

f) Everybody has a role to play in quality assurance. Deming's driving out fear and team work, elimination of selective awards; Juran and Crosby's emphasis on organisational culture, Crosby's complete transactions go together.

Both Beam (1997) and Landesberg (1999) find Deming more general, comprehensive and philosophical. They find Juran more analytical, closer to the shop floor. Also, Juran is considered more specific and willing to systematically extend his quality to service and even to society in general. Courtney (1995:29) points out one crucial difference between Deming and Juran: "Deming did not believe much in managing by numbers, but Juran found managing by quantity essential". Again, one notices that while both Deming and Juran advocate theorisation, the others ignore this aspect.

Giroux and Landry (1998) draw upon the categories of rationalist and normative schools to look at the prescriptions of the major thinkers on quality: rational theories, like the earlier scientific theory of management emphasise careful work design and coherent support systems. Normative school views an organisation as a locus of shared values, moral involvement, cohesion and loyalty. Giroux and Landry include Deming, Juran and Feigenbaum in the rationalist school and Crosby in the normative. Considering that Deming advocated teamwork, discontinuing of individual incentives etc., it is difficult to agree with this classification.

2.5 Issues of Quality

While the concepts of quality have started dominating the discourse of manufacturing (and, as we shall soon discuss service including education), they have attracted both criticism and further elaboration. Also, they have inspired a few empirical studies.

Tuckerman (1998) argues that at the heart of TQM lie the neo-rightist and hegemonic ideologies. He criticises TQM on the following grounds:

a) It is a "broader attempt to create new forms of managerial and political control, not through coercion, but through political hegemony;

b) While quality is important, TQM compels the workers to accept a new set of working conditions;

c) Internal relations in an organisation are represented as those between customer and supplier;

d) Statistical process control now becomes cultural change and the burden is shifted to shop floor;

e) TQM substitutes pseudo market language for bureaucratic relations. Tuckerman even becomes dramatic when he states, TQM is not just chains, but manacles and chain. It is the "culmination of degradation of work and not the reversal of it"(p.74).

Wilkinson and Wilmot (1998) suggest that there is an inherent contradiction between the two meanings of quality: "On the one hand, an established, commonsensical association of quality with superior and exceptionally high standards of goods and services, and, on the other hand, the quality gurus' conception of quality as meeting reliable and consistent standard – standards which may or may not be commonsensically identified as exceptionally high" (p.3).

Wilkinson and Wilmot (1998) argue that the quality gurus do not refer to the amelioration of the working conditions, career prospects, quality of working life and the like. Furthermore the ideas and practices that do not reflect the principles of quality management are "interpreted as instances of irrationality that can be corrected through the proper and systematic application of quality principles" (Ibid.15). Finally, they raise a very pertinent question: is respect for employee involvement a means to an end? (p.16).

The objective of Kerfoot and Knights (1998:220) "is to provide a critical understanding of the development of quality as a contemporary managerial and organisational phenomenon". According to them, the quality programmes which are seductive, contain too many contradictions. While the threat of competition is being managed through TQM, the collective bargaining capacity of the workers has declined. It is an aid to demassification of consumption.

Kerfoot and Knights examine the mutually reinforcing roles of aspects of quality, - the hard and the soft. The hard aspects like zero defects, fitness for use reflects the engineering roots. They can be easily standardised through statistical monitoring and control. But, all these sophisticated techniques of manufacturing like CAD, CAM can take place only in a social context, "where human interpretation of input and output remains important" (Ibid.: 231). They argue that bureaucratic forms of organisation relieve the employees of the responsibility for the consequences of their actions. Hence, the employees should be involved in decision making. Kerfoot and Knights call this managing of employees the softer side of TQM.

The critiques of Tuckerman, Wilkinson and Wilmot, and Kerfoot and Knight, are more ideologically inspired. Harari (1993a) points out mostly practical reasons why TQM does not work. According to him, for every company that has succeeded in implementing TQM, there are two to three failures. He lists ten reasons:

1. TQM focuses on internal processes rather than external results,
2. TQM cannot be sold to non-manufacturing groups in a company. These are the people who could and should be influenced by strategies to add value to end users,
3. TQM concentrates on minimum standards,
4. TQM develops its own cumbersome bureaucracy,
5. TQM delegates quality to experts,
6. TQM does not demand a radical organisational restructuring,
7. TQM does not demand changes in management compensation,
8. TQM does not require new relation with outsiders,
9. TQM is a fad and it militates against entrepreneurship, and
10. TQM has no place for affection.

In the article published two months later Harari (1993b) wonders at what cost the very few successes of TQM had been achieved. He adds the eleventh reason:

11. "When one cuts through the glibness of theory and slickness of promotion, TQM is, plain and simple, sold and implemented as a formula. In this helter-skelter world of business, formulas cannot solve management problems".

Some of the points of Harari are well taken. Total quality management, unless properly implemented may lead to increased bureaucracy and form filling. A rigid conformance with requirement may stifle imagination and innovation. Everybody may be only talking about TQM. But, the fact remains that the very consciousness of quality has a positive impact on quality. The Japanese have succeeded with the help of TQM. Becker (1993) responds to Harari by arguing essentially that Harari has given examples of misguided implementation. All the changes in the internal set-up must redound to the advantage of the customer. There are well known examples of success of TQM in service organisations. TQM will succeed if implemented wholeheartedly and in spirit. Feinberg (1998) argues that TQM is likely to be opposed on three grounds:

(a) TQM is teamwork. But, managers have better information and knowledge. However, Feinberg rebuts, the knowledge that managers have acquired is transferable,

(b) Customer is not always right, and

(c) Not everything is a process. Feinberg's advice is that implementers of TQM should move from hidden stalemate to open dialectic.

Oakland (1995: 5-6) elaborates upon the theme of customer requirements. He equates quality with reliability, satisfaction of ownership and even customer's delight. Emphasizing the concept of internal and external customers, he says, "The concept of internal and external customers / suppliers forms the *core* of quality" (Ibid.: 8).

Zairi, *et al.* (1994) note that the much acclaimed management commitment is necessary, but not sufficient. Analysing the performance of 29 TQM companies over a period of five years, they found improvement in the following areas: profits, average remuneration, total assets, returns from assets, turnover, and increase in the number of employees. Youssef and Zairi (1995) hypothesize that if TQM is viewed as a soft technology or a generic philosophy of management, the critical factors affecting it should almost be the same everywhere. They seek to ascertain what these critical factors are in the context of the United Kingdom (only health services), the Middle East (Saudi Arabia, Kuwait, Bahrain, Qatar and the United Arab Emirates) and Malaysia – Singapore. They found that the factors varied from region to region. But, across all the regions, the following emerged as the most critical: (a) management commitment, (b) customer satisfaction, (c) clear mission statement and (d) cultural change.

The criteria of Malcolm Baldrige Award, European Quality Award and Deming Prize can also serve as benchmarks for organisational excellence. Many organisations seek to assess themselves against theses criteria. Thiagaragan and Zairi (1997a and 1997b) review the various empirical studies of such organisations. Together, all the studies underline the importance of leadership, management of internal stakeholders, policy and strategy, resources and systems management, effective and open two-way communication, etc. Thiagaragan, *et al.* (2001) state that research and theory in the area of TQM are still at an early stage. Their main purpose is to "construct a TQM framework that can be used as a guide in the selection and / or formulation of an effective TQM approach in Malaysian organisations (Ibid.: 291). They study Malaysian based TQM organisations with reference to "a set of quality factors based on their implementation experiences" (Ibid.: 292). They identify the key organisational requirements: (a) a steering group with CEO as the head, (b) maximization of internal stakeholder requirements, (c) workforce understanding the quality culture, (d) effective two-way communication, (e) customer driven process and (f) continuous improvement.

Guimaraes (1996) seeks to test empirically the hypothesis that turnover intention of the employees could be lower after the implementation of TQM. He surveys 113 employees of a US company and ascertains the employees' opinion and attitudes like motivation, job satisfaction, turnover intention, etc. After the TQM has been underway, he surveys them again. His sample size is reduced (as it generally happens) to 73 employees. He finds that there has been a decline in turnover intention. The TQM does work. Tata *et al.* (1999) seek to test whether the effectiveness of TQM will be higher in companies with flexibility oriented organic structures than in companies with control oriented and mechanistic structures.

They selected a sample of 89 managers in the USA working in different types of industries, e.g., plastics, electrical, metals, machinery, etc. Their dependent variable, i.e. effectiveness of implementation of TQM comprises the following items: reduced service calls, reduced scrap, reduced labour costs, increased production and increased customer satisfaction. The independent variable of organisation consists of items like extent of centralisation of decision-making, goal setting, if subordinate's ideas used, where responsibility is felt for achieving goals, etc.

They also introduce the control variables like quality, values, information and analysis, human resource utilisation, knowledge of customer services. They find that both the independent and control variables contribute significantly to the explanation of the variance of the dependent variable. They conclude that mechanistic and control oriented organisations are likely to assure quality by direct supervision which is less effective. But, flexible organisations facilitate the solution of problems as, when and where they occur.

Terziovski and Samson (1999) surveyed about 1,300 companies in the U S A and sought to answer the question: does TQM practice have a significantly positive effect on the organisational performance? Their concept of the kind of impact (positive or negative) was operationalised into 14 variables. Six out of them like customer satisfaction, employee morale, etc. were positively related to the implementation of TQM. But, they also found that ISO certification does not make a difference.

Tan (1997) concedes that only half of the companies succeed in the implementation of TQM. In 1991 one hundred and six companies participated for the Malcolm Baldrige award, but by 1993 the figure had dropped to 76. Nevertheless, he urges a holistic and humanistic implementation of the TQM schemes. In the process he further articulates the prescriptive TQM principles.

Spencer (1994) argues that there are many similarities between scientific management and TQM. To her, much depends on through what cultural glasses one looks at TQM (despite the notion that TQM constitutes a rejection of the principles of scientific management). Chapman *et al.* (1998) stress that because of the historic migration of quality from the quality control department, culture of an organisation is important.

2.6 ISO and Quality

The preceding sections discussed how quality and quality assurance emerged to the forefront as a strategy of success in business. The governments of various countries realised that they also had a stake in promoting quality assurance in manufacturing and service (including education) sectors.

In the first place, the government itself is a major purchaser of certain kinds of products. Secondly, the brand image of the country would also go up along with enhancement of quality. Thirdly, a pro-active role of government in assurance in standardisation and ensuring good quality would mean large exports, assured share in international markets and good earnings. Hence, the governments have started regulating standards and providing incentives and recognition to those companies which have done well in terms of quality assurance. In 1972 the first British Standard BS 4891 was introduced to provide common guidance to the manufacturers. It contained many provisions peculiar to the defence industry (Seddon, 1996). It was soon replaced by BS 5179. Still, many nagging problems remained. In 1977 Sir Frederick Warner recommended to the British Government the use of quality standards in British industry with independent assessment. Thus ISO 9000 (i.e. BS 5750) commenced in 1979. It was soon adopted by the North Atlantic Treaty Organisation and came to known as AQAP (Allied Quality Assurance Publications) series. In the beginning, the ISO standards were actually meant to solve a particular problem, - exploding munitions in factories (Ibid.).

In the recent past, the registrations to the ISO standards have been increasing year by year. As of 1999, 340,000 certificates have been issued world-wide in 150 countries. It has now become a matter of both prestige and sound business strategy to seek registration to ISO standards. Since the ISO standards are essentially European in origin, the formation of European Economic Community has also encouraged the companies to seek registration with them. These standards have been adopted by the American National Standards Institute (ANSI) with endorsement and co-operation of the American Society for Quality Control (ASQC). They are called ANSI-ASQC Q90 1987 and are recognised by over 100 countries (Evans and Lindsay, 1996:488).

ISO 9000 and 9004 prescribe the fundamental features of a comprehensive quality assurance system and are useful in applying the suitable level. Evans and Lindsay (op. cit.:489) explain, "ISO 9004, specifically, guides the development and implementation of a quality system. It examines each of the elements of the quality system in detail and can be used for internal quality audit purposes". The other levels are: Level 1 (ISO 9001) "provides models for quality assurance in firms that design, develop, produce, install and service products" (Ibid.). Level 2 (ISO 9002) "provides a quality assurance model for firms engaged only in production and installation" (Ibid.). Level 3 (ISO 9003) applies to firms engaged only in final inspection and test (Ibid.). Basically, the ISO series requires: 1) Quality system, 2) Design control, 3) Purchasing, 4) Product identification, 5) Process control, 6) Inspection and testing, 7) Training, and 8) Statistical control.

Not fully satisfied with the ISO 9000 standards, but incorporating them and those of the European affiliates, the US based Chrysler, Ford and General Motors have developed QS 9000 standards. The QS series additionally addresses issues specific to automotive industry.

There is some confusion regarding the ISO standards and their various national counterparts. They are not prescribed and benchmarked international standards, dealing with either process or product. "They are *quality system standards* that guide a company's performance of specified requirements in the areas of design, development, production, installation and service" (Ibid:488). Each company defines the quality features of its products. The third party external audit examines whether the procedures have been fully followed or not. A company may specify the quality features of its products, prepare manuals of procedures, follow them and still produce substandard goods. The main rule is that procedures must be followed consistently. Also, the ISO standards do not deal with leadership, strategic planning, etc.

Still, many writers like Ho (1995), Ho and Wearn (1996), Juran and Gryna (1993) feel the registration to the ISO standards can help in many ways: spreading quality awareness, paving the way for TQM, encouraging continuous improvement, etc. But, there are sceptics as well like Seddon (1996) and Simmons and White (1999), who in varying degrees, disagree with those who take for granted the impact of the ISO standards.

In addition to accepting ISO standards and incorporating them into their own national standards, many countries have instituted national quality excellence awards. Among them, Baldrige Award of the United States and Deming prize of Japan have elicited a lot of interest. The Baldrige Award is based on the following criteria: (a) leadership, (b) information and analysis, (c) strategic planning, (d) HRD, (e) process control, (f) business results, and (g) customer focus (Evans and Lindsay, 1996:499 – 501). The Deming prize is based on: (a) policies, (b) organisation and its operations, (c) education and dissemination, (d) information gathering and communication, (e) analysis, (f) standardisation, (g) quality assurance, (h) effects, and (i) future plans.

In their comparative study of nine national quality awards, Xie *et al.* (1998) find that these awards play an important role in promoting and rewarding quality and business excellence. Also, they differ in emphasis of various criteria. The authors argue that a country's economic development status plays an important role in the differences in emphasis of various criteria.

The preceding paragraphs have discussed the emergence, popularity and even compulsions of seeking registrations to ISO 9000 series and their national counterparts. The ISO series have also generated debates on their relationship to TQM and their own usefulness.

Simmons and White (1999) argue that ISO 9000 standard is a generic code of conduct that can be applied to a broad range of industry and economic sectors. The standard describes what elements quality systems should encompass and not how a specific organisation should devise, design and implement for its products, practices and processes. They further cite Juran saying that companies must go beyond ISO series. Registration does not mean good products, nor improving their quality.

Juran and Gryna (1993:578–599) further suggest that quality audits (like the ISO series) are helpful in checking conformance with requirements, but they are not helpful to the top management in providing full assurance that "all is well with quality ". The audits are not concerned with relative standing (of a product or a company) in the market, analyses of users' situations, challenges to the product development and design, and engineering employees' perception of quality. They, however, add that ISO 9000, 9003 and 9011 series along with the criteria like those of the Baldrige Award, are useful in conducting surveys on the above factors.

Ho *et al.* (1995) elaborate on the complex relationship between registration to the ISO series and total quality assurance as follows: (a) Some kind of formal quality management systems, not necessarily those specified in the ISO series, are absolutely necessary for the creation of a TQM environment; (b) A TQM environment is much more than just a quality management framework; (c) TQM is a creative and pro-active approach to problem solving and process improvement, with ISO 9000 adding formality, discipline and procedures; (d) TQM provides the tool kit and ISO 9000 delivers formality; (e) ISO 9000 series deal with processes and not products; (f) ISO 9000 is an integral part of the TQM concept. Its introduction leads to new awareness among the workers; (g) Adoption of ISO 9000 necessitates cultural change; and (h) ISO 9000 now contains a clause of continuous improvement. They also point out a negative aspect of ISO. It is designed for large firms, and not medium ones.

Ho and Wearn (1996), in their analysis of adoption of TQM by the Simon de Montfort University found the British Standard Institute's interpretations of ISO 9000-1 and ISO 9004-4 series suit the HE and FE Institutions. They argue that the adoption of the standards raises relevance of the series to Deming, Feigenbaum and Oakland. Meegan (1997) believes that registration to ISO 9000 series is an essential stepping stone to the attainment of TQM. She argues that organisations are competing at top four levels of management: resource management, operational systems, management systems, and corporate culture. According to her, products can be easily copied and the markets easily entered. These resources can be subdivided into operational infrastructure (day-to-day requirements) and management infrastructure. She continues, as a company prepares for ISO registration it is "encouraged and even forced" to address resource management and operational systems. This transitional process is important. She further argues, "However as it (the company) progresses to TQM, it must address its management systems and company-wide issues of corporate cultures". The company has to move to customer focus, continuous improvement and from reactivity to pro-activity.

Peters and Wills (1998) argue that branding is important in any market driven activity. While accepting that the ISO 9000 series is criticised on the counts of being overly bureaucratic, focussing more on process than on the product, they argue that the series helps in understanding the customer. Lim (1998) tries to locate the ISO 9000 series in a systems model. Reciting Deming's advice to appreciate a system, he argues that living and organic systems exhibit the characteristics of self-renewal and self-transcendence. The greater the interaction among the sub-systems of the system, the greater the synergy of the system. In the ISO models, according to Lim, management, executives and workers are subsystems. When the feedback from the customers is integrated through documentation, design and production, the organisation succeeds.

Doherty (1995) discusses how the University of Wolverhampton began with the experimentation with TQM, gave it up and went for the ISO series. He agrees that going for the standards is a painful process. Since it is a documented system, there is always a danger of paper bureaucracy, particularly if it is installed by a consultant. But the series introduces thoroughness, regularity and incrementality.

So far the arguments of those who wholeheartedly root for ISO series or of those who want to link ISO and TQM have been considered. But there are counter arguments as well. Seddon (1999), an industrial consultant, argues that the ISO 9000 or the British 5350 negates Deming. It is only the glamour of ISO registration, and not the real desire to improve quality, makes the managers climb on the bandwagon. "We have witnessed a plethora of companies registering and failing to achieve the promised result, - improvements in customer satisfaction, efficiency and other measures of performance".

Seddon lists the defects and disadvantages of ISO: (a) bureaucracy : filling of forms; (b) unnatural bifurcation of work; (c) quality by inspection, opposite to what was previously suggested by Deming; (d) quality taken over by procedure merchants; (e) the British managers know in their heart of hearts that the ISO systems are flawed; (f) decline in performance quality and morale; (g) flawed presumptions –work is best controlled by specifying and controlling procedures; (h) people have to do two jobs : do the work and write about it; (i) criticising quality is like criticising Queen Mother; (j) as Deming taught, quality should be managed from a position of knowledge and not from supposition. On the whole, Seddon argues, when people are controlled, they pay attention only to the controlled aspects.

Seddon's conclusions are based on his three empirical case studies conducted in 1996. He chooses (a) a sales and distribution organisation, (b) a high tech manufacturing company, and, (c) an engineering manufacturing company, all in the UK. In the first case the results were very disappointing. Old conflicts within the organisation were revived. ISO was seen as drudgery. There was no improvement in product. The third case showed indifferent results. About 75% of the quotations resulted in no order. Only the second case reported some good progress and company-wide awareness of quality, but there was no solid proof. Seddon concludes on a rather sarcastic note: ISO has many features, which an organisation can learn to move away from, and the ISO procedures can be counter-productive. According to him ISO standards smack of Adam Smith and Fredrick Winslow Taylor: specialisation and standardisation.

Simmons and White (1999) undertook an empirical study to ascertain the impact of registration on ISO on profits, operational performance and foreign sales as a percentage of total sales. They used size of the firm as a control variable. Their final sample contained sixty-three firms with registration to ISO, and sixty-three unregistered. They found that when the size of the firm was controlled, ISO registered companies did better in terms of profits than the unregistered companies. But the authors found that the ISO registration had no impact on foreign sales and operational performance.

The ISO standards and their national counterparts have been installed to help business and business too is accepting them. A review of literature shows that registration to the standards is only a necessary but not a sufficient condition of quality. The standards and TQM are, and can be complementary. But the finding of whatever little empirical research has been conducted is not conclusive.

2.7 Quality in Manufacturing and Service

Service is a business-related, person to person direct interaction. The phenomenal growth of the service sector during the last half a century has been well documented. Reaves and Bednar (1994:422) say that in the USA by 1950 the number of persons employed in industry and service was almost equal. By 1990, 8 out of 10 workers were in the service sector. In almost all the countries, the service sector is growing in terms of employment and contribution to the gross national product.

Hotels, banks, airlines, educational institutions, surface transport, information technology, large hospitals, etc. have registered tremendous increase in their clientele. As the manufacturing process becomes more and more technologically sophisticated, fewer and fewer skilled persons are required for actual production and more people are required in service industry.

A proper conceptualisation of differences and similarities between manufacturing and service industries is very crucial for the definition of quality in service. Kwansik (1994:177) argues that in service businesses quality factors, such as response and courtesy are more difficult to specify and measure.

Crosby (1984:124) points out that in a hotel, a guest may meet the doorman, the receptionist, the bell person, etc., but he is not likely to meet anyone from the top of the organisation. "It is possible to travel an entire career and never meet the manager...However, while dealing with a foundry, contact is with the top levels of the company" (Ibid.). Bolton (1995:14) adds that in the service sector products have to be delivered face to face and have to be varied according to the needs of the individual customers. Often, marketing, design and operations are inseparable.

Evans and Lindsay (1996:45ff) say, "Customer needs and performance standards (in service industry) are often difficult to identify and measure, primarily because customers define them, and each customer is different." They list the following dimensions of service quality: time taken, timeliness, completeness, courtesy, consistency, accessibility and convenience, accuracy and responsiveness. They further explicate the following differences:

- The output of many service items is intangible, whereas manufacture is tangible.
- Services are produced and consumed simultaneously.
- Customers are often involved in the service process.
- Services are labour intensive; they have to be customised.
- Services have to deal with a large number of customers.

Bergman and Klefsjo (1994:266) add the following characteristics of the service sector.

- The customer does not become an owner of something when buying service.
- Services cannot be pre-tested before they are bought.
- Services often consist of systems of sub-services.

Nevertheless, it is also pointed out that manufacturing and services are drawing closer to each other. Feigenbaum (1991:31) argues, "Moreover, as services have become organised on a wider scale, becoming more professionalized and more mechanised, total quality control applications have become more and more similar in many respects to those of manufactured products". In a similar vein, Crosby (1984:122-123) points out that in many ways, service and manufacturing industries resemble each other. Oakland (1995:60) describes the following characteristics of the service industry: intangibility, perishability, simultaneously (*sic*) and heterogeneity.

In view of these factors, the major thinkers on quality have been incorporating the uniqueness of the service industry into their conceptualisation. Service industry (including education, as discussed below) is being seen as a system. The "Plan-Do-Check-Act" cycle is applied. Customer satisfaction is fully endorsed. The concept of internal customer is accepted. While there is a good deal of difficulty with "zero defects, getting it right the first time, and also with elimination of variance", they are being reinterpreted to mean zero defects in customisation and the like.

Desirous of developing appropriate instruments (questionnaires and interview schedules), items and scales to measure characteristics of quality in services, Parasuraman *et al.* (1994) have made a major contribution to the debates on conceptualisations of quality in service. The authors have also inspired further improvements on their conceptualisation and scales. They identify three features unique to services: intangibility, heterogeneity and inseparability of production and consumption. The authors draw a clear distinction between mechanistic quality involving an objective aspect or feature of a thing or event, and humanistic quality, which involves response of people to objects (p. 176). They argue, "perceived quality is the consumer's judgements about an entity's overall excellence or superiority. It differs from objective quality; it is a form of attitude, related but not equivalent to satisfaction, and results from a comparison of expectations with perceptions of performance" (Ibid.).

In other words, the authors define quality in service as absence of gap or difference between the expected and actual. Parasuraman *et al.* (Ibid.) first develop 10 dimensions with 97 items pertaining to quality in service. They test them on 200 respondent consumers of services in a mall: repairs and maintenance of appliances; retail banking; long-distance telephones; securities' brokerage and credit cards (but no education).

Through analysis they derived five dimensions of quality in service (SERVQUAL). These are: 1) Tangibility: Physical facilities, equipment and appearance of persons; 2) Reliability: Ability to perform the promised service dependably and accurately; 3) Responsiveness: Willing to help customers and provide prompt service; 4) Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence; and 5) Empathy: Caring, individualised attention the firm provides its customers (Ibid.).

Cronin and Taylor (1994) seek to examine the conceptualisation and subsequent operationlisation of quality in service and the SERVQUAL scale. They accept (p.195) that service quality is elusive and abstract and difficult to define. But, they "suggest that the current conceptualisation and operationalisation of service quality (SERVQUAL) is inadequate", and that gap approach is not supported by any theoretical or empirical evidence (Ibid.: 195-196). According to them, the definition of quality by Parasuraman *et al.* is ambiguous and they cite many studies to show that satisfaction is a distinct construct that mediates prior perception of service quality to form current perceptions of service quality. Thus it is an antecedent variable (p. 197). Cronin and Taylor accept the attitudinal angle. Retaining the 22 items of the SERVQUAL (because they adequately define the domain of service quality), they canvass the questionnaire on 175 to 189 respondent-customers of two firms in each of the following four industries: banking, pest control, dry cleaning and fast food. (The respondents were asked to choose only one industry). The authors find that all the 22 items load on only one factor, which they call performance (SERVPERF). (It should be noted here that the industries did not include education.)

2.8 Approaches to Quality in Higher and Further Education

A review of literature on the extension and application of the conceptualisations of quality to higher and further education reveals four major trends: (a) the writings which seek to apply the quality conceptualisations of the major thinkers (which have been developed in the context of manufacturing) wholly, or almost wholly to higher and further education; (b) the writings which adapt the ideas of the major thinkers, and develop their own formulations of quality; (c) the writings which altogether reject the assumption that the concepts of quality as propounded by the major thinkers, or adapted, can be applied to the field of education; and (d) the writings which advocate enhancement of quality without the trappings of TQM.

2.8.1 Approaches derived mainly from the gurus

Barret (1999:5) seeks to answer the research questions: What is the effect of Total Quality Education (TQE) on the special education programmes in a particular school district? What are the elements which affect success of special education department? etc. She draws on Schmoker and Wilson's (1993) translation of the 14 points of Deming to education. Most of these translations are either too simplistic or inadequate. For example, Demings point no. 11, "Eliminate numerical quotas or goals", has been rendered as "Do not let grade be the product, the learning is to be the product". Again, Deming's point no. 12, "Remove barriers to pride and joy of workmanship", has been translated as "Remove the systematic causes for teacher and student failure". While elimination of systematic or common causes of variation is an important tenet in Deming's (and Juran's) philosophy, this particular point, i.e., removing barriers to pride etc. cannot be rendered as removing of systematic or common causes of failures. Barret also adopts Deming's systems approach to organisation, which adoption is adequate.

Bolton (1995) argues that application of TQM to higher educational institutions, though problematic and difficult, is possible and desirable. He enumerates the reasons why many people, mistakenly according to him, believe that TQM cannot be applied in Higher Education Institutions. The HEI's comprise departments lacking the necessary "structure for proper decision making, problem solving, strategic planning, team building, market analysis and professional development of both the individuals and the department itself" (Ibid.:13). Also, according to Bolton, there are problems of identifying the customer, according priority to customers' needs. "When performance measurement and quality assurance are added to the process, TQM may be perceived as alien and inappropriately demanding" (Ibid.). He argues that there are many points of convergence between TQM and HEI's values and needs: (i) TQM gives importance to individuals at all levels and human-centred values prevail in HEI's; (ii) "All effective HEI's are innovating or at least adapting their teaching to satisfy student demand"...(Ibid.:14); (iii) Education is a part of the service sector, and educational services are intangible and have to be experienced; and (iv) Performance indicators are being advocated now in HEI's. But, Bolton has not adequately addressed the problem of variance in admission, assimilation of knowledge, pedagogy, using learning for various purposes.

Dahlgaard and Kristensen (1995) also blithely assume that the Deming principles can be easily transferred to educational institutions. They define Total Quality Education as "An educational culture characterised by increased customer satisfaction through continuous improvements, in which all employees and students actively participate" (p. 446). The authors construct an essentially Deming inspired TQM pyramid: base is the management commitment (leadership). The four sides are (i) focus on customer and employee; (ii) focus on facts; (iii) Kaizen: or continuous improvement, and (iv) everybody's participation. Deming's PDCA (Plan - Do – Check - Act) is slightly changed to PDADS (Plan - Do - Act to Plan – Do - Study).

The author's only innovation is the definition of a product in education: "The product in education is a person empowered to educate herself or himself, not an educated person" (p. 452). (The emphasis here is on the capacity for self-education, and not on the quantum of knowledge and skills.)

Karapetrovich and Willborn (1997) define quality as the ability of a product to satisfy stated or implied requirement. They also bring in the concept of zero-defect. They equate zero-defect product in education with a student knowing the fundamentals of discipline. For the authors one graduate (of history?) in a million not knowing the name of the first American President does not violate the concept of zero-defect graduate. Again, a structural engineer should know about the strength of materials. The authors trivialise the concept of zero-defect by equating the concept with knowledge of rudimentary elements of a subject. They forget that a product has to be produced with fitness of purpose in mind. An assessment of satisfaction of consumers will lead to requirements that will have to be conformed to. Hence, the arguments of the authors are weak.

Schonberger (1995) concedes that on the surface HE and research may be at odds with TQM. TQM is team based; faculty are "notoriously independent", and so are students. TQM requires cross-functional thinking, planning and dialogue. "Faculty and curricula are highly specialised". Despite the apparent difference, quality is being pursued in many educational institutions. The author then defines total quality as "... a people focused management system that aims at continuous increase of customer satisfaction at continually lower real cost". Its features are: a) it is a total system, not a separate area or programme; b) it is an integral part of high-level strategy; c) it works horizontally, vertically and backwards and forwards to include the supply chain and the customer chain; and d) it involves continual adaptation to continual change (p. 69). Writing in the context of quality and academics, the author advocates inclusion of quality in many disciplines.

Karapetrovich's (1998) thesis is an ambitious effort to apply the quality conceptualisations of the gurus almost totally to a university system. Although wholly conceptual and analytical, it contains a couple of case studies. He begins with a convincing definition of quality "...(A) quality system is a set of interdependent processes that function harmoniously, using various resources to achieve objective related to quality and create quality characteristics that will meet customer needs" (Ibid.: 4). He adds, "Nevertheless, a well-established quality system should be able to facilitate objectives beyond meeting customer expectations and transfer to the realm of surpassing" (Ibid.: 6).

Karapetrovich's discussions of who the customer is in a university set up are interesting. He cites several arguments against students being considered as customers: in business, the sales of a product are open to all those who can pay; but universities restrict admissions. Customers generally pay for what they consume. But, in the case of education a student may get scholarships, sponsorships, and education may be subsidised by tax payer's money. In business customers are not continually tested. Education may not provide immediate gratification. He seems to suggest that each university should determine who their customers are.

Karapetrovich considers university as a system wholly comparable to manufacturing – with the functions of input, process and output. He adapts ISO 9000 to a university system with emphasis on designs, control, design of curriculum and course plans, process being teaching, etc. He argues that the university processes can be regulated and their variance reduced with various statistical process control devices.

Karapetrovich further argues that all quality characteristics are measurable (Ibid.: 82-84). For example, students knowledge can be measured by employability of graduated students, average starting salary, percentage of recent graduates employed, ability of graduates to successfully solve engineering problems, as ascertained by percentage of graduates registered as professional engineers; attractiveness of courses to students can be measured by student evaluation, failure rates, etc. Quite a few of these measurements are perfunctory, imprecise and misleading. He argues that through the application of ISO 9001 quality standards, zero-defect graduates can be created. He clarifies, "Like zero-defect products, zero-defect students are not perfect, in the sense they know every thing. They just satisfy all the requirements" (Ibid.:133). All the graduates must meet critical quality characteristics. We have critically examined this aspect while discussing Karapetrovich and Willborn (1997) above.

Karapetrovich's efforts to establish a model of process control through statistical measurements are not possible or desirable beyond a point. Many of his suggested measurements of quality characteristics are unrealistic and far-fetched (e.g., quality of research measured in terms of number of articles published). His conceptualisation of a zero-defect graduate is too vague. On the whole Karapetrovich mechanically applies quality concepts to higher education.

Sallis (1993), too, begins by defining quality as that which satisfies and exceeds customers needs and wants. He argues that service quality characteristics are more difficult to define than those of physical products and points out the difference between manufacturing and services. To him, (Ibid.: 25), education, - the value added to the learners, - is the service or product. The learner is the primary external customer or client. Parents, governors (of the school or the college body), employers are the external customers and, labour market, government and society are tertiary customers. Teachers and support staff are internal customers. The interests of each have to be reconciled.

Sallis says that the gurus of quality concentrated on manufacturing. Although all of them said that their ideas are equally applicable to the service sector, none of them have given much consideration to education. Sallis holds that zero-defect is an important service sector goal (Ibid.: 48). He continues, "It (i.e. zero-defect) is an idea which ought to have an important echo in education. At its simplest level, and most powerful, it would mean that all pupils and students would make a success of their education and fulfil their potential" (Ibid.).

Sallis argues, "The process of strategic planning in education mirrors that normally followed in industry and commerce. The tools employed in establishing mission, goals and analysing strength, weakness, opportunities and threats translate well" (Ibid. 104). All these arguments of Sallis are vague and, often, sweeping. He should have given some concrete examples.

McAdams and Welsh (2000), although avoiding the phrases like common and special causes, fitness for purpose, conformance with requirements, seek to apply in an empirical exercise the Business Excellence Model (BEM), developed by the European Quality Award, to 17 colleges of further education in Northern Ireland. The legal status of these FE institutions had been changed in 1998 so that they were allowed to develop a greater business focus.

The study was conceptualised in terms of leadership, enablers, processes and results. The respondents identified students, parents and employers as customers. Quite a few respondents recognised citizens, taxpayers, local governments, and governmental department as most important stakeholders. Most importantly, the respondents cited the following reasons for quality: enhancing customer satisfaction, need to acquire a competitive edge, and preparing for external evaluation.

Courtney's (1995) main objective is to examine which one of models of implementation of TQM in universities, institution - wide or department – wide, is more successful. His wide-ranging review of the writings of mainly the gurus does not lead to any definition or conceptualisation of quality in higher education. However, among the benefits of implementation of TQM, which were better in the case of institution-wide approach, he recounts better working relationship and trust between faculty and administrative leadership, better service, improved teamwork and improved decision-making. He also adds that more respondents in universities with institution-wide implementation of TQM reported better academic performance, teamwork among the faculty, teaching and retention. There is very little discussion of stakeholders, different categories of customers and clients, and the nature of educational product. All the quality gurus look at organisations as a system. They emphasise cross-sectional and horizontal transactions and co-operation. The concept of internal customers has emerged. In view of this, one wonders what is intellectually challenging in comparing institution-wide and department-wide implementations.

Berry (1998) sets out to analyse a case of introduction of quality systems in schools of North South Wales, Australia. He argues, "quality is built in at the design and processing stage rather than being inspected out as defects in the end product". Like Deming and others, he prefers to look at an organisation as a system. To him the quality process includes customer driven process, emphasis on team work, continuous improvement, problem prevention, participation in decision-making, management by facts, individual responsibility, commitment to staff training, action cycle, PDCA cycle, etc. All these are the echoes of Deming. But, after raising hopes regarding an empirical analysis of quality assurance in schools, the author simply says that the system was introduced in 1993 and ceased to exist in 1996. He just explains that the components of the system were not there.

Idrus (1996), who has forcefully described the rationale for the inexorable push of quality in the educational field, opts for the definition, "fitness for purpose". He also examines the problems and benefits of introducing TQM in education. He is reluctant to describe students as customers on the grounds whether the students can take, and should be asked to take, responsibility for their education. In his opinion academics consider themselves special. But, he notes that owing to TQM there are significant gains in placements, reduction in dropouts, higher levels of achievements.

Durlabhji and Fusilier (1999) draw on the experiments of the former in introducing the principles of TQM in higher education. TQM and quality applications are defined as (i) 100 per cent customer satisfaction, (ii) zero defects, (iii) self-managing teams, and (iv) continuous process evaluation and improvement. The students had been involved in the designing of the contents of courses.

Macfarlane and Lomas (1999) describe students as consumers. They define quality in HE as fitness for purpose, which is achieved by a transformative and quantitative change. They make a useful comment in the context of education. They say that while it is easy to list stakeholders, significant conflicts arise in managing their competing claims.

2.8.2 Approaches improving on the writings of the gurus

The above section critically examined those works, which essentially sought to translate the ideas and prescriptions of the gurus regarding quality to higher education. In the process, it was discovered that some writers have almost mechanically applied the concepts and categories to education.

Below are discussed authors who have, keeping in mind the major tenets like consumer satisfaction, even fitness for purpose, developed their own conceptualisations, definitions and measurements of quality in higher education.

Parsons (1994:2) begins by quoting the British Standards definition of quality: "Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. This covers fitness for purpose and satisfying customers". He adds (Ibid.:8) that TQM speaks not merely for improved efficiency and effectiveness, "but a better way of work life. In these hard times in education many would settle for that as a form of salvation" (Ibid.). Interestingly, Parsons strikes a different, if not a dissenting, note (Ibid.). He says that quality is not only customer satisfaction; customer is not the overriding judge of what constitutes quality. This is dictated by the professional and specialist training. He further seeks to refine the conceptualisation of quality in education (p. 9): a) client quality: what customers (pupils and parents) and clients (employers and community) want from a service; b) professional quality: whether the service meets the needs as defined by the professional providers; c) management quality: most efficient and productive use of resources within the limits and directives set by higher authorities. He (Ibid.:6-7) observes rather dramatically, "The quality movement has an impressive array of joyous religiosity". "It is the absolutes which hit one". While he is justified in making a distinction between customer quality and client quality, his categorisation of management quality is superfluous; because, optimum utilisation of resources is one of reasons for emergence quality consciousness in education.

Rowely (1997) argues that appreciation of the complexities associated with the nature of quality measurement and enhancement in higher education is an essential pre-requisite to the design of instruments for measuring quality.

Rowely says, "Higher education is unique as service experience in that most customers must meet stringent academic and sometimes personal criteria before being permitted to enter on the experience". (This never happens in manufacturing and very rarely in other kinds of service.) She suggests that exclusivity of access is almost equal to pricing. Further she identifies the different stakeholders in education: students, their parents and family, the local community, society government, governing body, staff, local authorities, current and potential employers.

Rowely stresses the longitudinal nature of educational experience. She adopts the gap theory of Parasuraman *et al.* (1994) and defines quality as an attitude of the customer resulting from satisfaction: the difference between customer's perception and customer's expectations. She further seeks to elaborate on the variety of gaps: the understanding gap, the design gap, the delivery gap and the communications gap. She however, does not go into the operational definitions and measurements of these concepts.

Owlia and Aspinwall (1996) suggest, "In the case of higher education, students and lecturers participate a great deal in the process, but other groups like the employers deal mainly with the final products in the system". (Even this is changing now. For the various reasons discussed earlier, employers are getting increasingly involved in education, and the educationists, too, are inviting the employers to participate in educational planning and evaluation.) The authors argue that very little conceptual work has been done in regard to quality in the public services, and particularly in higher education.

Through their article Owlia and Aspinwall have made two major contributions: (a) using Parasuraman *et al's.* (1994) ten service quality features, the authors seek to identify equivalent concepts in the works of five other authors. (b) more importantly, they examine the conceptualisations and operationalisations of Garvin (1988), (who has analysed the categories of quality applicable to both product and service) and Parasuraman *et al.* (1994), (who have pioneered the development of quality measurement instrument, – SERVQUAL –, in services). Owlia and Aspinwall seek to develop definitions of quality in education for each of the above sets of definitions. Since SERVQUAL is more widely used and debated, and also has led to many adaptations, the authors state its higher educational counterparts, as given below (p. 18):

- Reliability: the degree to which education is correct, accurate and up-to-date; how well an institution keeps its promises.
- Responsiveness: Willingness and readiness of academic staff to help students.
- Understanding Customers: Understanding students and their needs.
- Access: The extent to which staff are available for guidance and advice.
- Competence: The theoretical and practical knowledge.
- Courtesy: Emotive and positive attitude towards students.
- Communication: How well the lecturers and the students communicate in the classroom.
- Credibility: The degree of trustworthiness of the institution.
- Security: Confidentiality of information.
- Tangibles: State, sufficiency and availability of equipment and facilities.
- Performance: Primary knowledge and skills required for students.
- Completeness: Supplementary knowledge and skills.
- Flexibility: The degree to which knowledge / skills learned are applicable to other fields.
- Readiness: How well an institution handles customer's complaints.

The authors further reduce them to six dimensions: tangibles, competence, attitude, content, delivery and reliability. They also identify the customers for each of these dimensions. Capturing the essence of the items of quality in higher education, one may paraphrase their conclusions as follows: higher quality education is an integrated effort to impart knowledge and skills – broadly defined – combined with a humane and sympathetic attitude toward students in a supportive environment. Owlia and Aspinwall's fine effort at synthesis and transferring to education of the major strands of quality, however, ignores the society and state as customers.

Reavill (1998), who has been associated with Higher Education Funding Council of England, seeks to view quality assessment and management of education from three angles: (a) product process model, (b) service process model, and (c) the systems model. In the products process model the students constitute the (input) raw material and education is a transformative process performed on them. The graded products are supplied to the employer – customers. In the service process model, following the service industry analogy, the student is the customer. Reavill finds both these models fragile and defective. He suggests the application of the systems model. (Actually, the product process model, involving input – conversion – output is also a systems model.) He views university as an open system, comprising students, teachers, administrators, etc. He then identifies twelve stakeholders from students to government, taxpayers and professional bodies. The relative importance of the stakeholders is essential for quality assessment. The student, his family, employer and universities are important; but the government and taxpayers are also important stakeholders. Hence, along with curriculum design and teaching, student progression and accountability also emerge as an integral part of quality. Beyond describing university as a system of interest comprising the elements of teachers, students, administration, etc. and supported by a wider system of interest, Reavill does not suggest any empirical proofs.

While describing the experiences of introducing ISO 9000 / BS 5750, in a section of Leeds Metropolitan University, Solomon (1993) says that quality assurance deals with prevention of problems rather than correcting them afterwards. She emphasises good planning as a part of quality. She also lists features like attitudes, co-operative teamwork, management style, organisational structure, training and development, a trusting and open culture, a proper rewards system and the like. She gives a good definition of a customer: a customer is defined as the person I pass my work to, or is affected by my work in any way.

In this discussion of how the University of Wolverhampton pursued quality system through ISO / BS and TQM, Doherty (1995) comes to a few interesting conclusions and derives features of quality in university. Rejecting "zero defects" as inapplicable to higher education, Wolverhampton sought to adopt and operationalise "getting it right the first time", and "errors free". It encountered a few difficulties. He writes, "Educational organisations, be they infant schools, or universities, are notoriously vague about who owns what, and where authority and responsibility lie. The problem is compounded by a product-oriented culture: "Take this curriculum, which I have designed for you, or lump it ..." (p. 4). Hence, the FE colleges, and FE turned universities were urged to go for BS 5750 series. So did Wolverhampton. Doherty argues that both TQM and ISO standards can be equally applicable to educational organisations. For some, ISO 9000 is a basis for TQM. He says:

> There is much loose talk about an industrial standard for education and that, anyway is not about quality, but about systems which while demonstrably effective might be just as likely to be delivering "bad quality" as "good quality" (p. 5).

Doherty characterises the gains of ISO 9001 as thoroughness, regularity and incrementality, which are redolent of the prescriptions of the quality gurus. The gains of ISO accreditation also resemble the TQM features: clearer grasp of roles and responsibilities and authority across the university, a much wider understanding of the university's aspirations and mission, a much clearer circulation of the respective 'right' and 'responsibilities'.

The empirical research of Oldfield and Baron (2000) generates, through a sort of grounded theory formation, characteristics of quality in a university context. Rather than using the checklist of external audit criteria, they have chosen to refine the SERVPERF instrument. They favour SERVPERF over SERVQUAL, because they believe that service quality should be measured as an attitude. Also, they sought to test whether attitudes of the students change over time. They point out that profit companies use financial measures to evaluate the effectiveness of business, but it is no easy task to judge the cogency of a service provider (p. 86). Two focus groups were used to refine the 24 items of SERVPEFRF. The instrument with 24 items was canvassed among 333 students of business and management in a university in UK. The factor analysis yielded three factors. Factor I, "Requisite" reveals that students want a better co-ordination between administrative staff and academic staff. They desire that the academic staff understand their needs, deal with them in a caring fashion, and have knowledge of course provisions. They also desire that the services are performed right for the first time. Queries are dealt with efficiently and promptly. These are essential to enable the students to fulfil their own study obligations. Oldfield and Baron label factor II as "Acceptable". The factor includes items like, "Academic staff are willing to give individual attention", "Academic staff are too busy to respond to a request", etc. These are items, which are desirable, but not essential during the course of their study. The third factor, labelled "Functional", contains items, which are of a practical, or utilitarian nature and includes items like "convenience of opening hours", "faculty should have up-to-date equipment.

Oldfield and Baron (2000) compare the first year students with the final year ones and demonstrate that the students become more demanding over the years. All in all, it is a well-conceptualised and executed study.

After recounting clearly the reasons for educational reforms, the Josephs (1997) urge that an educational institute needs to differentiate itself from its competitors. They too do not find the SERVQUAL instrument as developed by Parasuraman *et al.* (1994) suitable for education for the following reasons: (a) The applicability of five dimensions as the determinants of service quality is questionable; (b) The requirement of customisation of the instrument for different services is higher than expected; (c) Disconfirmation-based measurements are not useful, as in education expectations change with familiarity of service; and (d) "Expectations are standards against which performance can be measured. These standards are formed on the basis of knowledge and experience of service". Also, the authors argue that ordinal measures should be employed and not cardinal. The authors develop a questionnaire with the help of focus group interviews and circulate among 1000 business students in a New Zealand university, eliciting 616 responses. A factor analysis yielded the following 7 factors of desired service qualities in a university: (a) programme issues; (b) academic reputation; (c) physical aspects; (d) career opportunities; (e) location; (f) time, and (g) others. The authors say, "The students addressed two issues within career opportunities: how employable they will be after getting a degree and costs involved in doing so".

2.8.3 Quality notions of manufacturing not applicable to HE and FE

There are many authors, who while confirming the importance of enhancement of quality in higher education, reject that the definitions and approaches can be derived from manufacturing. Hendry (1988) argues that the notion of zero defects can be attainable in industry. Raw material can be inspected for quality and any sub-standard material can be discarded.

Also, the inanimate material are predictable. But, when the children are raw material, the quest for zero defects becomes much more difficult. But, she affirms that quality culture procedures are desirable (Ibid.).

Roffe (1998) argues that the continuous quality improvement in higher education is people oriented rather that process oriented. In manufacturing they deal with a relatively small range of indicators. Roffe agrees with Harvey and Green (1993) that application of quality processes to HE is fraught with dangers and "may well be changed out of recognition" (p. 76). He concedes that FE could be a bit different, because the level of acceptance of managerialism is high. But, even the FE institutions are increasingly engaged in the delivery of higher education courses. In HE the individual teacher is more important. His classes range from small to big. "Individual students are then expected to consolidate their knowledge. Most academics are not in formal management roles: they do not have specific job descriptions". There are many problem-concepts that are encountered in introducing quality in HE: (a) individual and the team: the emphasis in HE is on individual and in industry it is on the team; (b) performance indicators and complexity: in HE there is a multitude of factors. Also, there is a limit to customising the products in HE.

Jauch and Orwig (1997) have sought to explain why TQM should not be adopted into the academic activities of higher education settings. "Specially the academic activities of interest centre on the functions directly related to teaching and research. For other functions in higher education TQM might be very effective, such as the administration of physical plant, cafeterias, libraries, etc. They argue that the "...unstated assumptions of the TQM model are similarly antithetical to the assumptions operating in higher education. Perhaps the unstated assumptions do not fit the requirements of the technique" (p. 280).

These are listed below:

- Continuous improvement: While TQM assumes continuous slow change is superior to quantum change, it is believed in HE that significant advances in research occur in quantum jumps.

- Benchmarking: TQM assumes that the best practices can be emulated (even "mimicked"). In HE it is believed that there is no one best way of teaching and learning styles.

- Reduce variability: Raw materials are passive and the manufacturer performs, to the best of his ability, the same operations. In teaching, the students are the raw materials. They vary in intelligence. Extinction of teachers and student variability is neither possible, nor desirable.

- Customer focus: In TQM the customer can be easily identified. But in education, ".. multiple customers exist, and their perception of quality can not be problematic" (p. 283).

- Team effort: TQM assumes that employees will participate and teamwork is possible. But in teaching, the faculty are fiercely independent.

The authors argue, by way of further explication, that while the rules of the scientific method may be precise, the history of science suggests that the major breakthroughs have come through creative application of ideas. Diversity of ideas is desirable. Involvement of the learner should be active. Many times students do not desire quality. They opt for soft courses where they will get 'A' grades. The teachers too do not take course and teaching evaluation seriously. "Colleges and Universities have been characterised at "organised anarchies..." (p. 285).

Horsburgh (2000) argues that the attributes of quality based on dimensions of high standard, zero defects and value for money, or fitness for purpose cannot directly encompass the core activities of higher education. Transformation of the learner is central. She further argues, "Quality in HE is multi-faceted and complex, and that there is no one definition that encompasses all aspects of quality and that can provide a single focus or approach for quality monitoring". She, however, says that the graduates should know more. She recommends monitoring of curriculum, teaching and assessment method.

Koch and Fisher (1998) argue that TQM has become a rage in higher education. Also, the expressions like "culture of quality", "quality is everybody's job", "team work" have become a part of university conversations. But, TQM has very little to show. Some of the earliest advocates have already abandoned it. Its results are pedestrian, like reformation of campus centres, efficient handling of admissions. These advantages might well have been obtained by other means. The TQM process has not been able to change the fundamentals like curriculum. Faculties are conservative. The TQM never addresses the pressing issues like curriculum, academic standard, access of students to higher education, appropriate role of research.

2.8.4 Other approaches and definitions

Many scholars do not believe in perfunctorily translating and transplanting the gurus' maxims on quality to education. Nor do they believe in adapting from the maxims, or in evolving quality criteria which are essentially derivatives of the classical maxims. They ask robust questions like: are the knowledge and skill relevant? Can we teach better and can the students learn better? Can we improve our services while reducing the expenditure? etc.

Gore *et al.* (2000) find two distinct and often contrasting strands of approaches to quality in education. They compare "...those approaches that are grounded in technical rational paradigm and the more generous notions of quality and professionalism, seen as a form of professional artistry" (p. 76). According to them, the features of the technical rational paradigm are: (a) technical view of quality; (b) placing paramount importance on instrumental variables that are easily observed, monitored and measured; (c) appealing to bureaucratic mind; (d) comfortable with quality definitions derived from industry; (e) behaviourist foundation; (f) nomothetic approach; (g) efficiency through application of logic and strategy; (h) standardisation of procedures; (i) scientific management or Taylorism, and (j) benchmarking. According to them, this can lead to a paternalistic and morally impoverished system. Education becomes training. "A McDonaldised approach leads to McUniversity" (p.77).

But, the professional artistry model has the following features: (a) education and quality as a practical art; (b) a holistic approach to quality; (c) quality to be measured from a multi-stakeholder perspective; (d) "getting it right the first time" will discourage possibilities of innovation and advancement of quality (i.e. it is a pre-determined standard of excellence), and (e) taking an ideographic view. The authors argue, "In some ways they create, and are part of different cultures that are colliding rather than co-existing in modern higher education institutions" (p.83). The technical-rational approach is risk-adverse. Its internal logic "is irrefutable" (Ibid.). The professional artistry approach, being holistic rather than reductionist in approach to determining quality, recognises value in working with complexity. Gore *et al.* also seek to adduce two case studies. But, they are not actual event-process case studies; they are the descriptions of curriculum revision and delivery in two universities. This is only a minor flaw in the article. Otherwise, Gore *et al.* have captured the dilemmas of all those seeking to enhance quality of HE / FE.

The reasons advanced by Warren *et al.* (1994) regarding the emergence of quality issues in higher education have been discussed earlier. They suggest, "The definition of quality assurance as it is expressed in the literature of higher education implies that quality assurance is a continuing, active and integrative process for maintaining and improving quality rather than simply a system of evaluation and checking of errors (Ibid.:4). This definition involves tautology, but it draws our attention to the dynamics of the process. Although Fraser (1992:10-11) tends to speak of quality in education in such a way that the word 'enterprise' could be substituted by 'university', he adds "...a university which takes quality assurance seriously emerges as a self-critical community of students, teachers, support staff and senior managers each contributing to and striving for continued improvement" (Ibid.:11).

Gordon (1999) argues that the contexts in which the universities used to make decisions have changed. They have to become increasingly accountable. Also, they have to escape from being overwhelmed by the combined impact of many forces: increased student numbers, greater diversity of intake, employers' demand for quality and varying attributes of the output of universities, government desire to cut costs, knowledge explosion, etc. A university has to become entrepreneurial: diversify sources of income, reduce dependence on government, have new models of thought and training.

Logothetis (1995) argues that the revolutionary changes are taking place in economy and society and these will affect educational organisations also. The teachers have to reorganise themselves, their material, and behaviour toward students and also look beyond the institution to the current training needs of the society. Currently, quantitative merits are rewarded more than qualitative merits like team work, co-operation and communication.

Interestingly, Logothetis suggests that currently there is no link between vocational training and education. Those with vocational training do not possess the soft skills like logical reasoning, communicative ability and creativity. He urges a shift from simple teaching to a systematic and strategic management of learning.

Herschback (1997) shows that one can make a case for quality in education without invoking the gurus' quotations and jargon. He argues that the developing countries have made heavy investments in education and vocational training. But the quality of training is uncertain and manpower needs unfulfilled. He advocates: (a) better use of instructional time; (b) instruction must accommodate individual differences; (c) broaden instructional repertoire; (d) use of modular learning centres; (e) positive school climate created by good leadership; (f) production of good instructional material; (g) in-service instructor training; (h) prioritisation of what to teach; and (i) continual and intense interaction with employers. He further notes, "There should be a strong relationship between what is taught and what employment requires. The source of content for vocational training is the workplace" (Ibid.: 99). He advocates organisation and maintenance of the flow of information in several ways: formation of advisory committees or employers' association, use of placement or development officers and systematic feedback from job placement.

Catri (1998) also concentrates on vocational education and suggests that it suffers from a poor image: it is meant for non-college-goers, the unemployed and students with disabilities. She suggests their reorganisation by accommodating the forces of change, creating a responsive future-focused organisation and allowing for a 'chosen image' instead of a perceived image.

Lomax, *et al.* (1996) adopt a radical and emancipatory view of quality in education. They do not accept the market determined educational imperatives, because, "... (T)hey exclude what we would see as the most important vehicle for quality, what could be called self-driven quality, which is the process through which we attempt to live our educational values in our practice as educational managers" (Ibid.:2). Their concept of living theory naturally leads them to advocate action research by the educational managers to introduce quality. They call the concept of 'prevention rather than detection' a 'deficit' model. To them fitness for purpose involves not the purpose of the market, but the educationalists' purposes. But, on the whole, dissent of Lomax, *et al.* from the quality mainstream sensitises the educational managers to the uniqueness of education.

2.9 Social, Political and Cultural Contexts of HE and FE Institutions

It has been noted that reorganising a manufacturing or service organisation or an educational institution to incorporate quality is an exercise in planned organisational transformation. Such transformations cannot be brought about, much less sustained without appropriate changes in social, political and cultural contexts of the organisations.

According to Hofstede, culture is "...the collective programming of the mind which distinguishes the members of one human group from another... the interactive aggregate of common characteristics that influences a human group's response to its environment" (1980: 26). Richards argues that the culture, has three main qualities: first, it is learned; secondly, it is shared and thirdly, it is transmitted (2001: 167). He further adds that it comprises the beliefs, values and assumptions shared by all or almost all of an identifiable group of people. It is revealed in personal values, attitudes, norms, behaviour and artefacts. He says, "It shapes and structures our perceptions of the world" (Ibid.).

Juran and Gryna (1993:31) say, "Employees in an organisation have opinions, beliefs, traditions and practices concerning quality. We will call this the company quality culture. Gaining an understanding of this culture should be a part of a company assessment of quality". It should be noted that Juran and Gryna advocate focus group discussions and questionnaires. They emphasise that both changes in technology and quality culture are essential for the introduction of quality. "Technology touches the head, culture touches the heart" (p. 159).

Juran and Gryna suggest that developing a positive quality culture involves five key elements: (a) Create and maintain an awareness of quality; this involves sending messages to all the management levels – lower, middle and higher – in appropriate idioms; (b) Management leadership in quality must be proved; (c) Provide opportunities for self-development and empowerment; and (d) Provide participation as a means of inspiring action; there are innumerable ways to do this; (e) Provide recognition and rewards. The last recommendation is a bit controversial as many argue that individual incentives should be abolished.

In the same vain, Gryna (1999:22.65) argues that for an organisation to become superior, it needs an 'unusual marriage' of technology (including appropriate design of individual jobs and quality) and culture. He continues, "Quality culture is the pattern – the emotional scenery of human habits, beliefs and behaviour" (Ibid.:). Crosby's "vaccination serum" (1984:8-9) has many principles denoting aspects of quality culture. He stresses total company-wide commitment to quality: integrity, systems inculcating common knowledge, communication, etc. He adds, "If you look behind the Japanese success, or the successes, you will find one secret: they take the requirements seriously. They create them with care; they meet them with care" (ibid.:56).

Having pointed out the fact that TQM has come under fire from many quarters, and the varying extent of success or failures claimed by both the advocates and critics, Sousa – Poza, *et al.* suggest, "There are a number of reasons why TQM has presented a significant implementation challenge, including the innate complexities of TQM itself" (2001: 745). They argue that TQM is claimed as management philosophy; but it is also associated with a number of management tools or methodologies. They suggest that while application of tools can be easy and straight forward, the adoption of the philosophy is more problematic, as "it requires the alignment of the way the members of the organisation think and behave" (Ibid.). They point out that of late corporate culture has been blamed for TQM implementation failures (Ibid.: 747-8). The authors posit a reciprocal relationship between corporate culture and implementation of aspects of TQM. That is, corporate culture affects implementation of TQM, and the latter also affects the former.

Sousa-Poza *et al.* intend to explore the relationship (not causal, but just correlational) between the types of corporate cultures and aspects of TQM. They study 133 companies in 3 countries: USA (only Missouri), Switzerland (only the German counties) and South Africa. They adopt a classification of corporate cultures: (a) people-oriented (organisation is a personal place; bosses are mentors); (b) outward oriented (Corporate; the CEO is a hard driving competitor); (c) inward oriented (bureaucratic; very rule-and procedure-bound); and (d) task-oriented (entrepreneurial). (The descriptions in the parenthesis show that this classification is surprisingly similar to that of Lomas (1999), discussed in the following pages.), Sousa-Poza *et al.* selected the following aspects of TQM: leadership, information and analysis, strategy, business results, human resource development, process and customer satisfaction.

The authors found that the relationships between dimensions of corporate cultures and those of TQM implementation are different. "This implies that the implementation plan should be adapted to ethnological culture specific to the region in which TQM is being implemented (Ibid.: 756ff). In particular, they find, using the categories of Hofstede (1980), the following possibilities: Missouri with its higher power resistance (i.e. acceptance of hierarchy) and individualism requires a task culture and can accept quantitative techniques like SPC; Switzerland (the German counties) has low individualism and possesses an outward culture. The organisations there can use quality circles and teamwork. The authors found it is difficult to categorise the South African culture, which requires a completely different approach. But, a task culture and hierarchy generally are not compatible with each other.

Oakland locates the total quality management in the context of organizational culture. He enumerates the main components of organizational culture (1995:28): 1) Behaviours based on people interactions, 2) Norms resulting from working groups, 3) Dominant values adopted by the organization, 4) Rules of the game for getting on, and 5) The climate. He further stresses, "Culture in any 'business' may be defined as the beliefs that pervade the organization about how business should be conducted, and how employees should behave and should be treated" (Ibid.).

Hill (1998:33-53) argues the quality circles were outside the chain of command and hierarchy, and the workers participation was half-hearted. The thrust of Hills's argument is as follows: As quality systems are introduced in an organisation, there will be a shift in the centre of gravity in decision-making. Managers either control quality or empower shop floor workers to do so. "Improvement process both creates and depends on cultural change" (p. 38). "Cultural change is a major objective of quality management" (p. 40).

He regrets that while research has focused on solutions to technical issues, ".. there are obvious lacunae in the treatment of social factors" (p. 38). Also, he suggests that while there is clear evidence of cultural change being under way within management, one cannot be so sure of change among the shop floor employees (p. 49).

Hart and Schoolbred (1993) strike a similar note. They argue that the nature of the organisational culture which supports a quality system is a less obvious but more crucial aspect of the development of a quality organisation (p. 23). According to them, "Culture is the traditional way of doing things, which the members accept and new members must learn". "It is a set of values, behaviour and norms which make an organisation tick" (p. 23). They suggest that while pursuing quality, many HEs / FEs are facing fear, and lack of security, lack of direction and crisis management, timetable changes at short notice and too many conflicting priorities. They conclude that the Hobbesian notions of human nature, long dispensed with in private sector, are coming back in universities. Hart and Schoolbred have probably put their fingers on a major aspect of change in the HEs / FEs: fear of new way of doing things, desire to continue in the old way, etc.

Lomas (1999) argues that the implementation of the Dearing report in the UK and the establishment of a Quality Assurance Agency (QAA) have moved the quality management towards a more universalistic and structured approach. She says, "The introduction of terms such as templates, codes of practice and benchmarking to the quality management lexicon suggests that a more rigid and less flexible system is being developed". She argues that this approach takes into account the particular and peculiar organisational culture to a far lesser degree.

She undertook research on the cultures of seven different types of higher educational institutions in UK: (1) An 'Oxbridge' college, (2) A 'red brick' university, (3) A 'plate glass' university, (4) A university which was formerly a college of Advanced Technology, (5) A 'modern' university which was formerly a polytechnic, (6) A college of higher education, and (7) An institute of higher education. Lomas employed semi-structured interviews and documentary analysis. She identifies four types of organisational culture, (1) Collegial culture; (2) Bureaucratic culture (management by meetings); (3) Entrepreneurial culture (management by marketing); and (4) Corporate culture (dominance of centralised power). While Lomas cites the Oxbridge college as an example of collegial culture, she does not give examples of other types of cultures, using the institutions she has selected. This makes it difficult for the reader to judge to which cultural type, for example, the 'plateglass' university belongs.

Currie (1997) conducted 14 semi-structured interviews of the public sector managers in the UK and a case study to find out how the managers have reacted to the goadings that they accept business values. He says, "The rise of managerialism in the public sector represents an 'unsettled' period, and has the potential to give rise to ideological conflict (Ibid.: 125). There would be resistance to changing style or role. Young (2000) suggests that middle managers particularly are prone to offer resistance as they work in a highly stratified environment and with conflicting ideological interpretations of reality. Gordon (1993) suggests that older universities resist change and newer ones are accustomed to it. But, he sees a remarkable change in the nature of educational activities. There is a need to revise the cultural values of the organisation to assimilate the developments (p. 18). In another article, Gordon (1999) suggests that a university not only has to be entrepreneurial but also should seek to establish "a non-exploitative, suspicion-free context in which a culture of quality improvement can flourish…". He also advocates "a process of internal quality monitoring enabling the consistent gathering of relevant evidence to inform analysis and reflection".

Laszlo (1998) in his generally prescriptive article argues that the difference between quality assurance and TQM is that the latter permeates the whole organisation. In the title of the article itself he emphasises three C's of success: Commitment, Culture and Cost. Wong and Kanji (1998) conducted a study of 53 Sino-foreign joint ventures. They found that the quality systems were badly implemented in both letter and spirit. The employees were made to memorise the ISO specifications. They conclude that responsiveness to both macro and micro culture is necessary.

2.10 Quality Assurance and Managerialism

2.10.1 Managerialism and the major thinkers of TQM

Section 2.9 discussed, among others, the cultural aspects of implementing quality assurance systems: attitudes to change on the part of both management and workers; manager - worker relationships; fear of the unknown and the like. It was also noted that the cultural change following installation of quality assurance is one of the least researched areas. Changes in organisational culture and managerialism are closely related. All organisations, whether public sector or private, manufacturing or service have to be managed: mobilising and organising human and physical resources, designing and assigning tasks, planning, taking crucial decisions, etc. In fact, these days administrators have to be managers, too. The two concepts – administration and management - are increasingly overlapping. But the styles of management vary from one type of organisation to another, one organisation to another, and again the way quality assurance is pursued. The implications of pursuit of quality for managerialism in general will be discussed in this section. The implications in the field of HE / FE will be examined in the following section.

Although almost all the quality gurus discuss, to a greater or lesser extent, the cultural correlates of quality assurance, none of them specifically discuss managerial implications. But, such implications can be derived from their writings. The derivation is easier in the case of Deming than in the case of others. The analysis of some of the 14 points of Deming by Evans and Lindsay (1996) throws a good deal of light on how he viewed managerialism in the context of quality assurance. His second point, "learn new philosophy" would mean, according to Evans and Lindsay, Taylorism's quota driven production, work measurement, and "adversarial relationships will not work today in to-day's global business environment " (1996:75). This strikes at the roots of Taylor's managerial philosophy of keeping planning and implementation separate – a philosophy that dominated the managerial approach for more than 50 years.

Again, according to them, Deming's third point, "understand inspection", would mean, "Inspection should be used as an information gathering tool for improvement, not as a means of "assuring" quality or blaming the workers (Ibid: 76). The fifth point, "Improve constantly and forever", would mean the workers should be taught to detect special causes, while the management would detect common causes. According to the researcher, this would mean that the workers should be entrusted with more responsibilities and greater power of decision-making. Deming's eighth point "Drive out fear" would, according to Evans and Lindsay, mean that mutual respect between managers and workers would replace adversarial relationship (Ibid.). His ninth point, "Optimise efforts of teams" has far reaching organisational and managerial implications. Cross-level and inter-departmental functioning means better understanding among workers and more delegation to lower levels. His twelfth point, "Remove barriers to pride of workmanship" has been interpreted by Evans and Lindsay as follows: "Deming believed that one of the biggest barriers to pride in workmanship is performance appraisal" (Ibid.:80).

We have earlier noted in section 2.3.1 the efforts of Anderson *et al.* to derive managerial principles from Deming. The principles comprise leadership, internal co-operation, learning and quality. But, the authors also argue that Taylor and Deming are not mutually exclusive. All these interpretations generally mean rejection of command and control or directive – command style of managerialism and Taylorism: separation of planning and design from production. This is particularly important because new managerialism in HE / FE has come to be discussed and practised in the directive – command, target oriented terms.

Juran and Gryna do not dwell much on managerialism, except for saying that a positive quality culture has to be developed and this culture includes management and workers' empowerment and self-development. Garwood and Hallen also argue that Juran advocated empowered work systems including teams (1998: 15.12). But Evans and Lindsay argue that Juran is in favour of different levels of management speaking in their own languages and that quality can be improved without making any major cultural (managerial) changes (1996: 82).

Crosby does not discuss in detail the managerial implications of the "quality management process grid" (1996: 31ff). He does not even mention the mode of workers participation. Whatever little he has written on managerialism implies that the quality assurance can be attained through the prevailing system. He argues,

> They (the management) are the only ones interested in the customer; they are the only ones interested in the whole company. Every one else, and I mean every one only cares about their own area and interface (1996: 210).

He advocated the managerialist style of right selection, training, encouragement positive relationship, encouragement in the form of a pat on the back or a gesture (Ibid.). Feigenbaum (1991), too, does not pay much heed to managerial implications of pursuit of quality. His 9M's do include "management". The farthest he goes is to say that today's workers require more than monetary incentive like a sense of accomplishment (Ibid.: 60).

Garwood and Hallen (1999: 15.1–15.29) write in the idioms of managerialism as implied by Deming: decentralization, workers' involvement and empowerment, building teams and the like. They argue that every other item in the Baldrige scheme relies very heavily on properly managed human resources.

They say,

> Employee empowerment is an advanced form of employee involvement. Empowerment is a condition in which the employee has the knowledge, skills, authority and desire to decide and act within the prescribed limits. The employee takes responsibility for consequences for actions and for contribution to the success of the enterprise (Ibid.:15.1).

The classification developed by Giroux and Landry (1998) to analyse the approaches to quality is also useful in analysing managerialism. The authors' binary categories of 'rationalist' and 'normative' schools have been discussed earlier. These schools have managerial implications. The rational school includes scientific management theories, e.g. of Taylor. The normative school views an organisation as a "locus of shared values and moral involvement" (Ibid.:185).

2.10.2 Managerialism in Higher and Further Education

Like the theme of application of quality in HE / FE, managerialism in HE / FE also shows divergent strands: (a) mangerialism reflecting the major TQM philosophies and strategies; (b) managerialism almost resembling directive command style; and (c) developing collegial style of management, if necessary by modifying, reinterpreting or even rejecting TQM. It may be noted that sometimes a few writers do not take a clear stand and tend to speak in multiple voices.

a) Managerialism reflecting TQM philosophy

Demichiell and Ryba (1997) argue that the old managerial styles of single point decision, decisive action, and military type of command and control are out. To deliver customer-driven quality products, visionary and reflective types of management are needed. The authors argue, "Teams are the new heroes and their members adopt the characteristics of team performance rather than clinging to the concept of mastery over environment". But, they also add, "Faculty and others must come forward and be accountable for their idea."

The following four action research studies employ action – reflection – action cycles, and participation and involvement of the workers (here teachers, and sometimes students). Sommerville (1996) was the principal of a special purpose college in the UK. She decided to pursue the total quality management, particularly along the lines of Kaizen (steady improvement), on the basis of the European Quality Model. She found that cultural change was not explicitly mentioned in the model. All the staff together developed a model of culture into which they wanted the school to be transformed. They observed and corrected one another. The 47 items of the model of cultural change include many, which are directly related to management, like: involving people in decision-making; working together; taking responsibility.

Bone (1996), the principal of a high school in UK resorted to action research in order to introduce collegiality in the administration. According to him, modern managers face the dilemma, "How do I achieve a balance between my views of collegiality and my need to take control ?" (Ibid.:26). As a result of his research, he personally moved away from the role of solitary hero towards a more co-operative style of leadership, although he recognised his responsibility to provide clear leadership (Ibid.:33).

McKen (1996) undertook, in her capacity as quality development manager in an FE college in UK, to develop and install a monitoring and evaluation process. She employed an action research strategy. She says,

> Imposed change is unlikely to enhance the learning process particularly in an educational context. Ideally educational leadership needs to be seen as a social process, facilitating shared experiences, which harness the talents and energies of every one in the organisation (Ibid.: 49).

She further argues that autocratic leadership would not make the staff respond. She promoted the idea of the staff ownership of the monitoring and evaluation process.

Stevens (1996) also undertook to pursue total quality management in his high school in UK. He too employed action research strategy. He believes that quality is not the sole prerogative of the school, but has to be negotiated with parents, pupils, feeder schools, communities and commerce. Staff perception should be placed at the heart of the decision-making process. He advocates flat organisations. He argues that as long as the educational values are kept to the forefront, there is no need to be frightened by the (TQM) techniques and strategies taken from the industry (p. 69).

b) Managerialism almost directive-command type

The philosophies and strategies of TQM and the nature of a supportive organisational behaviour and structure have been discussed in the earlier sections. Minimally, these philosophies and strategies subscribe to customer satisfaction through fitness for purpose, conformance with requirements, prevention rather than detection of errors, self –directed workers, intra-, inter-departmental and cross-level teams, leadership instead of supervision and surveillance, empowerment of workers and decentralization and the like.

The public sector organisations including HE / FE institutions have been urged and also compelled to adopt TQM philosophies and strategies. However, they are being asked to adopt 'new managerialism' or 'new public management', - a managerial approach prevailing in those private sector organisations, which have not whole-heartedly subscribed to, and operationalised the TQM philosophies and strategies. Chandler, *et al.* say that these new managerial techniques draw on approaches from scientific management to human relations "with elements of organisation development and corporate culturism – with emphasis on visions and missions – thrown in for good measure" (2000: 3-4).

The following features of the new managerialism can be gleaned from various writers (Berg, *et al.*: n.d.; Chandler, *et al.*, 2000; Clark, 1998; Deem, 1998; Lawler and Hearn, 1995; The Report National (Sir Ron Dearing) Committee of Inquiry into Higher Education, 1997):

1. The HE / FE institutions (and other public sector services like public health) should do a better job for less money; demonstrate 3 E's, i.e. economy, efficiency and effectiveness. They should justify expenditure. They should reduce the unit cost per student.

2. The institutions should develop an entrepreneurial culture. They should reduce dependence on government, raise resources on their own and diversify income sources. They should also start new units outside the traditional departments, introduce new modes of thought and display stronger capability.

3. There should be greater managerial control over the academicians, including proper surveillance, measurement of performance, use of pre-set output measures; oversight and regulation through audit and inspection, control of professional work, greater accountability, discretionary managerial power, quasi-market competition – including internal competition between employees, disaggregation of the organisation into smaller units. (Contrast this with Deming's views on inspection and quotas.)

Deem (1998) argues that in many universities there is hybridisation and co-existence of both the new managerialism and old collegial autonomy. She also suggests that the new managerialism exerts considerable pressure. Control and regulation of academic labour have replaced collegiality, trust and professional discretion. She distinguishes between soft and hard managerialism (Ibid.:53). Soft managerialism tolerates inefficiency and ineffectiveness, and seeks to invent a rational mechanism for university performance. Hard managerialism involves imposition of discourses and techniques of reward and punishment on those who are untrustworthy. She seeks to support her arguments by two studies: the first a survey of women academicians and the other of financial crises at the Lancaster University. While she is not able to say much about gender and the new managerialism, she finds that the Lancaster University became more tightly organised due to the new managerialism.

The report of the National (Sir Ron Dearing) Committee of Inquiry into Higher Education (1997: Ch. 15) says that educational institutions would gain more by corporate approach. The Report also recommends training and information for the academicians with management responsibilities, and evaluation of an institute's performance with external assistance and benchmarks. Chandler, *et al.* (2000) admit that the heads of departments prioritise managerial responsibilities over academic, and control the staff. Those staff lower in the hierarchy rush through their daily routine out of fear of their livelihood. But, they also argue that it is wrong to posit managerialism against professionalism. Many academicians felt that things were too loose in academes. Chandler, *et al.* say, "Elements of professionalism and mangerialism can be thus woven together – if sufficient space is allowed to the professions involved" (Ibid.:13).

c) Collegial type of managerialism

Many writers concede that there is a tremendous pressure from governments, employers and the society in general on the HE institutes to reorganise themselves and deliver quality. However, they also argue forcefully that in the name of quality wrong management policies are being adopted. In the context of the HE's TQM has to be interpreted differently and collegial style of management alone can maintain the ethos of HE.

It has been noted earlier that Moreland and Clark (1998) studied a school, an HE institute (a former polytechnic) and an FE institute, all of which had adopted ISO 9000. They observe that there are two types of collegialities: collaborative and contrived. Adoption of ISO 9000 links to the second. While working relations are regulated and made predictable in the short run, there is an increase in bureaucracy and impersonal feeling.

Hart and Schoolbred (1993: 26) argue that the managements themselves are yet to embrace the quality values and "recognise the expectations they create". Holmes (1993) recognises the reasons for the emergence of the managerialism in the UK. He argues that this (the managerialist mode) has widely impacted the teachers, groups and departments. Some of activities of teachers have ceased. The morale of the teachers is low. He continues, "It is not surprising that those drowning in the sea of new-found managerialism have sought refuge in the life boat of techniques, again drawn from the commercial world" (Ibid.:5). The terms like BS 5700, ISO 9000, TQM have "caught on with a vengeance".

Berg, *et al.* (n.d.) compare two universities – one each in England and Sweden - to assess the impact of new public management. They argue that it has led to the growth of the McUniversity and academic assembly lines. It has brought in harsh bureaucratic regime, audit society and endless paper trails. They say, "Any exhortation to managers in universities to be charismatic teachers, even entrepreneurial, in such a stultifying environment, in which bureaucracy is increasing, appears at best contradictory". The academics are not used to hierarchy. In relation to one another, they are in different positions in different situations. The authors list the following effects on the teachers: bad health; burn out; no time for research; taking work home, which has a more adverse effect on women teachers; loss of flexibility; every thing to be monitored; vulnerable to be reached at home during weekends; lack of interest in the profession; etc.

While recognising the forces that are compelling the HE sector to be more like business sector, Holmes and McElwee say, "one of the results of such processes (e.g. managers justifying their action, business-like etc.) has been a pre-occupation with TQM, which, we argue, is linked to performance appraisal and 'hard' human resource management techniques" (1995:5).

The authors distinguish between functionalist and interpretive approaches to human resource management. The functionalist model treats employees as reactive, rather than pro-active; assumes that employees pursue the same agenda as that of an organisation; managements' pre-occupation with bureaucratic and utilitarian values; over-riding concern for efficiency and cost-effectiveness. The manager wants compliance and control.

The interpretive approach considers employees as creative and having a choice of action; their commitment must be earned or won; the human resource management policy employs negotiation and accommodation. Teaching, research and scholarship are not 'managed' by the seniors in the sense of control and direction. The seniors should create a proper environment. Students and teachers are engaged in a dialectical process. TQM managerialism is not appropriate for HE; it inhibits professionalism and quality. If the research of scholars is controlled, it will inhibit creativity. For example, Harley and Lee (1997) found through their research that in England the reviews and appraisals of research in economics by Research Assessment Exercise led to the neglect of research in the area of non-mainstream economics.

The following main points have emerged out the analyses of literature on quality assurance and mangerialism:

1. A careful study of the writings of the quality gurus reveals that they, in varying degrees, favoured decentralization, empowerment of workers, self-managing teams, leadership instead of supervision.

2. The problems faced by HE's and FE's like reduced funding, accountability, improved instruction cannot be wished away. But TQM or new mangerialism should not be equated with what Holmes and McElwee (1995) have called the functionalist approach to human resource management.

3. Being entrepreneurial, 'business-like', are not inconsistent with what Holmes and McElwee (Ibid.) have called interpretivist approach.

4. Those schools and colleges which sought to pursue quality goals through participatory action research succeeded because participation, unlike command-directive management, elicits co-operation and commitment of the workers.

2.11 Development of Theoretical Framework in the Context of the Study

The preceding review of literature has discussed the various aspects of quality. The review began at a general level and gradually concentrated on the more specific level - that of HE / FE. The following significant and interconnected propositions can be derived from the review of literature:

1. The quality movement, however imperfectly developed and employed in the manufacturing and services, was bound to affect education and other public sectors.

Most countries have begun to recognise the role of quality in all spheres, including education, and other public sector activities. In the developed countries, the educational sector has been called upon to give value for money and align itself with needs of the market. This is also true of countries like the Kingdom of Bahrain, which are extractive economies. But, the burden is greater due to the urgent need to undertake diversification of the economy. It is not just a case of the existing educational institutions adopting quality regimes. Such educational infrastructure has not developed. Even the new institutions have to begin with considerations of quality.

2. The drive for adopting and implementing TQM may arise outside the organisation or inside the organisation; or both the outside and inside impulses may coincide.

In many countries, quite a few manufacturing organisations adopted TQM as the last resort, - after losing market share. In many cases, the leaders of the organisations started becoming aware of the environment and sought to install quality systems. Many British universities were explicitly told to adopt quality systems. But, as noted in the Lomax (1996) anthology, the impulses for quality came also from within, - from sensitive teachers / administrators.

3. Identification of the stakeholders and the consumers / customers of HE / FE is necessary to develop an adequate definition of quality in HE / FE.

Even in manufacturing the definition of consumer / customer has been widened to include not only the end user, who pays for the product, but also the wholesalers and retailers. The state, which is very much concerned with the economy, employment and exports, is an important stakeholder. In HE / FE, the state, society (including taxpayers), parents, teachers, and employers are the important stakeholders. The quality of education impacts them. The parents, the students, and the employers are the customers. Quality – oriented HE / FE institutions will have to take into account the opinions and evaluations of these groups.

4. In HE / FE the value added to the individual student is the product. The features of the product are knowledge, skills, attitude and the capability to acquire higher knowledge and skills, and learn better attitudes. Also, these features are not static. A good quality HE / FE seeks to satisfy, through the above features, all the customers and stakeholders, in an increasingly balanced and harmonious way.

Achieving balanced satisfaction of all the stakeholders and customers is a highly dynamic and interactive process. We can produce and deliver an instructional programme, which may appeal to the student. It is of no use if the market does not find it effective or useful. The parents will be unhappy, if their children do not earn well.

The various cryptic definitions of quality, which have become buzzwords, have been discussed earlier. Some of these cannot be applied to HE / FE. There can be no such HE / FE product which can be described as a "zero defect" one, or has "freedom from deficiencies" produced by the six-sigma approach. "Getting it right for the first time" cannot be easily applied in HE / FE, (except in the case of support services like registration, refund, etc.). "Fitness for purpose", "Fitness for use" do not constitute absolute standards. They are relative.

All that we can do in HE / FE is to grade the products (students or the value added to them) and give a signal to the market that it can expect so much from each product. "Conformance to requirements" cannot be fully applied. In a classroom, whether in HE / FE, there have to be variations in teaching /training. Students cannot be customised. There can be no such thing as an "academic assembly line". No two teachers are alike; no two trainees or students are alike.

It may be argued that the HE and FE institutes differ fundamentally. In HE the teacher dominates. Two teachers can differ on the fundamentals. The teacher is the main driver of the curriculum. In FE there is more standardisation of teaching and curricula. One teacher can substitute another and that also regardless of the calibre of the trainees.

But, these differences have been overstated. Many FE institutes have begun imparting specialised and higher-level training. There is always a unique dynamism in a class, and the relationship between a class and a teacher even in FE is considerably unique.

5. Any conceptualisation and development of a quality system is a phased process and has to take into account the views of all the stakeholders.

The leaders of an HE / FE institute need to first take into account the criticism that TQM represents a neo-rightist and hegemonic ideology. The workers should not feel that in the name of a new system, they are being exploited. As discussed earlier, Holmes and McElwee (1995) discovered two different ways in which TQM and the related HRD can be conceptualised and implemented: the functionalist and interpretivist.

They argue that the interpretivist approach would be more appropriate to the academe. The interaction among teachers, and between the teachers and the students has to be envisaged and strengthened. Any conceptualisation of quality assurance has to anticipate resistance or inaction, and understand the reasons for these. Participation of the stakeholders is essential even in conceptualising an appropriate quality assurance system. It was also seen in the Lomax (1996) anthology that participation of teachers and students ensured successful implementation. All the efforts narrated in the anthology (Ibid.) involved action research.

6. Implementation of any quality assurance system will involve cycles of plan – do – check – act, or their variants. There is reciprocal relationship between the culture of an institute and the successful implementation of a quality assurance system. An institute must have an appropriate culture or develop one. Involvement and participation of the teachers and students is essential for proper implementation. Imposition of a quality system will not work.

As Sousa – Poza *et al.* (2001) have pointed out TQM can be viewed as a management tool or a philosophy, but the implementation is more difficult, because the members of an organisation have to reorient their thinking and behaviour (p. 745). It must be recognised that implementation acts on institutional culture, and institutional culture acts on implementation. All the aspects of institutional culture are not congruent with every single feature of TQM.

7. An appropriate style of managerialism is necessary for the proper functioning of quality assurance system. The latter requires decentralisation of power and decision-making, openness and transparency; self-learning and self-directing teams; a combination of collegial and entrepreneurial style of management, and a facilitating leadership.

There has been a paradoxical development in the adoption of quality assurance systems in HE/FE. Whereas the logic of the quality assurance literature demanded the empowerment of workers, team work, decentralisation of power and responsibility, "the financial crunch", expectations of the markets and findings and recommendations of the committees like the one headed by Sir Ron Dearing (1997) required tighter surveillance, control and enforcement of discipline – fiscal and academic.

Richards (2001:165) argues that the economic rise of Japan and Asian 'tigers' and 'dragons' dispelled the notion that both western industrialisation and management can be easily transplanted elsewhere. In his quest to understand organisational culture and behaviour, Hofstede (1980) classified national cultures along the following dimensions: (a) individualism vs. collectivism; (b) large vs. small power distance; (c) strong vs. weak uncertainty avoidance (cultures high on uncertainty avoidance will resort to fixed rules and procedures); (d) masculinity vs. feminity (a masculine culture worships material success). Later on he added a fifth dimension: 'Confucianism': long term orientation. An HE / FE institute seeking to run a quality assurance system cannot afford to encourage only individualism.

Team spirit demands cohesion and a high degree of collectivism. It also requires smaller power distances, due to the nature of cross-level and inter-departmental teams. The institute has to have a policy of low risk avoidance. It cannot build fences around itself. The leadership of such an institute should take the risk of exposing itself to the staff, public, external verifiers and employers, - not out of fear, but a genuine desire to learn. Material success is desirable but it should not be overemphasised.

The classification of organisational cultures adopted by Lomas (1999) has been discussed earlier. She uses the following typology of cultures: collegial, bureaucratic, corporate and entrepreneurial. We have to rule out bureaucratic and corporate cultures for managing TQM in HE / FE. A combination of entrepreneurial and collegial cultures would be desirable, - more of entrepreneurialism, and less of collegialism.

2.12 Summary

A combination of factors almost suddenly precipitated the issue of quality in manufacturing. Many thinkers accepted the challenge of conceptualising quality and came up with their analyses and prescriptions: Deming, Juran, Crosby and Feigenbaum. Their views have generated further discussions and debates. Quite a few writers have refused to climb onto the bandwagon of total quality management. They do not reject the idea of pursuit of quality. They think the price to be paid for the prescribed mechanism of organisational changes is enormous: a kind of new bondage for the workers, imposing unwarranted responsibilities on them, paper work, bureaucracy, etc.

Extending the idea of quality to the service industry has proved to be problematic. Service is almost a one-time transaction. Owing to many factors, quality assurance was bound to enter the field of education.

Conceptualisations of quality in education are even more problematic. There are multiple stakeholders. The interaction between the students and the teachers is unique. Some writers seek to translate the quality mechanism of manufacturing to education. Some others want to adapt these ideas to education. A few reject the adoption of ideas and the jargons of quality in manufacturing. Some want to pursue quality in their own ways. Quality in education involves the enhancement of the capabilities of an individual student / trainee while balancing the requirement of the multiple stakeholders.

A few writers stress that evolving quality assurance mechanisms, implementing and sustaining them are exercises in organisational change. But, all organisations are suffused with unique culture. The interface between quality assurance and organisational culture has not received much attention in terms of research.

Again, efforts to develop quality models have to reckon with managerial issues. Whether one likes it or not, state, society, parents of the students / trainees, taxpayers expect the HE/FE institutions to be quality conscious. But, these institutions have to harmonise the interests of the stakeholders.

CHAPTER THREE: RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This chapter discusses the research methodology and design employed for answering the research questions of the study. The study entails research questions to answer which data have to be collected from multiple sources: stakeholders such as employers, staff, trainees, the management system, available records, etc. More importantly, we have to examine over time what the impact of the various measures was, what lessons were learned from what results, and how actions and further policies and actions were adopted. We are studying how organisational changes can be planned. Hence, a case study involving action research becomes the best methodological strategy. The research process for this study is shown in **Figure 3**.

The following sections will discuss the research methodology and design of the study and the various aspects of the design, which are listed below:

- research approach and procedures,
- time frame of BTI case study,
- action research (AR) as a methodology,
- action research group structure, process and practice at BTI,
- design of survey instruments,
- focus group interviews, and
- triangulation of the case study.

3.2 Research Approach and Procedures

Research on organisational behaviour and change has always posed many problems to researchers. Cunningham (1993:253) observed that, as research methods become more complicated, they have also become less relevant to

the study of organisational change. Having had its own unique evolution and history, an organisation has employees and groups of employees. It has customers and stakeholders. The widely used survey design is only partially useful in studying organisational behaviour and change. In such a context the role of a survey instrument changes. The very complexity of organisational change rules out formulation of multiple hypotheses with variables. Rather, survey instrument becomes a useful device to obtain certain types of relevant data. Questionnaires and focus groups can be used for assessing the impact and evaluations of actions, and for envisaging further action initiatives.

The research approach adopted in this study involves a triangulation of multiple research designs, methods and analyses (The research paradigm for this study is shown in **Figure 4**):

- Action Research Group Process,
- Survey Instruments (questionnaires), and
- Focus Group Interviews.

The following points spell out the details of this research approach:

- Action Research Group plans and implements action steps,
- Survey instruments generate the status of quality as perceived by the stakeholders,
- Focus group interviews have been utilised for various purposes, particularly, for generating data and new ideas on the relevant issues.

Research question 1 is sought to be answered through the review of literature. The research questions 2 to 5 mentioned in section 1.3.2 are sought to be answered through the above approach, which involves triangulation. The Action Research Group Structure, Process and Practice at BTI will be discussed in section 3.7. The survey design and focus group interviews will be discussed in sections 3.8 and 3.9.

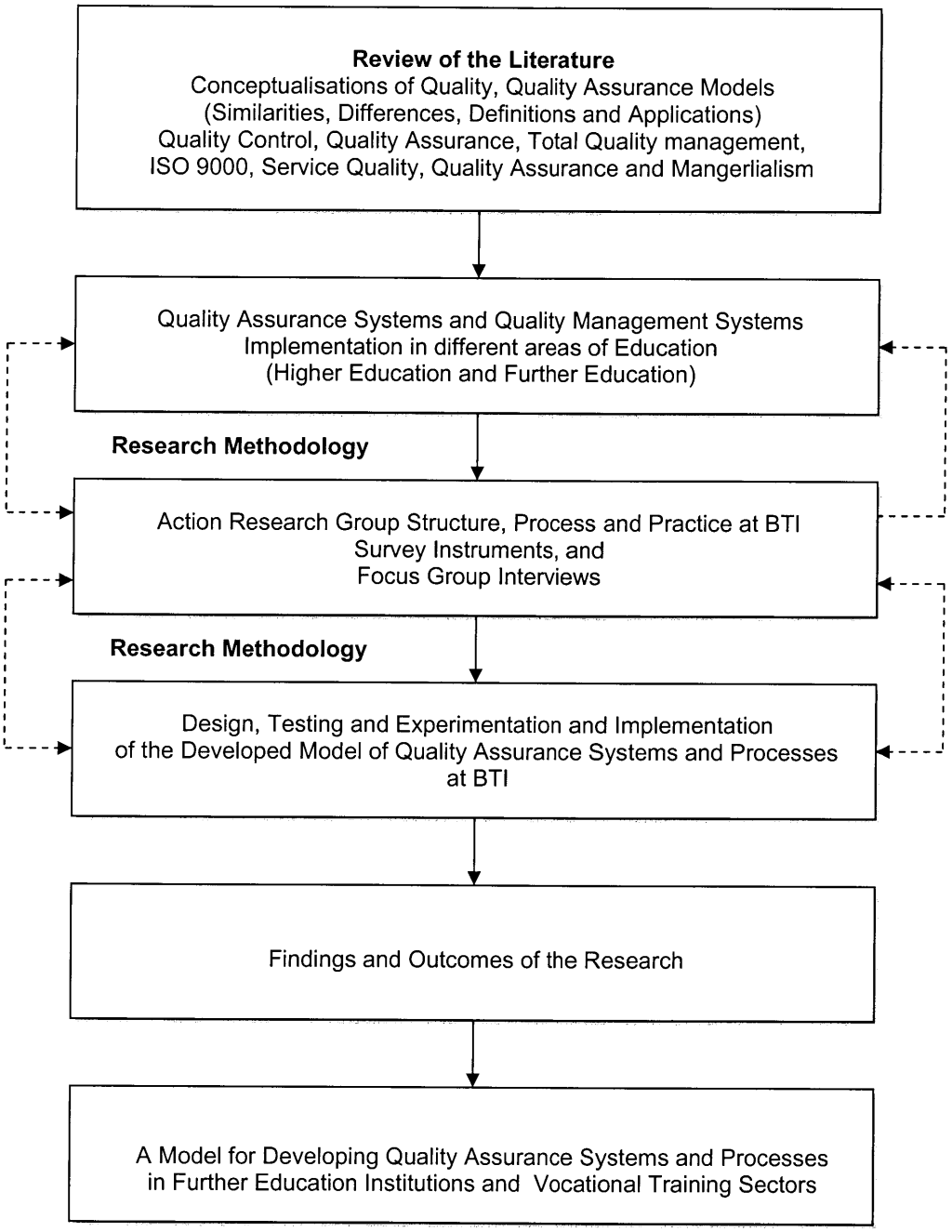


Figure 3 - The Research Process

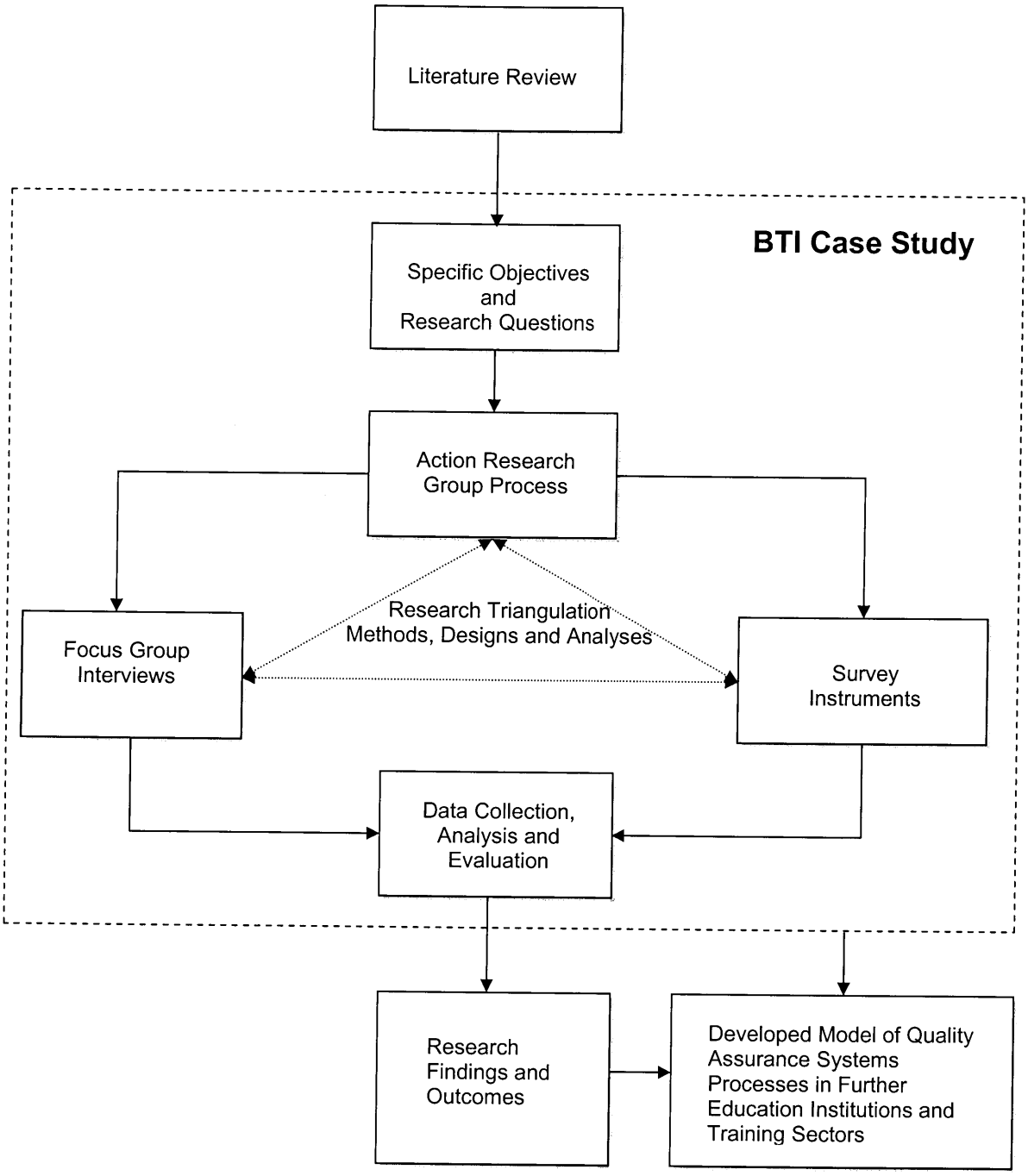


Figure 4 - The research paradigm

3.3 Time Frame of BTI Case Study

As argued in the sections on objectives of the study (1.3.1) and the research questions (1.3.2), this longitudinal case study involves continual conceptualisation, implementation and evaluation of quality assurance actions over time. The longitudinal aspects of the case study employed here are as follows: 1) the Action Research Group initiates conceptualisations of an appropriate quality assurance model for BTI, 2) the critical groups and stakeholders are involved, 3) the views and opinions of the stakeholders are collected and analysed, 4) depending on the findings and after reflection, further plans are devised, and 5) actions of quality management are evaluated and reviewed. Time is an essential factor here. One stage of action, depending on the results, determines and paves the way for the next stage. Figure 5 illustrates this process.

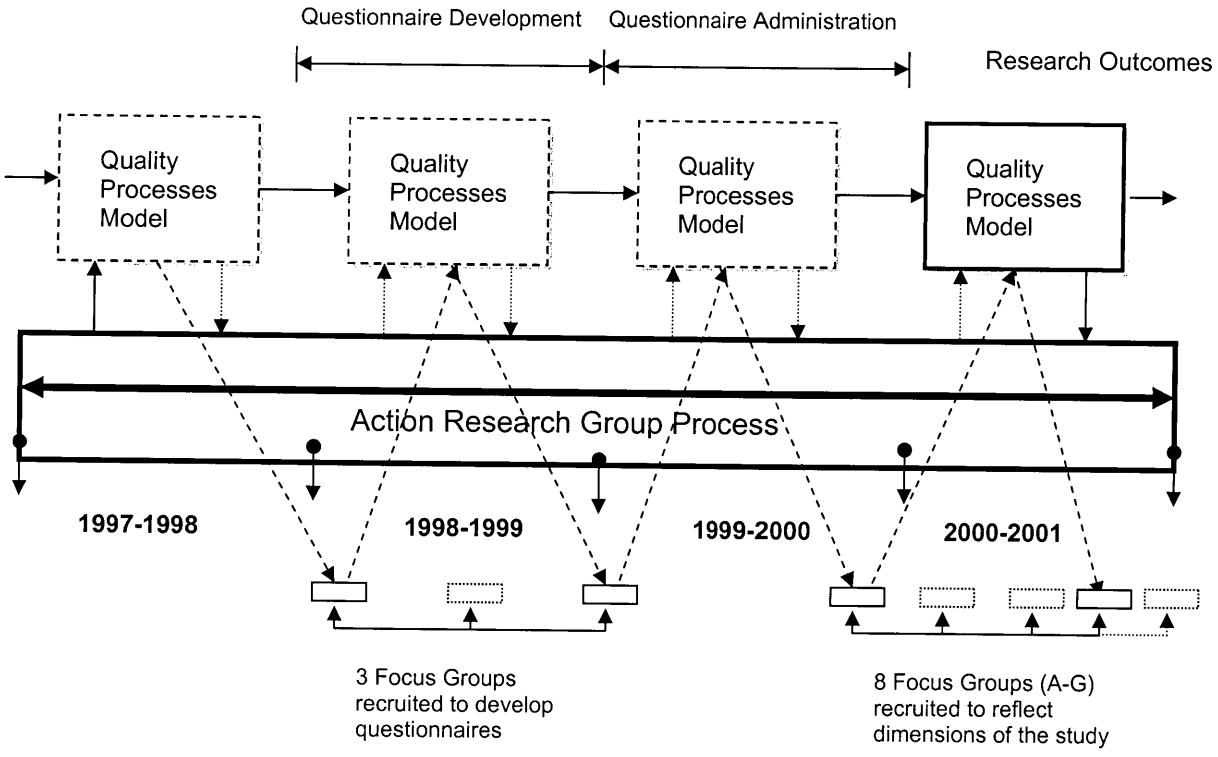


Figure 5 - Action Research Process

The cycles of planning, reflecting and acting are discussed in section 4.2. The cyclical process through time involves development of a model of quality assurance processes, implementation and evaluation. As shown in **Figure 5**, the study covers the period of the training year 1997/1998 to 2000/2001, during which major quality initiatives were taken, and the results examined and consolidated.

3.4 Action Research as a Methodology

The idea of Action Research (AR) was mooted at the end of the Second World War. The strategy of action research did not take off immediately. Quite a few things had to happen before it resurfaced. One of them is the increasing importance of the study of organisational behaviour. As Eden and Huxham (1996:527) have observed, "In common with other qualitative forms of research...*action research* has become increasingly prominent among the researchers involved in the study of organisations as an espoused paradigm used to justify the validity of a range research outputs".

3.4.1 Origin of Action Research and Participatory Action Research

Most of the researchers attribute to Kurt Lewin the inception of the concept of action research. Lewin coined the phrase around 1946. A few like Eden and Huxham (1996: 527) mention some other authors, crediting J. Collier also with the idea of action research. Almost at the same time across the Atlantic in England, Revans, a member of the National Coal Board after the World War II, began to consolidate his experience in terms of action learning. As Grieves (2000: 45) mentions, Revans was Britain's first professor of industrial relations. Since the inception of the term, and particularly more recently, Action Research (AR) and its variant, Participatory Action Research (PAR), have been interpreted differently by various researchers. These researchers differ in terms of epistemologies, the purpose of action, relative roles and contributions of the action researcher and the members of the organisation and the nature of theories generated through action research.

As Reason (1998: 148) argues,

> I no longer use the term 'new paradigm research', a term with which I have been identified, finding it now too vague and rather embarrassing; nor am I keen on the term 'action research', a catch-all term, which, while helpful if used with caution, is too all-inclusive, since it can be used to cover everything from emancipatory inquiry through to positive field research. I prefer to think of a 'family' of related methods, which are experiential, participative and action-oriented, each having its particular place within a wider picture.

Eden and Huxham (1996: 528) reinforce this view of how action research has become complex and diverse.

> In recent times it has become more difficult to identify the main thrust of action research; the literature has become confused in a variety of ways. On the one hand, there have been a number of different interpretations of the term action research, while on the other; an assortment of different (but similar) terms has sprung up.

Hence, it is necessary to carefully examine the origin of action research, its resurgence in recent times, and the different interpretations and usages. This will help the researcher to develop his research design in the perspective of his own objectives.

Lewin was immensely interested in group dynamics. As Aguinas (1993:418) has argued, "Lewin was concerned with inter-group majority minority relations, and social change and improvement. Because of these concerns, he suggested that social research should lead to social action and proposed a model that included both science *and* action, because ' research that produces nothing but books will not suffice' ". Cunningham (1993:12-13) finds that in addition to race relationships, organisation behaviour and improvements in labour management relations also interested Lewin. According to Eden and Huxham (1996:527), Lewin held the view that the study of general laws has to be combined with the diagnosis of particular situations.

As Peters and Robinson (1984:114) put it, Lewin stressed the need to "bridge the gap between the concrete and the abstract -- i.e., the gap between social action and social theory". Around the same time J. Collier called the attention of social researchers to the need to develop an action-based approach to research (Elden and Chisholm, 1993:121).

Lewin wanted to bend sociological theories to the betterment of community relations. As Peters and Robinson (1984: 11) mention, Lewin himself wrote only two papers of 22 pages that directly dealt with the subject. He directed his energy towards building institutions that would involve themselves in action research. He spells out the organic relationship between action and research in the following words:

> Problems of general laws deal with the relation between possible conditions and possible results. They are expressed in if...so propositions. The knowledge of the laws can serve as guidance for the achievement of certain objectives under certain conditions (cited in Peters and Robinson, 1984: 115).

We owe to Lewin the famous statements: "There is nothing so practical as a good theory"; "There is no meaningful action without research"; "The best way to understand something is to change it". As Elden and Chisholm (1993:122)[1] sum up, "Knowledge without action is meaningless. Research in an action mode is simply one form of scientific inquiry". Argyris succinctly sums up Lewin's conceptualisation of action research. He says,

> Lewin's action research was characterised by six basic features. (1) it was problem-driven, (2) it was client- centred, (3) it challenged the status quo and was simultaneously concerned with (4) producing empirically disconfirmable propositions that (5) could be systematically interrelated into the theory designed to be (6) usable in everyday life (1993).

[1] There are others who will only partly agree with Elden and Chisholm. These dissenters would like to be dissociated from "scientific inquiry". Their non-, anti-positivist approach to action research will be discussed in a subsequent section.

Lewin did not develop fully the epistemological roots of his approach to action research. Peters and Robinson (1984:115) argue that if we were to judge Lewin only on the basis of a couple of very brief papers, we would come to the conclusion that he was advocating a new research strategy, rather than a new epistemological approach. But, as Peters and Robinson continue, if we put his conceptualisation of action research in the context of his other statements, like his rejection of the positivist ideal of philosophical unity of all sciences, rejection of quantification, espousal of shared set of meanings, then we could conclude that he was *implicitly* challenging positivism.

As Kemmis (1980:8) has argued, Lewin remained on the fringes of social psychology as he "challenged an orthodoxy about the role of the social scientist as the disinterested, 'objective' observer of human affairs. Again, Kemmis continues, "Although action research (of Lewin) had challenged the epistemology of positivist research, it had not gone close to overthrowing it" (Ibid.:10). Eden and Huxham (1996:527) argue that in so far as the focus was on the relationship between perception and action, it was an interpretativist approach to research.

Revans (1983a) argues that change and uncertainty are inseparable. Highly organised knowledge in the form of management theory is a hindrance in dealing with uncertainty. The leaders seeking to solve a practical problem must develop what he calls "Q factor" – the ability to ask fresh and useful questions. No authority can teach a manager to do a right thing (Ibid.). As Day (1994:4) suggests, Revans regards the distinction between action research, learning and communication as the greatest myth of management education. Revans (1983c) emphasizes that learning involves doing; doing is the only effective way of learning. He (1983b) was also against turning over unsolved problems to the uninvolved, because the problem or the project is bound to be improperly specified.

As said earlier, for various reasons the methodology of action research or its variants did not take off immediately. Positivism or the scientific method reigned supreme in the first three decades of the post War II era. The action research methodology was not very quantitatively oriented. Pyrch (1998:v-x) suggests that, action research could take off only recently for a few reasons: (a) the declining grip of positivism, (b) the abating cold war fear of social change, (c) the South's challenge to the hegemony of creation of knowledge, and (d) the growing urge to democratise creation of knowledge. Also, the growing disenchantment with the application of conventional scientific method to the understanding of social reality prompted many social researchers to adopt action research.

3.4.2 Multi-Faceted Interpretations of Action Research

Action research methodology involves gathering data mainly in the form of people's experiences and opinions resulting from actions and interventions. The members of a group or organization themselves participate in varying degrees in the formulation and implementation of action strategies. Owing to all these aspects, action research methodology, like other social research methodologies, has grown in complexity and become multi-faceted. For example, Aguinis (1993: 419) argues, "In fact, AR can be seen as the application of the scientific method to problem solving and fact finding in organizations, with the difference that there is an active participation by not only the researcher but also the members of the organization". But, Reason (1998: 162) says, "Participation is a spiritual imperative. To deny participation not only offends against human justice, not only leads to errors in epistemology, not only strains the limits of the natural world, but is also troublesome for human souls". Since Lewin, many intellectual streams have flowed into action research methodology.

a) Action Research: Mainstream Science

Lewin attacked (i) knowing the world for the sake of knowledge, and (ii) the distinction between pure knowledge and its application. Drawing upon two studies involving problem solving action intervention, viz., the case of Xerox corporation of the United states and the case of Mondragon-Cornell participatory action research project in the Basque area of Spain, Whyte *et al.* (1991) conclude that participatory action research is best suited to the study of organisational behaviour and change, as such behaviour and change cannot be studied within the ambit of a single discipline. Feeding back your research findings to the participants in the organisation increases rigour of data collection and analysis.

Revans (1983a) argues that action learning skills cannot be taught in a formal setting; they are learned in community exchanges and discourses through contact with responsibility, peer evaluation and reciprocation of advice. As Day (1999:2) emphasizes, "Revans reiterates the fundamental principle – most certainly the most basic of all, - action learning is ' cradled in the very task itself ' ...". Revans specifies the steps involved in action learning project: (a) analysis, (b) development, (c) procurement, (d) assembly, (e) implementation and (f) review (1983d; 1984). He says (1983c) that implementation is the most difficult thing. He emphasizes that smaller groups can learn better with each other and from each other. Mumford (1999:330) says that Revan's action learning dominates the learning strategies with management teams and individuals by doing. Day (1999:4) says that Revans "... condenses the scientific method's five stages - observation, provisional hypothesis, trial, audit and review – into three action learning steps of diagnosis, prescription and therapy". She further argues (Ibid.: 2), to Revans the team of action learners – the set – plays a crucial role. They are the "comrades in arms". The phrases used by Revans and his commentators, like "There can be no action without knowing", and "no knowing without action" (Ibid.: 3) resonate with those of Lewin. However, Revans is in the mainstream of scientific method and his commentators (e.g. Day, 1999; Mumford, 1999 and Grieves, 2000) do not raise any questions about this.

Participatory action research serves the ultimate purpose of scientific method by compelling continual learning. "Because PAR leads the researchers to explore the previously unfamiliar pathways, involvement in the process is likely to stimulate us to think in new ways about old and new theoretical problems, thus generating provocative new ideas" (Ibid.:42). Whyte argues, "When the research agenda is controlled only on the practitioners' side, by only one party (management in this case), it is extremely unlikely that the fundamental issues of structure and power will be thoroughly explored" (1989a:504-5). Whyte further urges that researchers of organisational change should go beyond the conventions of the mainstream scientific method, which is characterised by the ambivalent relations between the researchers and their subjects. He is critical of those mainstream researchers whose primary commitment is to the pursuit of knowledge, even when topics have no practical relevance (Ibid.: 505-506). Writing in another article, Whyte is all the more emphatic and categorical about participatory action being definitely scientific. He argues,

> This paper presents an argument for participatory action research (PAR) as a powerful methodology for advancing scientific knowledge as well as achieving practical objectives. As in the physical and natural sciences, I am assuming that applied social research can advance basic knowledge, but here I am focusing on the merits of the methodologies hitherto little recognised among mainstream sociologists (1989b: 367).

He says that in so far as the participatory action research integrates different disciplines and the researchers' conclusions are tested against the experiences of the participants, knowledge is advanced and the scientific criteria are met.

Greenwood and Levin (1998b) take a tougher stance and defend participatory action research as much *more* scientific than the orthodox social science. According to them, without experimental action, there is little to distinguish scientific research from philosophical speculation (p.237). "By analogy, without social action, we believe there is no social research...Yet, orthodox social science is structured to make social inaction one of its core

methodological rules" (Ibid.). Again, they argue, "We make a simple but bold claim: AR is much closer to the practices of basic and applied science, than any of the mainstream varieties of academic social research" (Ibid.:239). The following section will show how quite a few researchers accept particularly action research precisely because it is, according to them, an anti-positivist and anti-scientific method. But, Greenwood and Levin reject these post-modern critics (Ibid.:240). They reject the familiar argument that all knowledge is socially constructed, saying that the quality of such knowledge has not been examined (Ibid.:256). Drawing upon John Dewey's pragmatic philosophy, they adduce the following points in justification of participatory action research as a methodology for acquiring perfectly scientific knowledge:

- action research is democratic inquiry,
- meaning is constructed collaboratively; and
- it possesses internal validity and credibility, workability, and trans-contextual credibility.

They further say:

> We are not captive to scientific fallacy in our advocacy of the scientific merits of AR (Action Research). We understand as well as any social scientists that social research involves a combination of objective and intersubjective knowledge (Ibid.: 240).

Greenwood and Levin criticise the orthodox social sciences on the ground that they equate disengagement with objectivity, impartiality and science. They list the core characteristics of action research as follows (Ibid.:251-257):

- AR is context bound; it aims to solve the real problems in context,
- It is an inquiry, which involves co-generation of knowledge, through collaborative and communicative processes, and
- Diversity of opinions enriches research/ action processes.

They say, "These practices are science at its best" (Ibid.:257).

Cunningham (1993), unlike Whyte, Greenwood, Harkavy and Levin, does not claim that AR is inherently superior to the traditional scientific method. He essentially argues that AR is more helpful in studying organisational change. He believes that an action science can offer a blueprint of scientific and organisational activities (p.4). He defines " an action researcher as a person with scientific attitude, an understanding of qualitative research principles, an understanding of dynamics of change, and commitment to studying problems that are relevant in real settings. This process is as much an act of scientific research as an act of engagement with people of experiencing the problem" (Ibid.). He does recognise the problems of applying the canons of scientific research to the study of planned organisational change. He says, "There appears to be a growing recognition of the difficulties of applying the traditional paradigm for understanding organisational events" (Ibid.: 50). But, he essentially views action research through the angle of field experimental designs and adds that an environment, has an information structure, and this has to be perceived inductively and from the particular (Ibid:.52). On the whole, the structure of Cunningham's book, with chapters on including data gathering instruments. etc., suggests that he more or less roots action research in scientific method.

Eden and Huxham (1996: 527) concentrate on delineating the characteristics of action research. They say:

> Action research involves the researcher in working with members of an organisation over a matter, which is of genuine concern to them and in which there is an intent by them to take action based on the intervention.

They argue that the findings of action research must have applicability beyond the context studied. In other words, this means theorisation at a reasonable level of generalisation. Compare this with those who argue that action research is essentially context bound, and in other words, there is something very unique to every action research, which defies generalisation.

Eden and Huxham further advocate development of 'emergent theory' from the data, which themselves are the products of theory based intervention. From these points of Eden and Huxham, it is clear that their analysis of action research is within the mainstream of scientific method or positivism.

Peters and Robinson (1984) are puzzled by the different interpretations, claims and contexts of the term action research. They compare the analysis of the 11 writers on action research including Lewin. They find that all the writers unanimously agreed on the three features of action research. It is (a) problem focused; (b) action oriented; and (c) collaborative / participatory. Most of them mentioned that it is organic, i.e. cyclical, ethically based and scientific. Only four said that it is emancipatory, and only two naturalistic (non-positivist). But, since these articles were published, many have joined the ranks of those interpreting action research as non-positivist.

The arguments of Eden and Huxham (1996) regarding how action research process involves emergent theory, loops of iterative cycles, action, evaluation, theorisation, further action etc. will be discussed below. They also argue (p.537) that history and context of the intervention are critical to the likely range of validity and applicability of the results of action research. Also, they advocate theory development, which is of general value to be disseminated in such a way that it is useful to others who are involved in action and /or research. Their 15 points summing up their analysis of the nature of action research constitute an important intellectual milestone (Ibid.:537).

b) Alternative Views of Action Research

It has been suggested above that many researchers argue that action research and scientific method differ from each other in terms of epistemological assumptions, nature of knowledge and purpose of action and research.

Although Lewin's purpose was mainly to bend the scientific method for the solution and amelioration of social problems, he sowed the seeds of non-positivist interpretation of social action by arguing that "group consciousness" of the subjects, or rather participants of research, whose views and behaviour will have been changed by action, has to be incorporated into research (Kemmis,1980:5). In other words, Lewin was critical of the distinction between pure theory and applied theory, and of the positivist drive for higher and general theories, as exemplified by the physicist's ambition of establishing a unified field theory. Both Kemmis (Ibid.) and Reason (1998: 148) argue that action research challenges through participation and involvement of the subjects / people, the hegemony of the researchers in the social process of construction of knowledge. The concerns of the researched are sought to be built into research. Kemmis (Ibid.: 12) particularly equates action research with critical social action and argues that both processes lead to conscientization and emancipation of communities. Meanwhile, the growing approaches of post-modernism, subjectivism, phenomenology and deconstruction found action research a suitable vehicle.

The question of objectivity in scientific social research has always been a nagging one. McTaggart (1998: 211-236), Salas and Tillmann (1998) and Tandon (1998) reject the pretensions of conventional social research to objectivity. To them commitment to share knowledge, intentionality, learning from the marginalized people, reality as perceived by the subalterns imparting strength to the weak constitute the vital elements of social research. Stringer (1999) seems to combine the phenomenological or critical theoretical mode and the emancipatory one.

He argues,

> The social world, I discovered, was not static but dynamic and changing, encapsulated by, and redefined continuously by the symbolic systems of thought and language through which human beings fashion their physical and social universe (p.8).

While discussing the format of the report of an action research, he stresses 'deconstruction' instead of review of literature (p.170). He also does not believe in production of objective and generalisable knowledge. Rather, "collaboratively constructed descriptions and interpretations" would enable the groups to find mutually acceptable solutions (Ibid.: 188). But, while justifying qualitative research, Silverman (2001: 221) argues that emancipatory ideology, however, appealing, is not a substitute for valid knowledge. He continues, "To claim otherwise is to make an alliance with an awful dynasty that includes 'Aryan science' under the Nazi's and 'socialist science' under Stalin" (Ibid.: 220).

3.5 Action Research Process: Key issues

a) Commitment and empowerment

All the writers on action or participatory action research – positivist or non-positivist - have agreed that this kind of research involves a value commitment, - to solve a problem in an organisation, or to change an organisation for the better. Eden and Huxham (1996:530), who otherwise tend to adopt a view of action research closer to the field experimentation design, argue, " Action research demands an integral involvement by the researcher in an intent to change the organisation. This intent may not succeed - no change may take place as result of intervention - and the change may not be as intended". Elden and Chisholm (1993) consider bringing about change in an organisation, and even raising the consciousness as a purpose of action research. They recognise that the extent of change, which can be achieved, depends on many factors. After studying three major success stories involving participatory action research, viz., the cases of Xerox, FAGOR co-operatives in Spain and University of Pennsylvania community development project in Philadelphia, USA, Greenwood *et al.* (1993) demonstrate how the concern not merely for problem solving but empowerment informs all these action research projects.

b) Nature of the organisation / community

However carefully the researchers and the practitioners plan the AR / PAR research, the research process will have to contend with various given or unalterable factors or parameters, which determine the nature of action and participation. Chisholm and Elden (1993) studied the reports of a number of action / participatory action projects and discovered that certain factors crucially affect the processes of action research, like the definition of the issue, formation of a group, evolution of action plans, participation, etc. (i) If an organisation is more complex and the system level rises above the single group, the complexity of the research tends to grow. (ii) AR sites may be highly organised settings like bureaucracies or industrial organisations, with neatly defined roles of members and clearly defined boundaries. Or, they may be loosely organised with role ambiguities. (iii) Sometimes the action research process itself may be highly pre-planned, almost like in orthodox research. In some other times the researchers and the insiders take one step at a time, groping in the dark.

c) Extent of participation

The extent of participation by the members of the groups is a crucial aspect of action research. Action research is client centred. Whyte (1989b: 382) observes, "PAR is controlled neither by the client nor by the professional researcher, but neither is out of control". However, the views of the scholars on the extent of possible participation vary.

Elden and Levin (1991:131) argue that participatory action research means that all the relevant stakeholders do what only researchers do. They continue, "Our model of PAR rests on 'insiders' (local participants) and 'outsiders' (the professional researchers) collaborating in co-creating 'local theory' that the participants test out by acting on it" (p.129-130). The insiders have intimate but unsystematized understanding about the specifics. The experts have training in inquiry, analysis and design.

But, this is a highly idealised picture of the insiders' participation. It depends on many factors: interest, ability, motivation, etc. Greenwood, *et al.* argue, " Participatory action research is an emergent, intensifying process that is liable to gain increased dimension and depth throughout the entire research process." (1993: 179). According to them, the genesis and trajectory of each action depends on a number of factors like structure, conditions, and issues existing in a particular organisation. Also, different groups of insiders may participate in different degrees, depending on their reactions to actions.

d) Steps in action research

It has been mentioned above that AR / PAR is an emergent and intensifying process. Its steps and processes cannot be first conceptualised and then more or less sequentially implemented. Kemmis (1980), Eden and Huxham (1996), Cunningham (1976) and Stringer (1999) have all argued that action research is a cyclical process. This is also evident from the case studies discussed in Greenwood, *et al.* (1993) and Whyte (1989b). Explicating the original ideas of Kurt Lewin, Kemmis draws a plan of research involving, initial idea, reconnaissance, fact finding, steps of general plan, implementation, evaluation, steps of amended plan, implementation, further evaluation. Cunningham (1976:218-225) posits three sequences of action research. According to him, a sequence may begin with group development, research or action. Evaluations conducted during the action may lead to further research and /or action.

Eden and Huxham (1996:542) also say that action research involves iterative cycles of pre-understanding, application of emergent theory, action, reflection, theory exploration and development. Cunningham (1993) argues that initiative for action research may begin at the top, or at the lower rungs of an organisation. Generally, these steps have a striking resemblance to those like Plan-Do-Check-Act, advocated by the thinkers on quality.

e) Methods of data collection

Action research requires a unique combination of methods of data collection. Research methods denote the sub-designs / plans and ways of planning, collecting and analysing data, like surveys and focus groups. Tools of data collection denote interview schedules, questionnaires, recording of focus groups, etc. These methods and tools can be of different types. Action research may also involve analysis of available documents.

At various stages during action research, surveys are employed. Generally the surveys elicit from the respondents economic and demographic data like income, expenditure, family size, age, education, occupation; views and opinions on various issues; and, habits, activities. Quite often surveys do not capture the realistic opinion, or the views of a person. The survey data collected through structured interview schedules and questionnaires lead to quantitative analysis. Silverman (2001: 29-30) cites a few 'non-sensical' points about quantitative research: (a) it manipulates data gained at some point of time by asking people, (b) responses to interview questions do not have stable relationship with how they behave in naturally occurring contexts, (c) social constructions of variables are neglected, and (d) quantification conceals as well as reveals. Moreover, these responses are frozen at a particular point of time.

As Krueger (1994:7) says, "Focus groups interviews were born out of necessity". He rightly points out, " They (i.e. the researchers) had doubts about the accuracy of traditional information gathering methods, specifically the excessive influence of the interviewer and the limitations of predetermined, close-ended questions (Ibid.:p7). He argues that a focus group has six characteristics: "(1) People (2) assembled in a series of groups, (3) possess certain characteristics, and (4) provide data (5) of a qualitative nature (6) in a focused discussion (Ibid.:p.16). Morgan (1997:3-4) says that focus groups can be used as a self-contained method of data collection, or as source of supplementary data , or as multi-method.

Focus groups have many advantages. As Morgan says (Ibid.: 13), they have the ability to produce a concentrated amount of data on precisely the topic of interest. Secondly, focus groups through interaction among the participants produce valuable data. When selected individuals are assembled in a group and asked to debate on an issue, their opinion starts evolving. This is a dynamic process. The views of the group or the individuals, invariably qualitative in nature, are very useful in the process of action research. Thirdly, according to Morgan (Ibid.:28), focus groups can be used to define the "manipulations" (i.e. the variations) of the independent variable, in our case, types and intensity of action. Fourthly, they are also useful in evaluation, and evaluations are an integral part of action research.

Focus groups can be used in four different ways:

First, focus groups can precede quantitative procedures. When used in this way, a focus group interview can help the researcher learn the vocabulary and discover the thinking pattern of the target audience. In addition, focus groups can provide clues to special problems that might develop in the quantitative phase. The focus groups enable the researcher to get in tune with the respondent and discover how the person perceives reality. These insights can be used to collect data through appropriately constructed survey instruments. In this research focus groups have been used also to whet draft questionnaires.

Second, focus groups can be used at the same time as quantitative procedures. At times the researcher may wish to use triangulation: two or more different research methods to address the same issue to confirm findings and to obtain breadth and depth of information. For example, in this research, the outcomes of the discussions among the groups of staff are being compared with the findings of surveys of the staff.

Third, focus groups can also follow quantitative procedures. Questionnaires typically yield a sizeable amount of data and generalisations, and focused interviews can provide insights about the meaning and interpretation of the results. In addition, the follow-up focus groups can suggest action strategies for problems addressed in the questionnaire.

Fourth, focus groups can be used alone, independent of other procedures. They are helpful when insights, perceptions, and explanations are more important than actual numbers.

Thus, focus groups can be used before a quantitative study, during a quantitative study, after a quantitative study, or independent of other methodological procedures. This research has used the technique of the focus groups in all the above ways.

3.6 Triangulation

Triangulation essentially involves efforts to validate a finding from multiple perspectives and types of data. Although there are no, and cannot be, hard and fast rules of triangulation, it is a useful method of obtaining valid findings in contexts like organisational change. As Cunningham (1993:170) argues, "The goal is to achieve convergence where methods of data gathering and analysis complement each other...When the convergence is achieved and different methods illustrate the same results, the confidence level is higher".

Eden and Huxham (1996:536-7) also argue along the same lines. In fact, they consider triangulation a necessary element of the action research process. They add, "However, action research provides *also a* uniquely different interpretation of the concept of triangulation. Exceptionally, action research provides an opportunity to seek out triangulation between (i) the observation of events and social processes, (ii) the accounts each participant offers, and (iii) the changes in these accounts and interpretation of events as *time passes*" (p.536).

They conclude,

> In action research, the opportunities for triangulation that do not offer themselves with other methods should be exploited fully and reported. They should be used as a dialectical device, which powerfully facilitates the incremental development of theory. (p.537)

Denzin (1978) has suggested a four-fold typology of triangulations. (a) Data triangulation: using data from variety of sources; (b) Investigator triangulation: using a number of researchers to study the same problem; (c) Theory triangulation: employing multiple theoretical angles to interpret a single set of data; and (d) Methodological triangulation: employing multiple methods to study a single problem.

Silverman (2001) questions the reliance of many proponents of qualitative research on triangulation as a method of seeking validity. He argues,

> To conclude, the major problem with triangulation as a test of validity is that, by counterposing different context, it ignores the context-bound and skilful character of social interaction and assumes that members are cultural dopes who need a social scientist to dispel their illusions (2001: 23-45).

It is difficult to agree with Silverman's rejection of triangulation as a method of validity. Like all exponents of qualitative research he supports collection of data through multiple methods and sources. The analyses and findings of these have to be integrated. The data arising out of social interaction may be context-specific. But, the context-specificity does not make a set of data totally unique. Contexts can be analytically controlled, too.

3.7 Action Research Group at BTI

As argued in Chapter 1, "Introduction", and also in this Chapter, this research is a case study of how an FE institute went about conceptualising and developing an appropriate quality assurance system. Action, reflection and evaluation constitute the core of the research. The Action Research Group was the nerve centre of the research. This section discusses the composition of the Action Research Group, the processes of action, planning of data collection, etc.

3.7.1 Action Research Group Structure

The Action Research Group was constituted at the beginning of the research project in November 1997. The members of Action Research Group were drawn from various levels, training (academic) and support staff of the Institute. The following are the eight core members of the Action Research Group: senior member of staff from Quality Assurance and Product Design Division, senior member of staff heading one of the Training Divisions, Head of one Department, one member of staff with responsibility for Special Projects, Assistant Head of one Department, two Senior lecturers, and the researcher. Occasionally, selected members of the training and support staff were invited.

The role of the Action Research Group was to advise on the formulation and implementation of policies regarding the quality assurance systems. The research work was done by the researcher who briefed the Action Research Group.

3.7.2 Action Research Group Processes

As mentioned earlier this research requires that primary data will have to be collected from the results and evaluation of the series of actions for implementing and evolving quality assurance processes in the context of education and training. To achieve the research objectives, the Action Research Group has adopted the following strategies:

1. Conceptualising and defining quality systems,
2. Planning and implementing actions,
3. Monitoring and measuring the impact on the perception of stakeholders through appropriate tools,
4. Helping construction of appropriate questionnaires to collect data on four out of five dimensions (i.e. dimensions 2 to 5) of this research as stated earlier in this Chapter,
5. Evaluating the processes of action and conceptualising improvements,
6. Setting up a series of focus groups,
7. Reflecting on and evaluating the dimensions of quality assurance, and
8. Developing a quality assurance model suited particularly to the Institute.

3.7.3 Action Research Group Practice

The dynamics of the action research group processes may be briefly described. The group receives information and feedback from the various relevant groups such as trainees, staff, management and employers. It also gets feedback and analyses from the focus groups. These are critically reviewed and appropriate further actions are planned and implemented **(See Figure 5)**.

Thus, the researcher and the Action Research Group sought to follow to the reinforcing cycle of examination, action, experience and reflection. The process and its outcomes will be described in detail in Chapter 4 (Section 4.2). Action Research Group Issues include the following for each dimension:

Dimension 1 - Conceptualisation and Nature of Quality Assurance in Higher Education (HE) / Further Education (FE)

- Defining quality in the context of HE and FE,
- Envisaging appropriate measures of action, and
- Proposing a model of quality management suitable for further education and training sectors.

Dimension 2 - Competitive Environment

- Main driving forces behind the adoption of the quality measures,
- Transparency of quality assurance processes, and
- Opinions and attitudes of the major stakeholders.

Dimension 3 - Internal Cultural Dynamics

- Involving the critical groups in the action schemes,
- Ascertaining the values and perceptions of stakeholders, and
- Evaluating qualitative and quantitative indicators of quality system at each cycle of action.

Dimension 4 - Implementation and Emergent Systems

- Identifying a range of quality devices,
- Reviewing and revising the progress and plans of quality management and improvement, and
- Implementing, monitoring and evaluating the impact of the quality systems.

Dimension 5- Management Style

- Overall strategic direction to quality assurance and total quality,
- Reviewing the quality systems mechanism to date, and
- Developing and sustaining an appropriate ethos toward quality at all levels.

Dimension 1 is tested only by the literature review. Dimensions 2 to 5 are tested through triangulation as described in Section 3.10. The analysis and findings of the study will be discussed in Chapter 4. **Appendix A** (**A1 -** Action Research Group Cycles), gives the diary of the meetings and cycle-wise record of the outcomes of the Action Research Group.

3.8 Design of Survey Instruments

This section discusses the design of the survey instruments. The questionnaires were constructed on the basis of the following:

- Literature review of the existing studies on quality assurance,
- Action Research Group Discussions, and
- Focus Group Interviews.

The purposes of the questionnaires in this study are summarised as follows:

- Assessment of quality position and status in the training years 1998/1999 and 1999/2000,
- Triangulation with focus group interviews and action research group issues,
- Evaluation of actions, and
- Derivation of further steps in the cycle of Examination, Action, Experience and Reflections.

3.8.1 Procedures for Questionnaire Development, Piloting and Pre-testing

Bearing in mind the different stakeholders of the BTI training systems, three separate questionnaires were drafted, one each for employers, staff and trainees as given in **Appendix B** (**B1** - Employers Survey, **B2** - Staff Survey and **B3** - Trainees Survey). The focus group interviews played an important role in the construction of the questionnaires. The three focus groups comprised convenience samples of those who are familiar with the quality assurance systems at BTI, and these include senior members of the staff – training and support. The focus groups recruited to develop the questionnaires helped in the following ways:

- Examining the clarity of the questions,
- Ascertaining and eliminating overlapping ideas,
- Further developing the questionnaire,
- Examining the content validity of the questions, and
- Ensuring the views and opinions of the stakeholders were reflected in the questionnaire.

After suitably incorporating the changes as suggested by the focus groups in the pilot study, the questionnaires were pre-tested on small samples of the populations under study. The outcomes of the pilot study are summarised in the **Appendix B (B4** - Summary of Pilot Study Findings).

3.8.1.1 Individual Questionnaire Statements

The procedure followed to generate the questionnaire items in order to assess the quality assurance systems at BTI is illustrated in **Figure 6**. **Employers questionnaire** contains 24 closed-end questions and an open-end question at the end. **Staff questionnaire** has 29 closed-end questions and an open-end question at the end. **Trainees questionnaire** consists of 29 closed-end questions and an open-end question at the end.

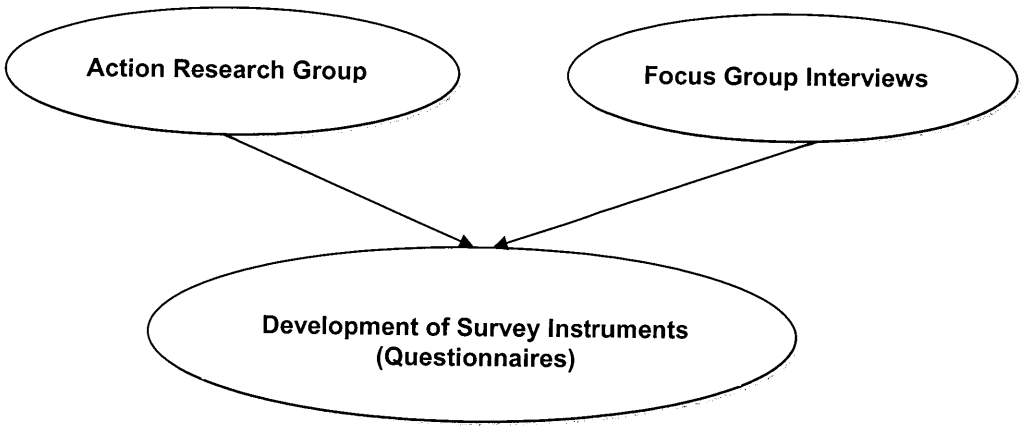


Figure 6 - Generation of questionnaire items

Each question was phrased in a clear understandable form. The selected items of the questionnaire were grouped into four categories. The first one deals with the personal profile of the stakeholder and collects the demographic data; the second, their relationship with BTI; the third, deals with their views and perceptions about BTI's quality systems and the fourth, an open ended question to bring out any other perceptions they have about BTI's quality systems - **Appendix B** (**B1** - Employers Survey, **B2** - Staff Survey and **B3** - Trainees Survey).

3.8.1.2 Rating Scale

A 5-point Likert scale was adopted for items 7 to 24 of Employers questionnaire, items 6 to 29 of Staff questionnaire and items 7 to 29 of Trainees questionnaire: 1) Strongly Disagree; 2) Disagree; 3) Not Sure; 4) Agree; and 5) Strongly Agree. The sampled stakeholders were requested to record the degree of their perception of each of the statements in the questionnaires.

3.8.2 Sampling and Administration of the Questionnaires

3.8.2.1 Employers Survey

The sampling frame for Employers was identified as: the members of the Board of Directors of BTI, Members of the various advisory committees of BTI, and directors, owners and personnel managers of the industrial, commercial and service sectors in the Kingdom of Bahrain. All these members of the sampling frame either are involved directly with BTI through their membership in various advisory committees, or have employed BTI graduates. This has given them adequate opportunity to have good information about the various quality systems of BTI. The total sampling frame came to 225. A careful record of all these members with their contact address, phone and fax numbers has been maintained. The letter sent to the employers to respond to the survey is presented in **Appendix B** (**B5** – Employer Letter). Forty one percent of them returned the questionnaire duly filled in. The returned questionnaires were properly scrutinised. The data entry was double-checked. Through these steps, the sampling and non-sampling errors were sought to be minimised.

3.8.2.2 Staff Survey

The sampling frame of staff covers the following four functional areas at BTI: Delivery of Training (D), Monitoring and Development (M and D), Trainee Support (T), and General Support (GS). All the categories of the staff (N=300) were included in the survey. In order to have an effective distribution and to ensure the return of the filled in questionnaires, one contact person from each department was identified to carry out the follow up. Seventy percent of the questionnaires were returned duly filled in.

3.8.2.3 Trainees Survey

The trainee population was divided into four strata based on the levels of the programmes they were undergoing, viz., Higher National Diploma (HND), National Diploma (ND), and First Diploma (FD), and other corporate programmes. Each of these strata was purposively allocated a number of groups, keeping in mind the specialisations, morning and evening programmes, numbers of years spent at BTI, age groups, and employment status and their in-depth understanding of the quality assurance systems at BTI. Also, terminal diplomas and independent programmes such as HND, ND and corporate programmes were allocated more groups, whereas FD was allocated only one group. (Almost 90% of the FD trainees continue into ND). Then from each stratum, using random probability sampling, the allocated number of groups of trainees were selected. In order to have an effective distribution and to ensure the return of the filled in questionnaires, for each level one contact person was identified to carry out the follow up. In total 500 questionnaires were distributed to the trainees and 434 were received as detailed in **Table- 1**. Eighty seven percent of the trainees returned the questionnaire duly filled in.

Table- 1 Trainee Population

Strata	Number of groups in the sample	Number of questionnaire returned
First Diploma*	1	19
National Diploma*	16	255
Higher National Diploma*	6	87
Corporate Programmes	9	73
Total	**32**	**434**

* Regular Programmes offered at BTI

The percentage response of the respondents for the 5 Likert scale points for all the items of the three questionnaires are presented in **Appendix C** (**C1** - Analysis of Employers Survey, **C2** - Analysis of Staff Survey, and **C3** - Analysis of Trainees Survey).

3.9 Focus Group Interviews

In addition to the three focus groups to examine the development and the contents of the questionnaire, eight focus groups of staff (6 for trainers and 2 for support) were formed to discuss the various aspects of the ongoing conceptualisation and implementation of the quality assurance processes. During the training year 2000/2001 BTI has approximately 340 full-time teaching / training and support staff of whom are 232 trainers. Fifty five percent of teaching / training staff are Bahrainis and 45 percent expatriates. It has 108 support staff – almost all Bahrainis. While forming the 6 focus groups of trainers, it was decided to have a fair mix of personnel at various levels, i.e. Instructors, Senior Instructors, Assistant Heads of Departments, Heads of Departments, and those with training responsibilities, and also a fair mix of Bahraini and expatriate instructors. While forming the 2 focus groups for support staff it was decided to have a fair mix of staff at various hierarchical levels. This principle of composition yielded richer interactions.

The eight focus group interviews (Group A, B, C, D, E, F, G and H) were conducted during the training year 2000/2001(February to April 2001) and four main themes were put before them to test the dimensions (2 to 5) and seek answers to the research questions of the study. Data on all of the focus group interviews are included in **Appendix D** (**D1** - Focus Group Interview Themes, **D2** - Introduction to Participants of Focus Group Interviews, **D3** - Schedule and Membership Composition, and **D4** - Focus Group Interviews Participants Sheet).

The outcomes of the interviews of the different focus groups consisting of instructors / trainers, programme co-ordinators, heads of departments, and assistant directors were utilised to ascertain their understanding of quality, the culture and ethos of the Institute most conducive to attain the goals of quality, etc.

The analysis and findings of the focus group interviews will be presented in Section 4.4 of Chapter 4.

3.10 Triangulation of the Case Study

As discussed earlier, triangulation is a multi-faceted tool of analysis and interpretation. Denzin's (1978) typology of triangulation has been noted in section 3.6. He has listed four types of triangulation; (a) Data, (b) Investigator, (c) Theory, and (d) Methodology. These different types enable researchers to derive inferences from diverse types of data collected at different levels and through different methods and instruments.

This study uses three types of triangulation to reach the conclusions:

1. Methods triangulation: using various research methods to gather and validate qualitative and quantitative data,
2. Analysis triangulation: using different analysis methods, and
3. Data triangulation: collecting data from different sources.

The data analysis triangulation is presented in Section 4.5 of Chapter 4.

3.11 Data Analysis, Evaluation and Interpretation

As the preceding sections indicate, the evaluation of the results of the series of actions and the conclusions derived from the focus groups interviews will consist of mainly qualitative data. Also, the questionnaire for the trainees, staff and employers generate quantitative data. The quantitative data generated by the survey will be analysed in terms of univariate tables.

The qualitative data derived from the focus groups interviews will be analysed by coding and establishing patterns: extent of awareness, extent of acceptance, extent of effectiveness, etc. The eight focus group interviews generated many pages of transcripts to analyse. One of the major problems of analysis of qualitative data is that there are no a *priori* and standardised formats of analysis.

The details of data analysis and findings will be discussed in Chapter 4.

3.12 Summary

This research deals with conceptualisation and formulation over time of an appropriate quality assurance system for an FE institute. This process involves study of organisational behaviour. In view of the objectives, action research is the most appropriate strategy. Action research is being claimed by different epistemological schools. In the context of this research, the strategy can be employed holistically, - blending objective, humanist and interpretive approaches.

The relevant data, both qualitative and quantitative, are collected from multiple sources through a variety of research methods and instruments: surveys with questionnaires for employers, staff, and trainees; focus group interviews. In view of the different types of data collected triangulation of analysis and findings becomes necessary.

CHAPTER FOUR: DATA ANALYSIS AND STUDY FINDINGS

4.1 Introduction

As the preceding Chapter indicated, the evaluation of the results of the series of actions undertaken by the Action Research Group and the conclusions derived from the focus group interviews consisted of mainly qualitative data. The surveys of the employers, staff and trainees generated quantitative data. This chapter will discuss the data collection, analysis, evaluation, interpretation, and report the findings of the study.

4.2 The Outcomes of the Action Research Group

The dynamics of the Action Research Group processes was described in detail in Chapter 3. The Action Research Group initiated the process of developing an appropriate model of quality assurance at BTI. It surveyed the stakeholders and received feedback from the focus groups. It evaluated the results of the actions and planned further actions. The cycles of action are given in detail in **Appendix A (A1** - The Action Research Group Cycles).

There were four main cycles of action research during the period from October 1997 to September 2001. Before that the researcher spent a period of three months exploring the various aspects of action research and conceptualised action plans. **Figure 7** summarises the four main cycles of Action Research Group and a number of spin-off cycles involving plans, actions and reflections. The cycles blended into each other, as each subsequent cycle was a result of the outcomes of the preceding cycle. The first cycle was initiated by the researcher after briefing the Action Research Group. The period of each cycle was taken as one training year. Each training year was divided into four quarters and each quarter was dedicated to one plan, thus enabling each cycle to have four plans.

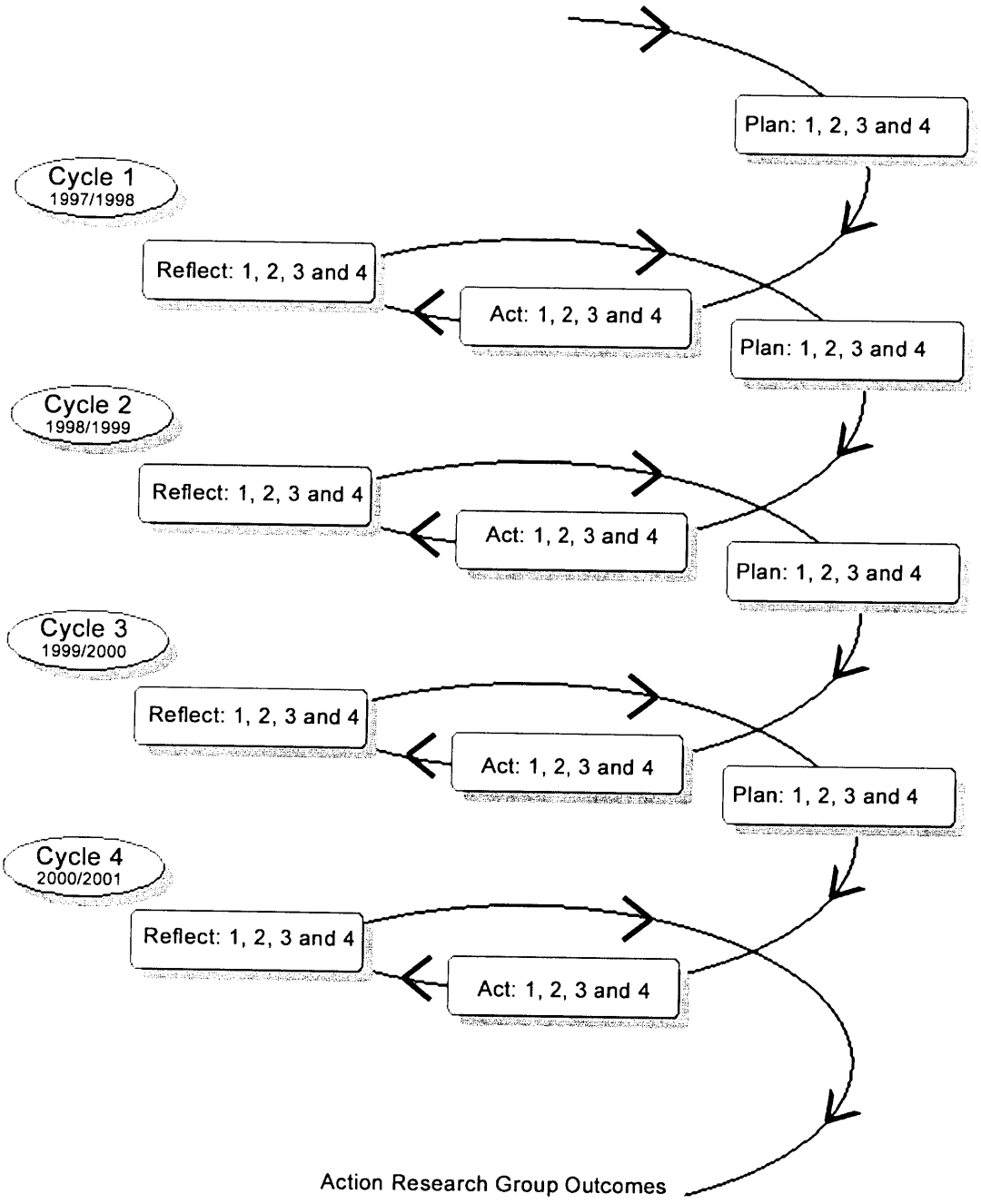


Figure 7 - Cycles of Action Research Group
Adapted from Bone (1996)

4.2.1 Action Research Group Cycle 1

This cycle of action research was undertaken during the training year 1997/1998. This training year was subdivided into four quarters, each of which concentrating on one plan. Plan 1 of this period was undertaken between October 1997 and December 1997. This plan started with the meeting of the Action Research Group, comprising eight members, on Tuesday, the 11th of November 1997. The purpose of this meeting was to outline the objectives of the research and to develop with the members of the group a shared perspective on defining and conceptualising quality systems. Also, the plan focused on conceptualising quality in the context of Higher Education (HE) and Further Education (FE).

During this meeting the researcher gave the members of the Action Research Group as much information about action research as possible. The researcher discussed the various concepts and definitions of quality systems in general and definitions of quality systems in higher education and further education in particular. All the members of the group were enthusiastic and exhibited willingness to contribute effectively to this study. They also endorsed the idea of formulating and proposing a model of quality assurance system at BTI. The members of the group appreciated that there was a good deal of enthusiasm for quality among the staff, trainees and employers, and this enthusiasm should be tapped and directed. Again, the group felt that a good quality assurance system should be developed by drawing on the expertise from within the Institute, rather than hiring experts from outside. The desire to pursue quality was clearly internally inspired.

The group was generally aware that quality consciousness was increasing in manufacturing and services. They advised the researcher to study more intensively how quality systems in manufacturing and service have been conceptualised and defined and how quality can be defined in the context of HE and FE.

The outcome of the plan 1 of cycle 1 was that the researcher continued his critical review of literature, particularly from the point of view of bringing out the distinctiveness of HE and FE as a service. He felt that some members, although sincerely committed to quality, were disinclined to see HE/FE as a service like as banking, hotels or airlines. Although education is now considered as a service sector, it has its own uniqueness. It has multiple stakeholders. Education as a service involves continual human interaction. The researcher decided to examine how and why education is considered as a service and with what implications.

The Action Research Group met on Wednesday, the 25th of February 1998 to discuss and envisage appropriate action plans (Plan 2 – January 1998 to March 1998). The members of the group reflected upon the various definitions and approaches to quality assurance in HE and FE. The concepts of stakeholders and customers were intensively analysed in terms of trainees, staff, employers, state and society. Their requirements have to be balanced. In general, the members were not in favour of mechanically transplanting to HE/FE the buzz words like "zero defects", "getting it right the first time". It was decided that the next meeting should be devoted to the discussion of the experiences of other institutions in adopting and implementing quality assurance in HE and FE.

Plan 3 was undertaken during April 1998 to June 1998 and the Action Research Group meeting was held on Sunday, the 3rd of May 1998. This turned out to be a crucial meeting. While examining the literature on adoption of quality in HE/FE institutions, the researcher had come across the problems faced by many HE/FE institutions. Whether to pursue quality through TQM or ISO standards was a big question to some of the universities. Introduction of quality involved decision regarding style of managerialism. Adoption of managerialism along manufacturing lines would be stressful to the leaders and other staff.

The discussion in the Action Research Group centred around how the teaching / training staff differed from the workers in other service organisations and manufacturing. It was noted every teacher / trainer was unique and every teaching, training situation was unique. The relation between two teachers was different in different situations. Drawing on their collective experience, the members of the Action Research Group advised the researcher that there should be transparency in the formulation of any quality assurance model. Secondly, as far as possible, the views of the staff should be accommodated.

The suggestion made by the Action Research Group members led the researcher to further refine the initial action plans. A systematic and thorough review of issues related to quality management in higher and further education was done by the researcher. The details of the review of the literature are presented in Chapter 2.

The Action Research Group meeting for plan 4 (July 1998 to September 1998) was held on Saturday, the 1st of August 1998, in which all the eight members of the group were present. The researcher explained the follow-up actions of the previous meeting. The Action Research Group reviewed the proposed action plans. It also examined the alternative models for developing a quality assurance system. Follow-up discussions with the members of the Action Research Group and the Director of Studies and the Second Supervisor helped the researcher to formulate the action plans, which included a thorough review of alternative models of quality assurance systems and giving general principles of building a quality assurance model in the context of BTI. The Action Research Group did not favour the models with statistical quality controls, particularly imposed from above. It favoured the ideas of "ownership". After a good deal of reflection, a model involving action research appealed to the group, particularly because it could elicit co-operation of the staff.

It was also suggested that the researcher should propose a model of quality assurance suitable for further education and training sectors as the main outcome of this research. The meeting generally appreciated the principles underlying the proposed model of quality assurance. (These have been reported in Chapter 2, Section 2.11 as "Theoretical propositions")

The action research of cycle 1 along with the systematic review of the literature relating to quality assurance in higher education and further education resulted with the emergence of Dimension 1: Conceptualisation and nature of quality assurance in HE and FE. Thus, cycle 1 of the action research facilitated in arriving at the following:

- A model of quality assurance eliciting the participation of the staff – action research – would yield better results,

- A systematic and thorough review of literature related to quality assurance in higher education and further education,

- Action Research Group supporting the idea that the urges and impulses within the BTI for quality should be tapped, and

- Emergence of Dimension 1: Conceptualisation and nature of quality assurance in HE and FE.

4.2.2 Action Research Group Cycle 2

Cycle 2 was undertaken during the training year 1998/1999. The Action Research Group met on Monday, the 2nd of November 1998 to formalise plan 1 of cycle 2. The researcher put forward the following issues for examination and review at the meeting:

- The cultural and other difficulties in quality assurance systems,
- The implications in terms of changes in organisational behaviour, and
- Conceptualisations of action.

The group reiterated its view that all the staff should be encouraged to take interest and participate in the development of the quality assurance system. Otherwise, there would be resistance, open or hidden. Also, the BTI staff were drawn from different national / cultural backgrounds. They should all be equally involved.

The researcher decided to thoroughly examine the methodology of action research. These experiences are explained in detail in Chapter 3. As a reflection the Action Research Group identified the stakeholders of BTI. By this time, the researcher and the rest of the Action Research Group had developed a good deal of rapport with each other. However, in the experience of both, a spirit of constructive criticism also prevailed.

To decide the follow up actions for plan 1 of cycle 2, the Action Research Group met on Tuesday, the 5th of January 1999 to implement plan 2 of cycle 2. The identification of the stakeholders as the outcome of plan 1 of cycle 2 and the action research on qualitative and quantitative indicators of the quality systems helped in identifying the approaches to data collection. The meeting discussed what kinds of qualitative and quantitative indicators needed to be developed and how the data regarding these can be collected.

The outcome was to conduct three surveys – one each for employers, staff and trainees. The objective of these survey instruments was to ascertain the opinions and evaluation of the status of quality in the training years 1998/1999 and 1999/2000. The Action Research Group decided that qualitative data should be collected through the focus group interviews.

The Action Research Group met on Wednesday, the 7th of April 1999 (plan 3-April 1999 to July 1999). The meeting addressed the main objectives that should underlie the survey instruments. It also examined the following:

- The extent of management involvement and support to QA initiatives,
- The impact of QA on the role of the staff,
- Involvement of staff in organisational improvements and decision making in relation to QA activities,
- Involvement and contribution of the different stakeholders in the development of QA systems, and
- Management styles of command and control vs. collegiality.

These discussions enabled the researcher to conceptualise and design the three questionnaires – one each for the employers, staff and trainees. The details of the three questionnaires are given in Chapter 3 (Section 3.8).

The group by now was convinced that there can be no development of a good quality system without a thorough research regarding quality. Lomax (1996) had observed that the principle of action research is about improving practice through intervention and demands rigorous planning, observing, and collection of data, reflecting on them, replanning and validating claims of learning. Writing on leadership, Kotter (1990) had said that there were three prerequisites for bringing about change. First, the persons leading had to set a direction or vision, then they had to get everyone lined up to go into that direction together, and then they had to inspire and energise them enough, to get them from here to there.

Reflecting these directions, the Action Research Group met on Monday, the 5th of July 1999 (plan 4 – July 1999 to September 1999) to analyse aspects such as:

- Ascertaining the nature of changing environment and giving a strategic directions to quality assurance,
- Involving the stakeholders / critical groups in quality assurance,
- Evaluating through qualitative and quantitative indicators the status of quality,
- Reviewing the impact of the quality assurance system,
- Evolving an appropriate and transparent style of management, and
- Proposing a quality system model suitable to FE and the training sectors.

With the meeting of July 1999, the main contours of the action research came to be defined. BTI had to demonstrate its pursuit of excellence through quality. Customers seek value for money. The members of the Action Research Group appreciated that BTI, like every organisation, had developed its own a culture. The staff is multinational. The leaders of quality assurance and the staff had to accommodate each other's views. The implementation of the quality system was an exercise in organisational change. Above all, a suitable style of managing the quality assurance system had to be evolved. The analysis led to the emergence of the following dimensions:

Dimension 2: *Competitive Environment,*
Dimension 3: *Internal Cultural Dynamics,*
Dimension 4: *Implementation Performance / Emergent Systems and Organisational Structure, and*
Dimension 5: *Management Style.*

The analyses of these dimensions through surveys and focus group interviews are presented in the subsequent sections.

4.2.3 Action Research Group Cycle 3

This cycle of action research was undertaken during the training year 1999/2000. The first meeting of cycle 3 was held on Wednesday, the 6th of October 1999 to consider plan 1. The researcher presented to the Action Research Group for comments the three draft survey instruments (questionnaires), seeking to ascertain the views and opinions of the employers, staff and trainees regarding the quality assurance system at BTI. The researcher explained in detail how the draft questionnaire was developed. The details of these are presented in Chapter 3 (Section 3.8). Following the suggestion of the Action Research Group, three focus group interviews were formed to review the draft questionnaires.

The Action Research Group also recommended convening a forum of the entire staff of BTI, - training and support -, to discuss the issues pertaining to quality. The first BTI staff forum, "Challenges in Vocational Training – the Role of BTI", was held on the 11th and 12th of January 2000. The Action Research Group felt that such a forum would increase the interest of the staff in the issues of quality. This would later on facilitate a better response to the proposed staff survey. The forum generated unprecedented enthusiasm among the staff. The researcher and other members of the Action Research Group had earlier felt that the participation of the staff would be perfunctory, given the super-ordinate – subordinate and corporate culture in the Gulf. The presentations dealt with such topics as, "Review of the Year 1999 Achievements", "Vocational Training vs. Academic Studies", "Effective Methods of Delivery", "Review and Evaluation Process", "BTI Staff Expectations". Each session was followed by lively discussions in the form of comments, questions and answers. The staff freely commented on the matters of quality. Some staff even asked, “Who will control the quality of the quality managers"? Many useful suggestions emerged.

The next meeting of the Action Research Group to discuss plan 2 of cycle 3 was held on Tuesday, the 1st of February 2000 immediately after the first forum. The group was pleasantly surprised at the spontaneity of the participants and the boldly voiced dissenting opinions and perceptions.

The Action Research Group reviewed in this meeting the opinions of the three focus groups interviews regarding the questionnaires. The researcher presented the summary of the results of the three focus groups and led the discussion. These deliberations helped the researcher to finalise the three questionnaires with suitable modifications. The details of the piloting and pre-testing are presented in Chapter 3 (Section 3.8.1).

The Action Research Group met on Sunday, the 7th of May 2000 (plan 3 - April 2000 to June 2000) to evolve a plan for the administration of the questionnaires. As the outcome of this, the researcher finalised the plans and timetable for the distribution of the questionnaires and collection of the filled in questionnaires, the details of which are presented in Chapter 3 (Section 3.8).

The fourth quarter (July 2000 to September 2000) of cycle 3 was devoted to the preliminary analysis of the data collected through the three questionnaires. The Action Research Group met on Saturday, the 5th of August 2000 to focus on the analysis of the questionnaires. The group also endorsed the plans of comparative analysis of the Dimensions proposed by the researcher.

4.2.4 Action Research Group Cycle 4

This cycle of action research was undertaken during the training year 2000/2001. The focus of this cycle was to analyse the data (both quantitative and qualitative) and interpret the findings. The researcher had given the Action Research Group the main findings of the three surveys. This cycle of the action research helped the researcher in enhancing the utility of the research results. The first meeting of the Action Research Group in this cycle was held on Monday, the 6th of November 2000 (plan 1 – October 2000 to December 2000) to monitor and measure the perceptions of the stakeholders. Using SPSS, the researcher had analysed the data obtained through the three questionnaires. The outcome of the meeting was to examine the patterns of responses to the various Dimensions in the questionnaire.

The Action Research Group met on Thursday, the 1st of February 2001, to envisage plan 2 – January 2001 to March 2001, during which the researcher initiated the action plan for the constitution, composition, recruitment and moderation of the eight focus group interviews. These would discuss the entire range of proposed QA measures and reflect on the dimensions which had emerged out of plan 4 of cycle 2. The details of the focus group interviews are given in Chapter 3 (Section 3.9).

As a reflection of this plan the second BTI staff forum, "Improving Quality at BTI", was organised on the 16th of April 2001. The one-day forum, although organised toward the end of the term, drew much bigger and better response than the first one. The presentations and discussions covered themes like "The Quality Dilemmas", "Critical Issues of Managing the QA Process at BTI", "Enhancing Quality in Training", "Quality Control in Training Departments", "Effective Delivery and Training Materials", "Delivering Effective Workshops". Besides, many other QA issues were raised in this forum, which validated many of the findings of the data analysis. The two staff forums, - which were really large focus groups -, helped a good deal in understanding how the staff perceived the quality issues at BTI.

Plan 3 (April 2001 to June 2001) of cycle 3 was devoted to the examination of the four dimensions through an analysis of the transcripts of the eight focus group interviews. The meeting of the Action Research Group for this purpose was held on Tuesday, the 1st of May 2001. This helped the researcher to analyse the dimensions in terms of extent of awareness, extent of acceptance, evaluation of implementation / impact, intensity / frequency of opinions and strength / forcefulness of the system. Full details of these are given in this Chapter (Section 4.4).

Plan 4 (July 2001 to September 2001) concentrated on the triangulation of the Action Research Group outcomes, stakeholders' quality perceptions and the outcomes of the eight focus groups interviews. The meeting of the Action Research Group was held on Monday, the 30th of July 2001. Various aspects of triangulation were critically analysed. This helped the researcher to employ triangulation and reach more valid results. All these helped the researcher to develop a model for managing quality assurance system process in further education and training sectors.

As discussed in Chapter 3, the nature and conceptualisation of cycles 2 onwards flowed from the experiences and results of the preceding cycle. However, many times, the actions in each plan of each cycle did not rigidly follow the sequential order in which they have been listed in Action Research Group cycle (**Appendix A1 -** The Action Research Group Cycles). Occasionally two actions got merged into one, like recruitment of the members of the eight focus groups and listing the themes for discussion of the focus group interviews (cycle 4, plan 2). While reporting, however, these actions have been kept analytically distinct.

The above section described how the Action Research Group was assembled and how it took a series of steps. As the plans were progressively implemented, the actions became increasingly complex. Planning and implementing action brought out the full co-operation and participation of all.

4.3 Analysis and Findings of the Survey Instruments

This section discusses the analyses and findings of the three surveys: employers, staff and trainees. The survey data were analysed with the help of SPSS version 10.0. The analyses of each of the three surveys are presented according to the following aspects:

- Profiles of the respondents (stakeholders),
- Stakeholders' quality evaluation, and
- Comparison of the stakeholders' quality evaluation.

4.3.1 Profiles of the Respondents

The following **Tables (2 to 18)** show the key profiles of the respondents. These profiles help us to ascertain the characteristic features of the samples.

4.3.1.1 Employer Respondents

Table- 2 Employer respondents by gender

Gender	Frequency	%
Male	77	83.7
Female	15	16.3
Total	**92**	**100**

Table- 2 reveals that male employers heavily outnumbered the female ones. The Gulf corporate world is still a male bastion.

Table- 3 Employer respondents by age groups

Age Group	Frequency	%	Cumulative
30 or younger	17	18.5	18.5
31 – 40	21	22.8	41.3
41 – 50	29	31.5	72.8
51 and above	25	27.2	100.0
Total	**92**	**100**	

It is seen from **Table- 3** more than half of the employers belonged to the age group of 31-50. It is noteworthy that slightly less than one-fifth of the employers are below 30 years of age. About 60 percent of the employer respondents were 40 or younger. If we presume that the younger managers, etc. are more quality conscious, it augurs well for Bahrain and BTI.

Table- 4 Employer respondents by position held in their organisations

Position in the Organisation	Frequency	%
Chief Executive	4	4.3
Director	11	12.0
General Manager	5	5.4
Manager	35	38.0
Section Head	14	15.2
Supervisor	9	9.8
Staff	6	6.5
Others	7	7.6
Total	**92**	**100**

Table- 4 gives the distribution of the employer respondents by their position in their organisation. Slightly more than one-third of the respondents were managers. Managers and section heads together constituted more than half of the sample.

Table- 5 Employer respondents by source of information about BTI

Source of Information	Frequency *	% *
Personal Contact	54 (92)	58.7
BTI Graduate	33 (92)	35.9
Media	34 (92)	37.0
Members of BTI Advisory Committees	26 (92)	28.3
Others	15 (92)	16.3

*** Multiple Response**

Table- 5 gives the distribution of the respondents by their sources of information about BTI. The question had multiple response categories. The frequencies, - percentage or raw -, are not additive. Each percentage frequency is independently calculated to the base of 92 shown in the table. More than half of the respondents said that they knew BTI through personal contact, which is gratifying. Surprisingly, one-third of them were BTI graduates, and thus are in position to know the aspects of quality in BTI very well. One-third knowing BTI through media did not come as a surprise. But, fully one-fourth of them having been the members of BTI advisory committees attests to the willingness of employers to be a part of BTI endeavours.

Table- 6 Employer respondents by employment of BTI graduates

Graduates Employment	Frequency	%
None	23	25.0
1 – 5	43	46.7
6 – 10	6	6.50
More than 10	17	18.5
No response	3	3.3
Total	**92**	**100**

The employer respondents were asked how many BTI graduates they had employed. **Table- 6** reveals that nearly half of the employer respondents had employed 1 to 5 graduates. While only about 7 percent had employed 6 to 10 graduates as many as 19 percent had employed more than 10 graduates. Probably this category consists of large industries in the Kingdom of Bahrain, which have a large employment potential.

Table- 7 Employer respondents by sponsoring their employees to BTI

Sponsored employees	Frequency	%
None	23	25.0
1 – 5	28	30.4
6 – 10	17	18.5
11 or more	23	25.0
No response	1	1.1
Total	**92**	**100**

Table- 7 analyses the employer respondents by the number of employees they have sponsored to BTI for training. While about 1 percent did not respond to this question, and about one-fourth of the respondents said that they had not sponsored any employees, an overwhelming majority of the respondents, i.e. almost 74 percent had sponsored their employees to BTI for further and higher training. It can be reasonably presumed that both employing BTI graduates and sponsoring employees to BTI for further and higher training are very important sources of information about BTI to the employer respondents.

4.3.1.2 Staff Respondents

Table- 8 shows that about three-fourths of staff were male and only one-fourth female. **Table- 9** reveals a very striking feature of BTI – a feature typical of any young organisation. Nearly three-fourth of the staff, i.e. about 71 percent, were 40 years of age or younger. Slightly more than one-third, i.e. 39 percent were 30 years of age or younger.

Table- 8 Staff respondents by gender

Gender	Frequency	%
Male	156	74.3
Female	54	25.7
Total	**210**	**100**

Table- 9 Staff respondents by age groups

Age Group	Frequency	%	Cumulative
30 or younger	82	39.0	39.0
31 – 40	67	31.9	70.9
41 – 50	40	19.1	90.0
51 or above	21	10.0	100
Total	**210**	**100**	

Table- 10 shows the staff respondents by their highest educational qualifications. About more than one-third, i.e. about 37 percent held post-graduates degrees and another about 7 percent held doctorates. In other words about 44 percent of the BTI staff were highly educationally qualified. Both the relative youthfulness and high academic qualification could dispose the staff toward quality.

Table- 10 Staff respondents by highest educational qualification

Highest Educational Qualification	Frequency	%
Ph.D.	14	6.7
Postgraduate	78	37.1
Graduate	41	19.5
Higher National Diploma (HND)	18	8.6
Others	52	24.8
No response	7	3.3
Total	**210**	**100**

Table- 11 Staff respondents by years of service completed at BTI

Length of Service	Frequency	%
Less than 1 year	36	17.1
1 year	5	2.4
2 years	31	14.8
3 years	26	12.4
4 years	21	10.0
5 years	21	10.0
More than 5 years	68	32.4
No response	2	1.0
Total	**210**	**100**

Table- 11 gives the distribution of the respondents by the years of service completed at BTI. Almost one-third of the staff respondents, i.e. 32.4 percent had completed more than five years at BTI. If the percentage frequencies of the staff respondents who had completed 4 years (10 percent) and 5 years (another 10 percent) are added to this, it is found that more than half (i.e. 52.4 percent) had spent at least 4 years at BTI. This can be interpreted as more than half of the staff respondents were reasonably experienced with the concerns of quality at BTI.

Table- 12 shows the staff respondents by the positions held at BTI. About 44 percent held the position as Trainer / Instructors. Another 23.4 percent of the staff (Programme Co-ordinators, Assistant Heads of Departments, Heads of Departments, and managers) held positions which are essentially related to management of training activities. These were the persons in critical positions to manage the quality processes.

Table- 12 Staff respondents by position held at BTI

Position at BTI	Frequency	%
Trainer / Instructor	93	44.3
Programme Co-ordinator	12	5.7
Assistant Head of Department	14	6.7
Head of Department	9	4.3
Manager	16	6.7
Support Staff	31	14.8
Others	35	16.7
Total	**210**	**100**

4.3.1.3 Trainee Respondents

Table- 13 shows the trainee respondents by gender. About 70 percent of the trainees were male and about 30 percent female.

Table- 13 Trainee respondents by gender

Gender	Frequency	%
Male	305	70.3
Female	127	29.7
Total	434	100

Table- 14 Trainee respondents by age groups

Age Group	Frequency	%	Cumulative
20 or younger	81	18.7	18.7
21 – 30	295	68.0	86.7
31 – 40	47	10.8	97.5
41 – 50	9	2.1	99.6
51 or above	2	0.4	100
Total	434	100	

Table- 14 analyses the trainee respondents by age groups. More than two-thirds of the trainee respondents, i.e. 68 percent were in the age group of 21-30 years. Another 19 percent were 20 years of age or younger. Thus, it is found that about 87 percent of the trainees were 30 years of age or younger.

Table- 15 Trainee respondents by number of training years completed

Number of years of Training	Frequency	%
Less than 1 year	86	19.8
1 year	23	5.3
2 years	96	22.1
3 years	135	31.1
4 years	63	14.5
5 years	20	4.6
More than 5 years	9	2.1
No response	2	0.5
Total	434	100

Table- 15 analyses the trainee respondents by years of training completed at BTI. More than half, i.e. 53.2 percent had spent 2 to 3 years and more than two-thirds, i.e. 67.7 percent had spent 2 to 4 years. Generally, they were expected to be acquainted with the programmes and their quality assurance.

Table- 16 Trainee respondents by training programme at BTI

Training Program	Frequency	%
First Diploma	19	4.4
National Diploma	255	58.8
Higher National Diploma	87	20.0
Corporate Programmes	51	11.7
Others	22	5.1
Total	434	100

When the trainee respondents are analysed by their training programmes as shown in **Table- 16**, it is found that more than half of them, i.e. about 59 percent belonged to National Diploma and another 20 percent to Higher National Diploma. But, it may be noted that this distribution reflects our purposive sampling of trainees, discussed in Section 3.8.2.3. Most of the BTI programmes are conducted in two modes, morning and evening. This is to enable the employed persons to avail themselves of BTI training schemes. It can be seen from **Table- 17** that the trainee respondents were almost equally divided into morning and evening modes.

Table- 17 Trainee respondents by programme registration mode

Attendance Mode	Frequency	%
Morning	224	51.6
Evening	210	48.4
Total	434	100

Table- 18 shows the distribution of the trainee respondents by the sponsorship status: private or sponsored. While a little more than two-thirds were self-sponsored or private trainees, a little less than one-third, i.e. 31.6 were sponsored, which is very gratifying.

Table- 18 Trainee respondents who sponsored to BTI programs

Sponsorship Status	Frequency	%
Private	296	68.2
Sponsored	137	31.6
No response	1	0.2
Total	434	100

4.3.2 Stakeholders' Quality Evaluation

For the purpose of analysis, the items in the three surveys were categorised into four dimensions as per the outcomes of Action Research Group discussions and the three Focus Group Interviews. These are:

Dimension 2: *Competitive Environment,*
Dimension 3: *Internal Cultural Dynamics,*
Dimension 4: *Implementation Performance / Emergent Systems and Organisational Structure, and*
Dimension 5: *Management Style.*

The groupings of the three surveys items into the four dimensions are listed below in **Table- 19**:

Table- 19 Survey groupings with respect to dimensions

Dimension	Survey (Question / Statement)		
	Employers *	Staff **	Trainees ***
2	7,8,12,13,24	6,14, 15,17	12,17,19,20,28, 29
3	14,18,19	13,21,22,23,27,28,29	15,16,18,23,27
4	9,10,15,16,17,23	7,8,10,11,20,24,25,26	7,8,9,10,13,14,21,22,24,25
5	11,20,21,22	9,12,16,18,19	11,26

* Analysis of Employers Survey is presented in **Appendix C1**,
** Analysis of Staff Survey presented is in **Appendix C2**, and
*** Analysis of Trainees Survey presented is in **Appendix C3**.

The means and standard deviations for each statement in each of the four dimensions by each category of respondents (Employers, Staff and Trainees) are given in **Tables- 20, 21 and 22**. Also the means for each dimension by each category of respondents are presented in the discussion (see Section 4.3.2.1, 4.3.2.2 and 4.3.2.3), e.g. $\overline{DE_2}$ - mean of Dimension 2: Competitive Environment, $\overline{DE_3}$ - mean of Dimension 3: Internal Cultural Dynamics, etc. The percentage frequency distribution tables for each statement of each survey according to the dimensions listed earlier are presented in **Appendix C** (**C1**- Analysis of Employers Survey, **C2**- Analysis of Staff Survey, and **C3**- Analysis of Trainees Survey).

While examining the tables of means **(see Tables- 20, 21, and 22)** and univariate percentage frequency distribution tables **(see Appendix C1, C2 and C3)**, one may argue why the means and the positive percentage frequencies are on the higher side. One may attribute it to all the statements being positively worded and the respondents having mechanically ticked down the line positive options. To avoid such an eventuality, some scholars use a mix of positively and negatively worded statements. In such questionnaires the scoring of Strongly Agree, Agree, etc. options is reversed, where necessary, for the purposes of analysis. The researcher thinks that such a mechanical ticking of positive options has not taken place in this research. In the first place, the stakeholder-respondents were concerned with the role that BTI has to play, and hence are likely to have given frank responses. Secondly, the researcher had assured them that their anonymity and confidentiality would be maintained, which assurance was respected. Thirdly, the tables of means reveal that in many cases the standard deviations are high. Fourthly, the incidence of positive frequency distributions in many tables is low. Last, in the questionnaires the statements of the dimensions were mixed, so that the respondents could apply their minds.

It has been explained in section 3.8.1.2, that for each statement of the questionnaires there was a 5-point Likert rating scale of Strongly Disagree = 1 to Strongly Agree = 5. These scores can be analysed by two alternative methods. The first method is to add the scores for each statement in a dimension for each respondent. This would give the total score for that dimension for the respondent. Each of these scores can then be classified into ordinal categories, like low, medium and high. Or, means of the total score for a dimension can be calculated across all the respondents in each category. This method of summation of scores was not adopted in this research.

The second method is to take the score of each respondent, add these scores across all the respondents and calculate the mean using the actual number of respondents. There were "no responses" for some questions i.e., there were missing values. There are various solutions to solve the missing value or no response problems. But, these are only approximate solutions. Hence, the second method of analysis was adopted.

4.3.2.1 Employers Quality Evaluation

Table-20 presents the employers quality evaluation, which clearly shows that the average scores of all the evaluative items in the survey are above the mid point of the 5-point Likert's scale (mid point = 3). The grand mean is 3.60. When the scores are grouped by dimensions, it is noted that:

$$\overline{DE_4} \langle \overline{DE_5} \langle \overline{DE_3} \langle \overline{DE_2}$$

Where $\overline{DE_2}$ = the average quality score of Dimension 2

$\overline{DE_3}$ = the average quality score of Dimension 3

$\overline{DE_4}$ = the average quality score of Dimension 4

$\overline{DE_5}$ = the average quality score of Dimension 5

Table- 20 Employers' Quality Evaluation

No.	Question / Statement	Mean	Std. Dev.
Dimension 2: Competitive Environment			
Q7	Programmes and the corresponding curriculum are responsive to the training needs of job market.	3.83	0.62
Q8	The learning objectives of training programmes offered meet the requirements of the employers.	3.77	0.65
Q12	BTI is responsive to the employer feedback and has demonstrated evidence of incorporating them.	3.64	0.89
Q13	BTI graduates are well trained to have appropriate skills and knowledge to take up industrial placements.	3.53	0.91
Q24	Organisations have to impart additional training to enable graduates to perform acceptably soon after entering the workplace.	3.96	0.87
Dimension 3: Internal Cultural Dynamics			
Q14	There is a positive attitude towards quality of all concerned within BTI.	3.73	0.76
Q18	BTI implements self-assessment of its performance to identify its strengths and weaknesses.	3.58	0.65
Q19	BTI has created an organisational culture that is conducive to continuous quality improvement.	3.62	0.72
Dimension 4: Implementation Performance and Emergent Systems			
Q9	The training programmes are cost effective and make efficient use of personnel and other learning tools.	3.64	0.69
Q10	BTI programmes are generally well matched to meet the individual needs of trainees, employers and other users.	3.64	0.72
Q15	BTI has comprehensive arrangements for quality assurance involving stakeholders.	3.44	0.62
Q16	Quality Assurance has helped in restructuring and redesigning the programmes, leading to measurable gains in the performance of the trainees.	3.47	0.73
Q17	Quality assurance procedures are reviewed continuously with appropriate stakeholders.	3.26	0.59
Q23	All the BTI processes have built-in mechanism to ensure Quality.	3.44	0.64
Dimension 5: Management Style			
Q11	BTI is able to support flexible learning needs with the objective of widening participation.	3.61	0.71
Q20	BTI's senior management is visibly committed to Quality Assurance.	3.70	0.67
Q21	BTI's quality objectives and strategies are developed and deployed down through the organisational hierarchy.	3.39	0.67
Q22	The senior management of BTI initiates actions for identifying and tackling the main quality problems.	3.57	0.76
	Grand Mean	3.60	

Scale: 1 = Strongly Disagree 2 = Disagree 3 = Not Sure
4 = Agree 5 = Strongly Agree

On the basis of these scores, it is found that the employers ranked the four dimensions in order of merit as follows: Competitive Environment ($\overline{DE_2}$ = 3.75), Internal Cultural Dynamics ($\overline{DE_3}$ = 3.64), Management Style ($\overline{DE_5}$ = 3.57), and Implementation Performance and Emergent systems ($\overline{DE_4}$ = 3.48).

It stands to reason that the employer respondents ranked high the Dimension 2, "Competitive Environment". The employers are the ones who feel the heat of keen competition in terms of quality of products and judge employees' skills and training. **Appendix C1** (Analysis of Employers Survey) containing the frequency distribution tables reveals a more detailed picture. The Total Positive Response Frequencies (TPRF), i.e. percentage "Strongly Agree" plus percentage "Agree" on the part of the employers for almost all the statements of Dimension 2 are very high. As many as 83 percent of the employer respondents agreed / strongly agreed that the BTI programmes and the corresponding curricula were responsive to the training needs of the job market. Similarly, three fourths of the respondents agreed / strongly agreed that the learning objectives of the training programmes met the requirement of the employers. The responsiveness of BTI feedback was appreciated. But, only a little more than half of the employer respondents said the BTI graduates were well trained to have appropriate skills and knowledge to take up the industrial placements. It may be noted that as many as three-fourths said organisations had to impart additional training to enable graduates perform acceptably soon after their entering the work place. The extent of support for this statement is intriguing.

Generally, all employers have to impart organisation - specific skills to any skilled graduate. With the manufacturing and service world becoming more specialised and complex, the need for imparting additional organisation – specific skills has increased, while FE institutes like BTI impart across-the-board skills. Therefore, the substance of the employer respondents' views of competitive environment is: BTI programmes and curricula are relevant.

BTI is responsive to employers needs. The training imparted to the BTI graduates is acceptable to the employers. However, the graduates are not in a position to take up placement soon after completing the training programme. Employers have to impart additional training.

The total positive response frequencies of the employers to the three questions in Dimension 3, "Internal Cultural Dynamics" are above 50 percent mark. The incidence of frequencies in the 'Not Sure' response category is rather high. There is need on the part of BTI to apprise the employers of how the Institute handles the matters of organisational culture.

The Dimension 5, "Management Style", ranked third in the evaluation of the employers. An examination of the total positive response frequencies of each of the questions in the Dimension reveals that the employers appreciated BTI's support for the flexible learning needs (statement 11). But only 39 percent of the employers strongly agreed / agreed to BTI developing the quality objectives through the hierarchy (statement 21). As many as 58 percent of the employer respondents were not sure of BTI involving the hierarchical levels. One cannot expect the employers to know fully the managerial style in BTI.

The employers accorded in comparison with other dimensions the last rank to Dimension 4, "Implementation Performance and Emergent Systems". This is due to the generally high incidences of percentages of respondents in the 'Not Sure' categories of statement 15, dealing with involvement of stakeholders, statement 16, dealing with continuous review of quality procedures with appropriate stakeholders, statement 17, dealing with the review of quality assurance procedures with appropriate stakeholders, and statement 23, dealing with BTI having a built-in mechanism to ensure quality. In the case of three statements out of the total six, the incidences of 'Not Sure' exceed 50 percent and even reach 71 percent in one case. The Total Positive Response Frequency (TPRF) scores are below 50 percent in 4 out of 6 statements. BTI has to demonstrate to the employers how it is ploughing back the views and opinions of other stakeholders like the staff and trainees.

4.3.2.2 Staff Quality Evaluation

The staff's quality evaluation is presented in **Table- 21.** The average scores of all the evaluative items in the questionnaire are above the mid point of the 5-point Likert's scale (mid point = 3). The grand mean is 3.59. When the scores are grouped by dimensions, it is noted that:

$$\overline{DS_3} \langle \overline{DS_5} \langle \overline{DS_4} \langle \overline{DS_2}$$

Where $\overline{DS_2}$ = the average quality score of Dimension 2

$\overline{DS_3}$ = the average quality score of Dimension 3

$\overline{DS_4}$ = the average quality score of Dimension 4

$\overline{DS_5}$ = the average quality score of Dimension 5

On the basis of these scores, it is found that the staff ranked the four dimensions in order of merit as follows: Competitive Environment ($\overline{DS_2}$ = 3.64), Implementation Performance and Emergent systems ($\overline{DS_4}$ = 3.63), Management Style ($\overline{DS_5}$ = 3.59) and Internal Cultural Dynamics ($\overline{DS_3}$ = 3.51).

Like the employer respondents, the staff respondents, too, accorded the first rank to Dimension 2, "Competitive Environment". As seen from the univariate percentage frequency tables in **Appendix C2** (Analysis of Staff Survey), the total positive response frequencies are above 65 percent, except in regard to statement 14: "Review of curriculum is based upon regular consultation with employers and past trainees". The statement elicits only 50 percent positive response. Generally, the staff felt that in this particular area of curriculum revision, BTI was not adequately taking into account the competitive environment through consultations with employers and past trainees. Not only more efforts should be made to intensify the interactions with the employers and past trainees, but the staff should be kept informed of these interactions.

Table- 21 Staff Quality Evaluation

No.	Question / Statement	Mean	Std. Dev.
Dimension 2: Competitive Environment			
Q6	The learning outcomes of training programmes offered meet the requirements of the employers.	3.71	0.87
Q14	Review of curriculum is based upon regular consultation with the employers and past trainees.	3.41	1.01
Q15	Industrial feedback on trainees doing on-job-training (OJT) serves as valuable input to the quality assurance system.	3.82	0.94
Q17	Trainers are appropriately qualified and have up to date knowledge / skills to be effective.	3.62	1.00
Dimension 3: Internal Cultural Dynamics			
Q13	Trainer's participation in the review and evaluation through the module teams and programme management committees is normally very critical and productive.	3.61	0.96
Q21	The existing organisational culture is conducive to continuous quality improvement and enables every one to participate.	3.32	0.99
Q22	BTI has demonstrated its commitment to continuous quality assurance improvement.	3.67	0.93
Q23	Staff are involved in improving the processes under their control on a continuous basis and take personal responsibility for their own quality assurance.	3.77	0.91
Q27	BTI quality systems are well understood and supported by all the staff.	3.09	1.20
Q28	The quality culture at BTI is promoted by the professional working environment.	3.34	1.12
Q29	The positive attitude towards quality of all involved at BTI is responsible for making BTI a premier training institution.	3.78	0.97
Dimension 4: Implementation Performance and Emergent Systems			
Q7	Training programmes designed and delivered are relevant to the job market.	3.78	0.85
Q8	The training programmes are cost effective and make efficient use of personnel and other learning tools.	3.68	0.86
Q10	Teaching and learning processes are planned effectively to achieve required standards.	3.63	0.98
Q11	Appropriate training methods are used to meet the trainees' individual learning needs and the needs of the programmes.	3.65	0.86
Q20	Appropriately qualified technical and support staff are effectively deployed to support trainers and trainees.	3.64	0.99
Q24	Staff appraisal and professional development are integral parts of BTI's quality assurance.	3.54	1.08
Q25	Trainers are vital links in the quality chain within BTI.	3.91	0.96
Q26	BTI's quality assurance procedures cover every aspect of its functions: training / teaching, assessment and administrative processes.	3.28	1.10
Dimension 5: Management Style			
Q9	Flexible targets are set by the institute for the performance of the individual staff and groups.	3.38	1.08
Q12	Specialist equipment and resources are available to support training and learning outcomes.	3.67	1.01
Q16	The direction given by BTI management facilitates achieving targets and keeps training and learning under constant review.	3.64	0.98
Q18	Trainers are provided with suitable opportunities for professional development.	3.52	1.02
Q19	BTI is committed to the development of its employees with the recognition that they are an asset.	3.73	1.06
	Grand Mean	3.59	

Scale: 1 = Strongly Disagree 2 = Disagree 3 = Not Sure
4 = Agree 5 = Strongly Agree

Dimension 4, "Implementation Performance and Emergent Systems" was ranked second by the staff. The total positive response frequencies for each of the 8 statements are above 50 percent mark. It is encouraging to note that the staff appreciated the efforts involved in implementation of quality. The Total Positive Response Frequencies to 7 out of 8 statements are in the range of 61 percent to 75 percent. But, only slightly more than half of the respondents agreed or strongly agreed that BTI quality assurance systems covered every aspect of its functions (statement 26).

Dimension 5, "Management Style", involving five statements was ranked third by the staff. Each one of the five statements drew total positive response frequencies of at least 59 percent or more, which, too, is gratifying. Slightly more than two-thirds of the staff respondents (i.e. 68 percent) agreed/ strongly agreed that BTI had provided them with specialist equipment and resources to support training activities (statement 12). BTI's commitment to the development of its employees with the recognition that they were an asset, (statement 19) elicited support from two-thirds of the staff respondents. What is more significant about the above commitment of BTI to staff development is the fact that one-quarter of the staff respondents, i.e. 25 percent strongly agreed with the statement. Similarly, about 59 percent to 66 percent of the staff respondents agreed / strongly agreed that BTI set flexible targets, facilitated achievement of targets and kept training under review (statement 9).

The Dimension 3, "Internal Cultural Dynamics", ranked last in the evaluation of the staff. The dimension comprises seven statements. There is a good deal of variance in the total positive responses to the seven statements. Only statement 23, i.e. "Staff involvement in improving processes, etc". drew a positive response frequency of 74 percent. Also, statement 13 regarding trainers' participation in the review and evaluation being critical and productive, statement 22, regarding BTI's demonstration of its commitment to continuous quality improvement, and statement 29, regarding the positive on the part of all toward quality elicited total positive responses ranging from 59 percent to 69 percent.

But, only 43 percent of staff respondents agreed or strongly agreed to statement 27, that all the staff understand well the BTI quality systems. Similarly, only less than half, i.e. 47 percent of the staff respondents agreed or strongly agreed to statement 21, regarding the existing organisational culture being conducive to continuous quality improvement and participation of all.

4.3.2.3 Trainees Quality Evaluation

The trainees' quality evaluation is presented in **Table- 22.** The average scores of all the evaluative items in the questionnaire are above the mid point of the 5-point Likert's scale (mid point = 3). The grand mean is 3.32. When the scores are grouped by dimensions, it is noted that:

$$\overline{DT_5} \langle \overline{DT_4} \langle \overline{DT_3} \langle \overline{DT_2}$$

Where $\overline{DT_2}$ = the average quality score of Dimension 2

$\overline{DT_3}$ = the average quality score of Dimension 3

$\overline{DT_4}$ = the average quality score of Dimension 4

$\overline{DT_5}$ = the average quality score of Dimension 5

On the basis of these scores, it is found that the trainees ranked the four dimensions in order of merit as follows: Competitive Environment ($\overline{DT_2}$ = 3.43), Internal Cultural Dynamics ($\overline{DT_3}$ = 3.30), Implementation Performance and Emergent systems ($\overline{DT_4}$ = 3.29) and Management Style ($\overline{DT_5}$ = 3.21).

Table- 22 Trainees Quality Evaluation

No.	Question / Statement	Mean	Std. Dev.
Dimension 2: Competitive Environment			
Q12	BTI training process adds a range of values to the trainees before they pass out as graduates.	3.58	0.81
Q17	Trainers are appropriately qualified and demonstrate their ability for transferable skills.	3.56	0.95
Q19	The standard of training programmes offered meets the expectations of the trainees.	3.21	0.97
Q20	Training programmes at different levels meet the specific requirements of the job market.	3.59	1.00
Q28	The quality systems at BTI have ensured the programmes to add real values to the trainees.	3.18	1.05
Q29	On Job Training (OJT) and Graduate Follow-up give BTI the job market's direct feedback about the extent to which the trainees meet the requirements of the job market.	3.48	1.01
Dimension 3: Internal Cultural Dynamics			
Q15	Independent / self-learning by trainees is helped by open access to appropriate learning resources and materials.	3.22	1.06
Q16	Trainee – Trainer interaction is encouraged in the learning process.	3.57	0.95
Q18	Trainees are given realistic feedback about their achievements at appropriate points in the progress of the modules.	3.26	1.05
Q23	Trainees understand the purpose of the assessments and what is expected of them.	3.26	1.09
Q27	Trainees and graduate trainees contribute to the review and evaluation of the different modules and programmes.	3.17	0.97
Dimension 4: Implementation Performance and Emergent Systems			
Q7	The guidance given by BTI before and on entry helps the trainees to choose the right programme.	3.06	1.15
Q8	Induction programmes enable the trainees to understand BTI quality system.	3.28	0.99
Q9	Trainees receive effective learning support to meet their needs.	3.42	0.95
Q10	Appropriate training methods are used to meet the trainees' learning needs in terms of knowledge, skills and attitude.	3.58	0.94
Q13	Delivery of training is well planned and helps to achieve the programme/module outcomes.	3.26	1.01
Q14	Support learning materials prepared by BTI are relevant and of high quality.	3.12	1.12
Q21	The training programmes are cost effective and make efficient use of personnel and other learning tools.	3.24	1.01
Q22	The aims and objectives of the programmes / modules are clear to the trainees.	3.33	1.06
Q24	BTI assessment system is consistent with the learning objectives of the programmes.	3.32	1.01
Q25	Assessments are realistic, and differentiate the ability and skills of the trainees.	3.25	1.00
Dimension 5: Management Style			
Q11	Specialist equipment and resources are available to support training and learning.	3.12	1.16
Q26	BTI sets realistic targets for the performance of individuals and groups at various levels.	3.30	0.98
	Grand Mean	3.32	

Scale: 1 = Strongly Disagree 2 = Disagree 3 = Not Sure
4 = Agree 5 = Strongly Agree

In the opinion of the trainees, Dimension 2, "Competitive Environment" fared better than Dimensions 3, 4 and 5. Dimension 2 has six statements. As seen from the univariate percentage frequency tables in **Appendix C3** (Analysis of Trainees Survey), the total positive response frequencies for three statements are in the range of 59% - 61%. Statement 17, regarding trainers being appropriately qualified and possessing transferable skills drew total positive response frequency of 61 percent of the trainee respondents. Similarly, 61 percent of the trainee respondents agreed / strongly agreed to statement 20, regarding training programmes meeting the specific requirements of the job market. Also, the total positive response frequency for statement 12, BTI training process adding value to trainees, elicited almost the same level of positive response. But, the positive responses to the statement 19, "The standard of training programmes offered meets the expectations of the trainees", came from only 43 percent of the trainees. Similarly, the statement 28, "The quality systems at BTI have ensured the programmes to add real value to the trainees", drew positive responses from only 43 percent of the trainees. It is found that while most trainee respondents rated high value addition of the BTI training processes, only a small section of them rated high value addition due to the quality process.

Dimension 3, "Internal Cultural Dynamics", got the second rank from the trainees. The Dimension has five statements, and only one, - statement 16 -, "Trainer – Trainees interaction is encouraged in the learning process", drew positive responses from 61 percent of the trainees. The remaining statements dealing with Dimension 3 did not draw a sizeable positive response. Particularly, statement 27, "Trainees and graduate trainees contribute to the review and evaluation of different modules and programmes", elicited total positive responses from only 38 percent of the trainees.

The BTI trainees ranked Dimension 4, "Implementation Performance and Emergent Systems" third. Dimension 4 has ten statements. It is found that only four statements elicited positive responses from at least more than half of the respondents. Nearly two-thirds of the trainee respondents, i.e. 64 percent agreed / strongly agreed with statement 10, - appropriate training methods being used to meet the trainees' learning needs.

Slightly more than half of the trainee respondents, i.e. 54 percent agreed / strongly agreed that the trainees received effective learning (statement 9). Approximately the same percentage of trainee respondents, i.e. 53 percent agreed / strongly agreed that the aims and objectives of the modules were made clear (statement 22). Regarding the assessment system the opinion was divided (statement 24). Statement 14, "Support learning materials prepared by BTI are relevant and of high quality", received the positive support from least percentage of trainee respondents, i.e. 40 percent. Statement 21 regarding the cost effectiveness of the training drew positive responses from a slightly higher proportion, i.e. 43 percent. Not many trainees were satisfied with the guidance given by BTI before, and on entry (statement 7). The positive responses to delivery of training (statement 13) came from 47 percent of the trainee respondents. Regarding induction (statement 8) the opinion was divided.

The trainees ranked Dimension 5, "Management Style" last. It had only two statements: 11 "Specialist equipment and resources are available to support training and learning", and 26 "BTI sets realistic targets for the performance of individuals and groups at various levels". Both these statements drew positive responses from only about 45 percent of the trainees.

4.3.3 Comparison of the Stakeholders Quality Evaluation

Table- 23 compares the Dimensions 2 – 4 in terms of their evaluation by the employers, staff and trainees. Dimension 2, "Competitive Environment", received the most consistent assessment. The coefficients of variation range from 21.6 to 28.6 percent, a range of only 7.0 percent. Dimensions 3 and 4, i.e. "Internal Cultural Dynamics" and "Implementation Performance and Emergent Systems" drew slightly less consistent support. The ranges of the coefficients of variation are 11.7 percent and 12.1 percent. Dimension 5, "Management Style" received most inconsistent evaluations. The coefficients of variation range from 12.7 percent (employers) to 33.6 percent (trainees), a range of 20.9 percent.

Table- 23 Comparison of the stakeholders' evaluations

Stakeholders	Mean	Standard Deviation	Coefficient of Variation (%)
Dimension 2: Competitive Environment			
Employers	3.75	0.81	21.6
Staff	3.64	0.97	26.6
Trainees	3.43	0.98	28.6
Dimension 3: Internal Cultural Dynamics			
Employers	3.64	0.72	19.8
Staff	3.51	1.03	29.3
Trainees	3.30	1.04	31.5
Dimension 4: Implementation Performance and Emergent Systems			
Employers	3.48	0.68	19.5
Staff	3.63	0.98	27.0
Trainees	3.29	1.04	31.6
Dimension 5: Management Style			
Employers	3.57	0.71	12.7
Staff	3.59	1.04	29.0
Trainees	3.21	1.08	33.6

This means that all the stakeholders – in almost equal degrees - recognised the significance of "Competitive Environment". But, when it came to the "Management Style" of quality assurance, the stakeholders' assessments diverged. Management Style requires a lot of effort in terms of evolving a consensus.

Section 4.3.2.1, 4.3.2.2 and 4.3.2.3 examined the relative rankings of the four dimensions in terms of the highest to lowest mean scores for each category of the stakeholders (employers, staff, and trainees). **Table-24** seeks to summarise these rankings. The Dimension 2, "Competitive Environment" was ranked highest by all the categories of stakeholders. All the categories of the stakeholders unanimously emphasised the catalytic role of the "competitive environment" in the quest for quality. They, however, differed in regard to the significance attached to the other dimensions.

Table- 24 Stakeholders' ranking of the four dimensions

Dimensions	Employers	Staff	Trainees
2: Competitive Environment	1	1	1
3: Internal Cultural Dynamics	2	4	2
4: Implementation and Emergent Systems	4	2	3
5: Management Style	3	3	4

Each section of the analysis of the surveys of respondents, employers, staff and trainees, began with a discussion of their evaluation of each dimension. The mean scores of dimensions for each stakeholder and the ranking of the dimensions for each stakeholder were given. **Figure 8** which is based on **Table- 23** seeks to show at a glance the distributions of the mean scores by dimensions. The dimensions are plotted on the x-axis and within each dimension the categories of Employers (E), Staff (S) and Trainees (T) are given.

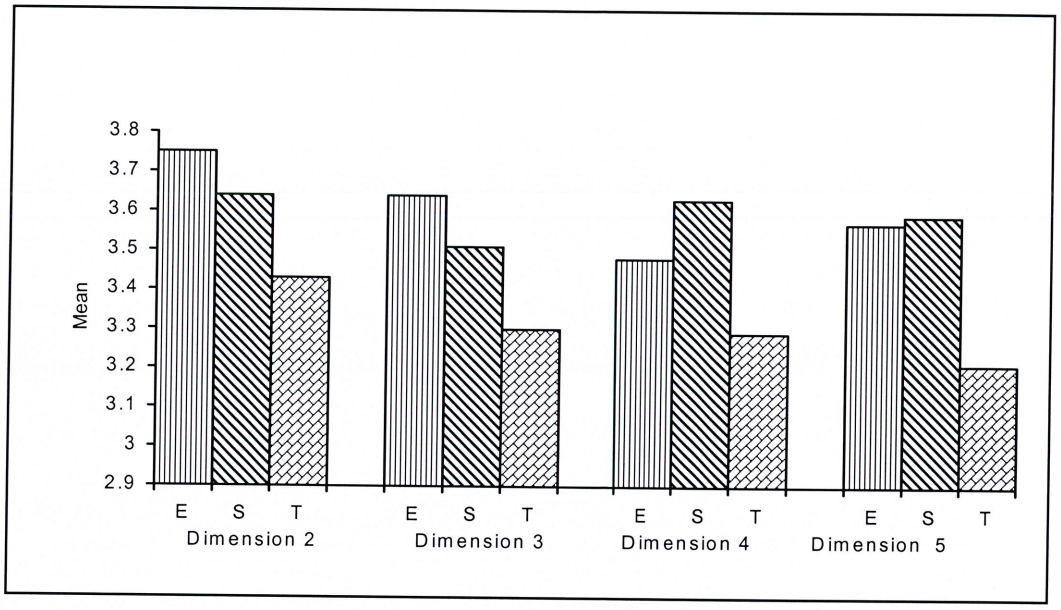


Figure 8 - Evaluation of the Dimensions by the Stakeholders

Within Dimensions 2 and 3, i.e. "Competitive Environment" and "Internal Cultural Dynamics", the mean evaluations of the employers, staff and trainees occur in the descending order. In other words, the employers' evaluation was very high, and those of the staff and trainees came next. The employers were more sensitive to the competitive environment. It is clearly seen that the staff evaluation of the Dimension 3, "Internal Cultural Dynamics" was lower than their evaluations of the other three dimensions. The various aspects "Internal Cultural Dynamics", for example, organisational culture, understanding of and support for the quality system, etc. are yet to crystallise. But, in regard to Dimension 4, i.e. "Implementation Performance and Emergent Systems", the staff evaluation came first, that of the employers and trainees second and third. The staff were in a better position to evaluate Implementation Performance and Emergent Systems. In regard to Dimensions 5, "Management Style", the staff evaluation was slightly higher than that of the employers. Again, the staff were in a better position to judge managerial style.

4.4 Analysis of the data of the Focus Group Interviews

This section will discuss the data collected from the focus groups interviews. General comments will be provided on the findings that emerged when the interviews data were organised and analysed.

4.4.1 Conducting Focus Group Interviews

In Chapter 3 the role of the focus groups in this research and their recruitment were discussed. The following sections will discuss the forming and conducting of focus group interviews:

4.4.1.1 Themes of the Focus Group Interviews

As mentioned in Chapter 3 (Section 3.9) eight focus group interviews (Groups A, B, C, D, E, F, G and H) were conducted during the training year 2000 / 2001 and four main themes were put before them to test the dimensions (2 to 5) and seek answers to the research questions of the study **(see Figure 9)**. The themes reflected for data gathering included the following:

- **Theme 2 [Dimension 2: Competitive Environment]** - The importance of changing economic environment on Further Education and Vocational Training and the quality actions taken by the BTI.
- **Theme 3 [Dimension 3: Internal Cultural Dynamics]** - Involvement of the various groups and their contributions to development of Quality Assurance.
- **Theme 4 [Dimension 4: Implementation and Emergent Systems]** - Dynamics of re-orienting the BTI system in terms of Quality Assurance.
- **Theme 5 [Dimension 5: Management Style]** - Impact of Quality Assurance on the role of the employees.

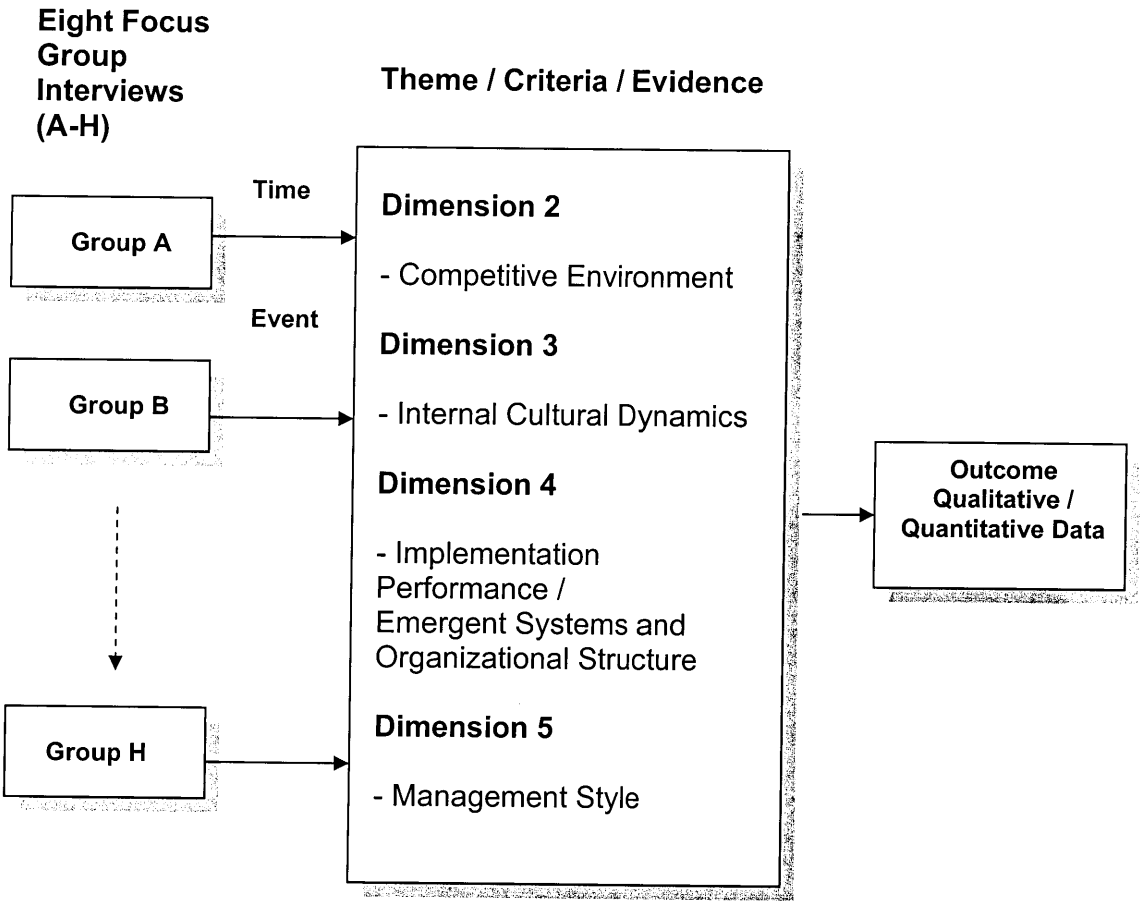


Figure 9 - Organisation of Focus Group Interviews

The data of all the focus groups interviews are given in **Appendix D**. The **Appendices (D1 – D4)** give details of the focus group interviews conducted during February, March and April 2001 which are as follows:

Appendix D1- Focus Group Interview Themes,
Appendix D2- Introduction to Participants of Focus Group Interviews,
Appendix D3- Schedule and Membership Composition, and
Appendix D4- Focus Group Interviews Participants Sheet.

4.4.1.2 Constitution of the Focus Group Interviews

As stated in Section 3.9 eight focus groups, - six comprising entirely teaching / training staff, and two mostly support staff – were constituted. While constituting the focus groups the following factors were kept in mind:

- The size of the group would not be more than 10, preferably 6 to 8.
- In the case of teaching / training groups, diversity of the disciplines was ensured.
- Staffs were not mixed with their departmental superiors in order to ensure free and uninhibited expression of views and opinions.
- BTI has a large number of trainers from other countries. Hence representation of diverse nationalities in a focus group was ensured.
- Staff members, who had a good deal of teaching / training experience and administrative / support experience were mixed with those with less experience. Also, each group contained a fair mix of staff of different age groups, and male and female representations.

4.4.1.3 Moderation of the Focus Group Interviews

Focus Group Interviews were moderated by a senior staff member, who himself had in the past the experience of participating in and moderating focus groups interviews and discussions. The following steps were taken:

- The moderator assured the participants that their anonymity and confidentiality of the detailed discussions would be maintained.
- The participants were assured that they would get a summary of the discussions.
- The discussions were tape recorded with the consent of the participants.
- The tape recording was transcribed.

4.4.2 Findings of the Focus Group Interviews

This section discusses the findings of the focus group interviews. The discussions in each focus group were conducted on the themes listed in section 4.4.1.1 **(see Appendix D1)**. During the discussions the moderator further elaborated and explicated the themes in terms of the sub-themes listed in **Tables- 25, 26, 27 and 28**. This enabled the participants to discuss the themes more concretely and specifically. Also, the participants could interact with one another more directly.

The transcripts were thoroughly examined and the emergent patterns / categories were coded and codes were further refined. These categories / codes were classified in terms of the following criteria:

- extent of awareness,
- extent of acceptance,
- extent of effectiveness,
- frequency and intensity of opinions, and
- strength and forcefulness.

It is not the objective in this research to compare the different focus groups in terms of categories / codes. The researcher found during the analysis that each group was not distinctive. It would not be rewarding to raise the level of generalisation by comparing the groups with one another. Hence all the transcripts were pooled together and multiple points were mentioned. As far as possible the original phrases of the participants have been retained and similar view points were combined. The summary of the data collected from the eight focus groups interviews with respect to each dimension have been arranged in Tabular form as given in **Tables- 25, 26, 27 and 28**. The following sections (Section 4.4.2.1, 4.4.2.2, 4.4.2.3 and 4.4.2.4) will summarise the findings of the eight focus groups interviews.

4.4.2.1 Dimension 2: Competitive Environment

The Dimension 2: Competitive Environment i.e. "**Theme 2** - The importance of changing economic environment on Further Education and Vocational Training and the quality actions taken by the BTI", has been subdivided into four **sub-themes** which are as follows: (1) Importance of standardising and representing outcomes from training to assure value added, (2) Alignment of Quality Assurance organisational practice to international standards, (3) Transparency of Quality Assurance processes to internal and external inspection, and (4) Inclusion of the views of the employers in the Quality Assurance processes. **Table- 25** presents the data of the Dimension 2: Competitive Environment according to each sub-theme.

Across all the eight groups, a consensus emerged that all the aspects of the training programme should add value to a trainee. This point, for example, can be expressed in the words of a participant: "One of the variables in the whole quality system is really the customer or participant in the training programme. One important aspect is really the added value to the participant. Another point is quality consciousness on the part of the customer and BTI as provider of training should be much more customer-oriented". Another participant stressed, "The first thing we should look at is the quality of the input or trainees' standard. We should have quality at the beginning and we should select a good raw material to have an output or end product which is of high quality, otherwise we end up with wrong product". The participants were keenly aware that the training must be useful to the trainees. Again, the point was forcefully emphasised that it was the quality of training that counted and the perceptions of the trainees in this regard were important.

The participants accepted that knowledge and standards should be excellent. In the absence of national standards, benchmark was ensured by accreditation. One participant stated, "I think that whatever the standards that we use, one has to strike the balance between the quality and quantity. I think it is a trade-off between the context of training individuals and transferring skills from a trainer to trainee. We should consider the number of trainees in the training environment, i.e. in classroom or workshop and the expected quality of the finished product or added value to the trainees. There is bound to be some trade-off in the loss of quality, because of the volume of trainees. We are only trying to ensure everyone is up to a certain standard. And I think it is definitely a loss of quality over quantity". In the words of another participant: "One of the things I feel we actually control is the delivery within the training environment itself. I feel it varies a lot from one instructor to another. So, may be, the same subject delivered by one person may not be delivered at the same level as the other person might be delivering it. There is a need to standardize that at least. Once a trainer walks into a classroom, the training delivery is at the same level across the board".

The trainees returning to the Institute for further training was a good measure of quality. Since quality was what the receiver perceived, its impact should be evaluated by the trainees, who were the final arbiters. Several participants said, "We have to look at trainees' expectations and explain to them the job opportunities available in Bahrain. The trainees should be realistic in their choices of programmes. We are not in the business of having people continue their studies only. We are preparing people to get employment. We have to prepare people for better jobs through value addition". But, there was a good deal of concern that efforts should be made to take in trainees with high calibre. One participant stated, "The graduate follow-up study we are conducting every year gives us a good indication of post-employment status. How our trainees are performing when they get the job, and whether they are satisfying their employers or not, - that might give us some really interesting feedback on the quality of our training". The participants urged that BTI should associate itself with other similar institutes so that it could evaluate itself.

There are two quotations emerging from the focus group interviews which are of particular interest as they indicate that the participants appreciated the competitive environment. One participant said, "If we are operating in a competitive environment, we have to satisfy the demand for quality of the programmes and services that we provide, and we have to know what the employers' expectations are. When they ask about the performance of graduate trainees, I think we need to be precise in what we are training our trainees to do and I think we have to be open to any criticisms when we place the trainees into the job market". Another participant stated, "Competition is a healthy environment and training providers should compete for quality of their programmes and services. So, if another new institution opens and they provide similar programmes, I say that student's choice will be based on the standard, quality of provision and the cost of the training programmes".

During the discussions of Competitive Environment itself the points relating implementation and management of quality began to emerge: (a) openness and transparency of the quality systems, (b) units and departments of the Institutes taking the responsibility for quality within the well-defined policy and regulations, i.e. decentralisation and empowerment, and (c) the departments/ units assuming the responsibility for managing transparency. The participants were conscious that they should subject themselves to internal and external verification. The strength of the participants' analyses can be judged by the opinion that local / national success of staff members' work denominated quality. One participant stated, "What quality means for me is openness and fairness and being willing to establish clear policies that everyone knows what the expectations are". It may be recalled here that Garwood and Hallen (1998: 15.4) identify open communications and trust as some of the building blocks of quality.

While stressing the importance of trainees as the immediate customers, the participants were acutely aware that the employers were also important stakeholders. In the word of one participant, "The quality of the training programmes is the skill transfer from trainers to trainees. I think the end product becomes the trainee". The quality of training should be maintained and enhanced by working with industry groups and employers. One participant suggested, "We should establish partnership with employers and with the external customers. We should attract them, respond to them immediately, and work very hard in order to satisfy their needs". The Institute should also establish and cultivate contacts with professional associations. This would help in evaluation of implementation of quality systems.

The strength of the participants' concern for employers and industries emerges from the fact that they advocated involving industrial representatives to participate on the programme advisory committees, to evaluate programmes and review curricula so that programmes and curricula meet the requirements of the job market. One participant commented, "I would say, to start with, we do have at the programme level advisory committees, whereby experts from different companies participate in regular meetings and we actually discuss various aspects of the programmes, - not just the content, outcomes and standard, but also the resources needed to run a particular programme. So, they provide a very useful feedback for us, in terms of development of programmes, improving quality, quality of materials and so on". Another participant stated, "Sometimes it is difficult to maintain a balance between the local requirement and the external requirement set by the awarding bodies. The main thing is that we should provide programmes relevant to the industry". Thus, it could be seen that the participants wrestled with the conceptualisation of quality, the means of ensuring it and indicators of good quality. While focusing on the trainees, the participants sought to bring employers and industries centre-stage.

Table 25 - Dimension 2: Competitive Environment

Theme 2:	The importance of changing economic environment on Further Education and Vocational Training and the quality actions taken by the BTI.
Sub-Themes: Indicators / Criteria	1- Importance of standardising and representing outcomes from training to assure value added, 2- Alignment of Quality Assurance organisational practice to International Standards, 3- Transparency of Quality Assurance processes to internal and external inspection, and 4- Inclusion of the views of the employers in the Quality Assurance processes.

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
1.1- Providing the training that is useful to individuals. 1.2- Providing trainees with value in all aspects of the programme and needs should be met or exceeded.	1- No national standards exist to compare us to other institutions in the country.	1- The effect of accreditation on quality is very useful to compare the standards and provide benchmark.	1- Recruiting of quality trainees. Trainees are not all necessarily committed to their training program.	1- Perceptions of trainees and coming back for a repeat experience are a measure of quality. The quality of service that is provided to the trainees.
2.1- Standards must be maintained and objectives adhered to. There should be continuous evaluation mechanism. 2.2- There should be external standards pitched at.	2- Excellence in the maintenance of body of knowledge and standards.	2- The trainees are customers and need to get the best experience and recognised standards of training.	2- If association with different vocational qualifications awarding bodies enhances the institute, it must be high quality institute.	2- Programme accreditation, which requires certain content for programmes and content of the outcome to be delivered.

Table 25 - Dimension 2: Competitive Environment

Continued...

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
3.1- Transparency is a measure of quality; high transparency is high quality. 3.2- Openness and self-assessment for internal and external inspection is important issue in quality.	3- Make policy and regulations to encourage departments/units to monitor quality.	3- The ultimate arbiters of quality are the trainees. Quality is in the eye of the receiver.	3- Responsibility of managing transparent quality systems lies with each unit/department.	3- Quality is defined by the degree of local/national success of staff member's work.
4.1- Employers have a role to play in quality. 4.2- Provide the best service to trainees and employers to meet their needs.	4- Quality has to do with the customer, the individual and the trainees.	4- Working with industry groups and employers, establishing partnership and maintaining contact with professional associations.	4- Staff should interact more with industry, to offer relevant programmes.	4- A complete process of managing quality requires involving industrial representatives to participate on programme advisory committees, to evaluate programmes, and review curriculum that meet the job market.

4.4.2.2 Dimension 3: Internal Cultural Dynamics

The Dimension 3: Internal Cultural Dynamics, i.e. "**Theme 3** - Involvement and contributions of the various groups to development of Quality Assurance" has been subdivided into six **sub-themes**, which are as follows: (1) Quality Assurance viewed as a developmental process, (2) Quality Assurance viewed as individual and group responsibilities, (3) Quality Assurance is the responsibility of the organisation to manage, (4) Quality Assurance needs to be documented and made explicit through interactions process, (5) Feedback and improvement implicit in organisational procedures, and (6) Perception of the staff and management in relation to Quality Assurance. **Table 26**- presents the data of the Dimension 3: Internal Cultural Dynamics according to each sub-theme.

One key point, i.e. organisational structure, politics and culture, on the one hand, and quality assurance on the other, were dynamically related, began to dominate the discussions and interactions in all the focus groups. The participants did not favour a rigid structure. It can be seen from the patterns of responses that quality assurance involved the cultural development of the individual as well as the organisation. The participants displayed their awareness of the organisation-wide implication of participation. Everyone from the top down to trainees was responsible for quality. Collective responsibility for quality was repeatedly recognised. Various aspects of quality culture came to the surface. One participant said, "We should not look at the quality assurance division role in a negative way like policing. They are playing a very important role in terms of implementing procedures, reviewing policies and spreading good practices". It was generally accepted that the training staff should themselves develop standards of excellence. A very sensitive aspect of evaluation of culture of quality found expression in the groups. They came to the conclusion that quality was professional pride. This is redolent of Deming (Evans and Lindsay, 1996 and Lomax, 1996). The important aspects of commitment and sharing of organisational values were forcefully voiced. The groups also identified frequently the crucial role the training departments could play.

Organisational politics was uppermost in the minds of the participants in the groups. One participant stated, "Politics is seen as creating a sense of territoriality which leads to less co-operation and co-ordination between departments and units of the Institute". Another participant said, "Organizational politics is a fact of life in any organization, where efforts of individuals or groups to ensure their policy preferences are not necessarily those chosen by the decision-making powers of the organization". The participants agreed that use of committees could not eliminate politics, but it could reduce its impact. It was intensely felt that some politics in the sense of canvassing one's views might not be bad. But, when it was associated with power, or used to gain power, it interfered with quality. In the frank evaluation of the participants, there were many power groups or power minded personalities in the departments. The focus group participants were critical of distribution of power in regard to quality. There was a frequent mention of the theme that the top management had a great deal of power over the quality assurance system. Centralisation and decentralisation could have an impact on quality and required monitoring.

Again, the participants frequently mentioned that even behind the seemingly consensual / collective agreements, there was a good deal of politics. They suggested that this led to decline of collegiality and lack reasonableness. It was strongly suggested that politics could act as a barrier to quality. But, one participant said, "Always we say, it is bureaucracy, it is politics, and we look for all kinds of excuses to do whatever we want to do in order to avoid sticking to any quality system. Let us forget about the politics, about the bureaucracy, and let us concentrate on quality of programmes that we offer". The participants intensely felt that politics (of ideas) might help enhance quality, but it led to inter-jurisdictional difficulties and conflicts. Organisational politics was evaluated as a destabilising factor. But, it was a part of the organisational culture.

The focus groups were aware that feedback on the performance of the staff should be frank and honest for all the staff. One participant stated, "Actually, I don't see much focus being paid on the assessment of the trainers' capability and his output in terms of quantity and quality of the work. We should get continuous feedback regarding our performance as trainers. There should be regular and systematic evaluation". It was also frequently mentioned that staff loading was too high, and hindered full participation in quality drive.

Culture was seen to emerge in such statements as, "The culture of the training departments has a positive influence on quality, as it was seen to awaken people to the fact that there are different ways of doing things. Important to quality is a culture that encourages trainees' feedback. In some departments the culture is directed towards the practice of the profession, rather than towards theoretical work. While departments may have several cultures, it is the role of Assistant Directors and Heads of Departments to align cultural issues in a certain direction". Another participant stated, "Some training departments have a culture of close working relationships with industry. Other training departments have a service culture, which is committed to their trainees, building their confidence and their preparation for employment. Trainers act as symbolic role models for trainees, who during their training programmes acquire certain beliefs about the profession that they have chosen".

Thus, the groups sought to unravel the different strands of internal cultural dynamics of quality assurance: culture and participation, organisational and individual roles, inevitability of politics and ways to reduce its adverse impact, conflicts and hidden barriers to quality.

Table 26 - Dimension 3: Internal Cultural Dynamics

Theme 3:	Involvement and contributions of the various groups to development of Quality Assurance.
Sub-Themes: Indicators / Criteria	1- Quality Assurance viewed as a developmental process, 2- Quality Assurance viewed as individual and group responsibilities, 3- Quality Assurance is the responsibility of the organisation to manage, 4- Quality Assurance needs to be documented and made explicit through interactions process, 5- Feedback and improvement implicit in organisational procedures, and 6- Perception of the staff and management in relation to Quality Assurance.

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
1- Some QA activities are rigidly structured in terms of different committees, which provide advice.	1- While the use of committees does not eliminate politics, it reduces its impact.	1- In departments/units there are many different power groups and personalities.	1- Politics is not necessarily negative; when it is associated with power, which may interfere with quality.	1- Everyone should share the quality culture and objectives of the organisation.
2- Everyone from the top down to the trainees is responsible for quality; we all have a collective responsibility.	2- Training staff should be allowed to decide on excellence in their discipline.	2- Quality is a professional pride. Staff members need pride in quality of their work.	2- The responsibility for quality is at department/unit level.	2- Departments/units must be committed to excellence.
3- Everyone in the organisation has to assume some responsibility.	3- Quality has to be monitored at the lowest level. If there are good selection criteria for hiring, then every staff members hired should be high quality.	3- Define objectives to change behaviour, knowledge and skills.	3- There is politics involved in collective agreements; there is a lack of reasonableness and collegiality.	3- Politics can act as a barrier to quality.

Table 26 - Dimension 3: Internal Cultural Dynamics

Continued...

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
4- Needs commitment from each individual staff member.	4- Quality is a collective exercise.	4- Politics hinders quality when everyone is looking out for his or her own interests.	4- Sometimes politics provides an opportunity to enhance quality, but in other ways it causes inter-jurisdictional difficulties.	4- A culture promoting accessibility.
5- We must be honest with our staff about their performance.	5- Staff performance will not be based on the number of complaints from trainees about a particular instructor / trainer.	5- Organisational politics affects quality especially when staff are competing for resources.	5- In larger groups, there are fewer allowances for organisational politics.	5- We should be more customers oriented; trainees should be on committees and listened to.
6- The responsibility of managing quality is with all staff members.	6- Individuals are totally responsible for their training activities.	6- Politics is part of the culture.	6- Staff loading is too high compared to other institutions, which hinders participation in quality activities.	6- The institute culture is important. Those who want to work hard versus those who have family priorities and believe this is most important.

4.4.2.3 Dimension 4: Implementation and Emergent Systems

The Dimension 4: Implementation and Emergent Systems, i.e. "**Theme 4 -** Dynamics of re-orienting the BTI system in terms of Quality Assurance", has been subdivided into two categories. Category one, 'Implementation Performance' has been further subdivided into six **sub-themes** which are as follows: (1) Top Down - Bottom Up or Sideways approach of managing QA, (2) Open system and processes, (3) Sensitivity to feedback from stakeholders, (4) Sensitivity to developmental needs, (5) Evidence of actions being implemented, and (6) Consultative and involving staff or directive approach. Category two, 'Emergent Systems and Organisational Structure' has also been subdivided into six **sub-themes** which are as follows: (7) QA seen as key activities, (8) QA system depends upon involvement / accountability, (9) Clarity of methods of defining quality system, (10) Clarity and knowledge of review process, (11) Evidence of actions linked to review and evaluation, and (12) Balance required for managing the emergent system. **Table 27**- presents the data of the Dimension 4: Implementation Performance and Emergent Systems according to each sub-theme.

The focus groups dwelt in detail on implementation performance of the quality systems. They were aware that the drive for the attainment of quality started at the top and percolated down. This essentially means, in the words of Deming, instituting leadership. Again, the groups emphasised the importance of team work in pursuit of quality. Quality should be a shared and systemic goal, and should not be identified with one person. The Groups' emphasis on cross-departmental efforts echoes the thinking of many quality gurus. With a good deal of intensity, the groups voiced the feeling that quality had to be addressed systematically. In other words, the participants felt that quality assurance could not be achieved with erratic and ad hoc measures. Also, they forcefully stressed the point that values of quality should permeate the BTI system.

Another issue pertaining to implementation performance emerged in the focus group interviews. How to assess the quality of a trainer and his work, particularly classroom delivery? The participants had a nagging feeling that they had not been told concretely about the standards they were being measured against. They desired standardised instruments for evaluation of the training processes. While implementing the quality assurance system, the middle level managers like Assistant Directors and Heads of Departments should let the staff know whether the staff were reaching acceptable levels of performance. The view that quality could not be fully measured was frequently voiced. Above all, the participants strongly emphasised another aspect of transparency: the measures used for quality should be the same across the board.

The participants of the focus groups mentioned their difficulties also. They felt that they needed support and resources to pursue quality. In their opinion, lack of adequate and appropriate resources and optimum class size hindered pursuit of quality. Getting down to the brass tacks of quality training, the participants made a few points abundantly clear. There should be proper programmes which reflected the state of the discipline. To implement these programmes there should be different types of instructional methods and training activities. Use of relevant and practically oriented material repeatedly cropped up in the focus group interviews. This was strongly reinforced by the argument that the training material should be up to date reflecting latest development in the field. One participant stated, "In fact, I had some difficulties in my own department; efforts were made to make the training material more practically oriented. The training material should be improved every now and then, when there is a possibility. But, because we use so much of time on our training and delivery, there is no time for development of materials". The participants were fully aware of the need for periodic and regular review of programmes and curricula.

The issues of the classroom delivery came to the fore in the discussions. Accepting and recognising the importance of classroom interactions with the trainees, the participants raised the question of how one could become an effective instructor / trainer and demonstrate quality delivery. One participant said, "If we like to re-activate or perhaps improve our quality within BTI then I think that the monitoring of the delivery should be done more often and obviously that is not lacking totally, but it is not that regular. We do actually conduct monitoring of the staff delivery, but very rarely in fact. So, perhaps we give it more attention. This monitoring of staff delivery should be associated with constructive feedback to the instructor, so that the instructor knows that the objective of the exercise is to develop and improve the delivery rather than penalise him on promotion and so on. So, once we develop a proper system of monitoring the delivery, for example, whether it is done in the classroom or in the laboratory, then that will at least enhance the delivery aspect of it".

The implementation of the quality training process was discussed. Ideal delivery and assessment strategies were frequently mentioned. One participant said, "Our quality assurance system focused more on assessment in the past few years. We are widening it now to include delivery. It was started about two years ago, hopefully trying to measure the quality of the delivery and improving the quality of the delivery". It was felt that the most critical point was when the instructor / trainer met the trainees.

The contours of the emergent systems and organisational structure could be seen in the discussions. There was a consensus that the Institute should concentrate on those activities which promoted quality. An appropriate quality climate should be fostered. For example, one participant said, "The quality system should not be dumped on everyone to adhere to. Instead, evolution of quality whereby the staff contribute in sharing their experience is preferred". The participants felt that some quality activities were rigidly structured in terms of different committees.

Again, there was a frequent mention of the view that a lot of time was devoted to programme arrangement and administration and not on direct issues related to delivery and assessment. Commenting frankly on the implementation, the participants said that rigidity and bureaucracy and lack of mutual understanding would not help the quality drive. One participant suggested, "If we could keep the bureaucracy to the minimum, I think we could devote more time to delivery and assessment. We have to have some administrative work going on obviously; however, administrative processes are cumbersome and decrease efficiency. When you start to overwhelm people with a lot of paper work, it just takes their energy and effort from the main job they are supposed to be doing". Another participant stated, "The quality system that we have in place here is focusing more on meetings and documentation. For example, in our area we are conducting a programme review meeting, where follow-up on action points from last review needs to be taken and the process is repeated every term. We need to evaluate the outcome of this process to find out whether it is productive or not".

The focus group interviews revealed that the staff did not find quality assurance intimidating. Several participants pointed that they required clear cut guidance and instructions. They also needed frank and fair feedback. They wanted state of the art training resources and materials. One participant stated, "Tell us how to deliver better in the classroom". The participants felt that smaller departments and units had greater control over a number of issues related to quality. For example, the smaller departments could judge the competencies of the direct entry trainees; they could respond quickly and creatively to the curriculum changes when required by the employers. Additional factors facilitating quality included the need for a collegial environment which was supportive of curriculum development and module or programme management, a movement to more team work and less individuality in preparation and the need for staff to have inclination or desire to undertake these assignments.

Many implementation strategies were helpful in enhancing the overall quality of the BTI system. One participant said, "The staff working in any system are the ones that make it or break it. The system should come from the people who are within the system; they should be involved in devising their own system; and, there should be participation in developing that system". Another participant suggested, "Training departments should establish a set of standards, to be used as a benchmark for all of their processes. Well documented procedures should support the quality system. Then the role of quality assurance division is simply to monitor the process compared to the procedure followed". Another participant said, "Rules and regulations are very important - especially important for people who are new to the organization, just to know how to go about things, how to do things here in BTI; otherwise people do them according to their previous experiences, and these might not be the things that should be done here in BTI. So, I think things should be clear to everybody".

Finally, the participants recognised that there were many measurement aspects of quality. One participant stated, "We get feedback from the trainees once they go for on-the-job placement. We also have a very useful feedback from our graduates, for example, the graduates, once they are recruited in various organizations; we get feedback from their supervisors and managers". The participants felt that much attention was not being paid to the trainee surveys. It was also mentioned that the trainee surveys should be used with caution. They also recommended surveys to ascertain employer feedback. They appreciated the role that the employers had to play in quality assurance development. It was stressed that quality criteria should not become restricting activities. Training Departments had to regularly liaise with all industrial, commercial and service sectors in the Kingdom of Bahrain. This exposed them to the expected standards and to other ways of doing things outside the Institute setting.

Table 27 - Dimension 4: Implementation Performance / Emergent Systems and Organisational Structure

Theme 4:	Dynamics of re-orienting the BTI system in terms of Quality Assurance.	
Sub-Themes: Indicators / Criteria	**Implementation Performance** 1- Top-Down/Bottom-Up/Side approach of managing QA, 2- Open system and processes, 3- Sensitivity to feedback from stakeholders, 4- Sensitivity to developmental needs, 5- Evidence of actions being implemented, and 6- Consultative and involving staff or directive approach.	**Emergent Systems and Organisational Structure** 7- QA seen as key activities, 8- QA system depends upon involvement / accountability, 9- Clarity of methods of defining quality system, 10- Clarity and knowledge of review process, 11- Evidence of actions linked to review and evaluation, and 12- Balance required for managing the emergent system.

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
1- Quality starts from the top and cascades down in the organisation.	1- Isolation between departments will hold up progress in spreading good practices.	1- More emphasis on quality is needed.	1- We do not address quality systematically.	1- Quality must be a commonly held goal in the system, but not in terms of one person.
2- Using standardised instruments for evaluations of training processes.	2- Staff wants some assurance in their own minds that evaluation is fair and applied equitably.	2- Assistant directors and Heads of Departments have a more direct influence on quality that needs to let staff know if they are achieving at an acceptable level.	2- We are trying to measure something that is not measurable. How to measure the quality of staff member.	2- The measures used for quality should be the same across the board.

Table 27 - Dimension 4: Implementation Performance / Emergent Systems and Organisational Structure Continued...

Extent of Awareness	Extent of Acceptance	Extent of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
3- Participation of members from industry on programme advisory committees, to ensure programmes relevant to the job market.	3- Having proper programmes in place which reflect the state of the discipline.	3- Using different types of instructional methods and training activities.	3- To use relevant material to deliver training programmes and practically oriented.	3- Up-to-date training material which reflect the latest development in the field.
4- Need support and resources to enable quality.	4- Lack of resources does not provide incentives to training activities.	4- Class size is a barrier to quality of experience.	4- The larger the class, the more difficult to deliver a quality product.	4- Scarcity of resources – more trainees – they get less attention from the instructor/trainer.
5- Ensure effectiveness, efficiency and relevance of training programs.	5- How does one become an effective instructor/ trainer, and exemplify quality teaching/training?	5- Quality delivery is the judgement of those who are recipients of the teaching/ training process namely the trainees.	5-Awareness of delivery and assessment strategies.	5- Set goals and objectives for the new training year.
6- Maintaining good links between management and staff for managing quality.	6- Heads of Departments are territorial and protect their turf.	6- Rigidity and bureaucracy and lack of mutual understanding will not help quality drive.	6- Most important is when the instructors meet the trainees; the administrative staff role is supportive but not fundamental.	6- There are many quality initiatives in the institute.
7- Have to concentrate on activities to improve quality and performance.	7- Quality is difficult to measure; it is difficult to measure the outputs of delivery.	7- A climate where faculty can pursue their delivery of training with maximum resources available.	7- Focus is not on good delivery; the focus is on programme administration.	7- There needs to be more of an emphasis on quality in delivery.

Table 27 - Dimension 4: Implementation Performance / Emergent Systems and Organisational Structure Continued...

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
8- Centralisation – decentralizations can have an impact on quality and need monitoring.	8- Some QA activities are rigidly structured in terms of different committees, which provide advice.	8- Staff members need to know what the criteria are and what they are to be held accountable for.	8- Director and top management have a great deal of power over the QA system.	8- Willingness to support quality initiatives is very important.
9- Have to define a quality focus.	9- No real systems are in place to define and measure quality.	9- Not clear that evaluation systems are a measure of quality in the institute.	9- Evaluations are time consuming. Keep these processes to a minimum.	9- Having objectives in programme outline, sticking to them.
10- Periodic curriculum review.	10- Limited knowledge of review process and doubtful of effect.	10- Focus attention on problems using data on how the institute is performing.	10- New staff is not fully aware of review process and old staff see it as just more work.	10- Different programme management – assign team leaders every year for each programme.
11- Regular programme review and evaluation.	11- We do not pay attention to measurable things, such as trainee surveys.	11- Annual course/instructor evaluations. To measure the level of expert knowledge of the instructors/ trainers.	11- Trainees surveys have to be used with caution; trainees intentionally fill them out with information, which is not correct.	11-Satisfaction of trainees and employers. Success of graduates in industry and employer feedback.
12- There are well-established procedures followed, people know whether it is good or not, and whether it should be implemented.	12- Measures are often subjective judgements of people sitting on committees.	12- Balance is required in any emerging systems, especially between quality and quantity.	12- Balance is accepted but diverse opinions on what is to be balanced. Selectivity of staff and recruitment process should be used to improve quality.	12-Establish effective systems, procedures and practices at the department level and the Institute.

4.4.2.4 Dimension 5: Management Style

The Dimension 5: Management Style, i.e. "**Theme 5 -** Impact of quality assurance on the role of the employees", has been subdivided into eight **sub-themes** which are as follows: (1) Time spent and engaged on quality activities, (2) Support given to enhance quality activities, (3) Involvement of staff in organisational improvements, (4) Staff empowerment and participation in decision making, (5) Set clear expectations of standards, (6) Feedback and review are important parts of team meetings, (7) Documentation of Quality Assurance system, and (8) Attitude to and awareness of Quality Assurance. **Table 28**- presents the data of the Dimension 5: Management Style according to each sub-theme.

The theme of management style, i.e. impact of quality assurance on the role of the employees, generated many sub-themes and a good deal of enthusiasm in the focus group interviews. While holding that leadership was important in the management of quality assurance, the participants felt that this leadership should be a shared one, and informed and inspired by collective values. For example, several participants said, "The people that are being led have a responsibility as well as the people that are leading, and they think that management style has an impact. Leaders need to be aware of the people that they are leading. An ideal leader would be allowed to be a part of the team. Staff should be responsible and involve themselves in quality issues. Their commitment and contribution are very crucial in promoting a positive quality culture". Another participant commented, "Leadership style varies from one person to another. Some leaders give more authority to managers, offer more guidance and direction to managers and lead them their way. Managers have to be competent to have authority and to gain power in order to function in a decentralised environment".

They once again emphasised the need for decentralisation and the middle level managers like the Heads of Departments creating a proper environment. A participant from a support unit commented, "When we look at BTI organizational structure, it is a centralized system, which means that we expect the departments and units to be responsible for maintaining and enhancing quality system all the time. But, do they have the ability and the flexibility to make the simplest decision? I want to see staff participate more in decision-making process concerning quality issues". The groups wanted to be involved in the decision-making process which would be accepted by everybody and would foster teamwork and high morale.

In their own way, the participants were recognising that while the top management, including Board of Directors, had to lead from the front, they were also suggesting greater involvement and participation of the staff in the decision-making process. Several participants stated, "Management style has to support the quality system. We think leadership should be democratic somehow and we consider those leaders who are not concerned or participating in quality system as the ones who want to isolate themselves". Also, it was mentioned often that many leaders were close to a situation, but, did not take a decision.

One participant said, "There should be a team, and a team effort that will develop the quality systems. If employees and not just leaders are involved in system development, they help to develop the system. Then they are accountable for that system and they have to make it work because they developed it". The participants felt that this was the proper way for a quality assurance system to earn their respect. But, there was also a hint of corporatist, command – directive type of managerial style: quality should be encouraged, expected and even demanded.

As one participant stated, "Leaders have to trust the people they work with and delegate responsibility to them, otherwise they will end up doing things themselves and in a highly centralized environment. You could never get the maximum productivity from the people that you work with. You have to trust them, delegate to them; and remember, not everybody has the same capability; so, some people will make mistakes and will take wrong decisions. Show them, tell them how to do things".

Some issues such as the staff needed help, examples of good delivery, new ideas, timely feedback, etc. emerged from the focus group interviews. The question of feedback to the trainers cropped up repeatedly. It was recognised that the feedback was an important part of quality assurance. Evaluating the impact, the participants mentioned that the feedback was too slow to have an effect. The burden of documentation work came up for discussion. It was forcefully argued that documentation and paperwork were required, but should be kept to the barest minimum. In the word of one participant, "We try to do lots of things to improve the quality, improve the productivity, improve efficiency and be a cost-effective centre. Maintaining and enhancing a quality system is not only a question of documenting it. It is not only the responsibility of quality assurance division, but it is the responsibility of everybody. We also should have more active roles and more authority to do things". Again, the participants voiced the feeling that the present system was regulatory and evoked tension.

The participants of the focus groups criticised the funding and budgeting process, which was not seen as enhancing quality, but more as an exercise in how much money you were going to lose every year. The groups desired that funding of educational and vocational institutions in the Kingdom of Bahrain should be linked to a set of performance indicators. More resources should be allocated to the institutions that had the highest capability and put in more efforts to ensure quality. The present financial picture was seen as providing continual movement to reduce service and output.

There are two quotations from participants of the focus groups which are of particular interest as they reveal the general feeling of the staff about empowerment. One participant said, "I believe we are all empowered. Of course we are empowered. For example, the persons who are empowered to deliver are the persons in the classroom, in the workshop; they are the ones in charge of courses / modules; they have to be accountable; they have to be responsible, but they are empowered within the overall framework of the organisation". Another participant said, "A member of staff should have authority and empowerment; but, in fact, at the moment the final responsibility lies with the head of department. We would like to see more delegation, and more responsibility should be given to the experienced staff. We accept the quality control system, but once we have a quality system then we should empower people to gain their support". The groups on the whole favoured a more collegial type of management, leavened with good leadership. But, they underscored the need for discipline.

The focus group participants mentioned other factors as well. These included the bureaucratic mindset and interferences that took time away from critical activities, and the need to improve quality and decentralisation of responsibilities. Decentralisation gave powers to make decisions which might not always be in the best interest of the Institute. Also noted were the negative attitudes of some instructors regarding trainees, the politics of the situation, the anti-change attitudes which were against doing anything, the lack of a collective understanding of the problem, people not interested in taking responsibility for quality, the need to promote positive quality culture within the training department / division, and the need to improve communications. Some important comments made by the participants related to the role of the Assistant Directors and Heads of Departments in demonstrating leadership and in setting values for quality programme. It was stressed that the Assistant Directors must inject excitement and enthusiasm into their training divisions. While staff members had their own goals and training needs, a commitment to quality in training programmes was required.

Table 28 - Dimension 5: Management Style

Theme 5:	Impact of quality assurance on the role of the employees.	
Sub-Themes: Indicators / Criteria	1- Time spent and engaged on quality activities, 2- Support given to enhance quality activities, 3- Involvement of staff in organisational improvements, 4- Staff empowerment and participation in decision making,	5- Set clear expectations of standards, 6- Feedback and review are important parts of team meetings, 7- Documentation of Quality Assurance system, and 8- Attitude to and awareness of Quality Assurance.

Extent of Awareness	**Extent of Acceptance**	**Evaluation of Implementation / Impact**	**Frequency / Intensity of opinions**	**Strength / Forcefulness**
1- The top management has values for a quality programme and plays a leadership role.	1- There has to be collective values, rather than only leadership.	1- Quality should start from the top management, heads of departments and all staff.	1- Shared leadership is important.	1- Quality starts from High Council, Board of Directors, management and everybody in the organisation.
2- The top management ensures the overall mission and they must put the Institute's interest front and centre.	2- Heads of Departments must create an environment with the proper morale and teamwork.	2- The management has the responsibility for quality.	2- Short lines of communication and approval are required.	2-The decentralisation of power enhances quality.
3- Staff are not fully involved.	3- Need to involve more people interested in quality system improvements.	3- Heads of Departments have to participate on almost all the institute committees of various types. Staff should be more involved.	3- Create homogenisation, but this does not ensure quality.	3- Foster an atmosphere, traditions and culture around which staff performance will be measured and seen as positive.

Table 28 - Dimension 5: Management Style

Continued...

Extent of Awareness	Extent of Acceptance	Evaluation of Implementation / Impact	Frequency / Intensity of opinions	Strength / Forcefulness
4- Participatory decision-making is an open and collective style of management that leads to mutual agreement.	4- If staff are given the opportunity to participate in taking the decision they will respect it.	4- The collective decision making cultures.	4- People close to the situation do not take action – do not make the decision that should be made.	4- Competent leadership needed at all levels to make right decision.
5- Top Management and Heads of Departments set expectations and encourage staff.	5- The management sets priorities to ensure the staff is meeting the standards.	5- We must make it clear that not only do we expect quality, we demand it.	5- Improve the system of staff performance appraisal for training and support staff.	5- The culture is one where we have to be the very best.
6- Feedback is seen as very important issue in QA system.	6- The importance of Programme management committee and department meetings to get feedback and review quality issues.	6- Feedback is too slow to have an effect.	6- Many meetings and quality focus should be in delivery.	6- Need to exemplify quality delivery, innovation and ideas emerging from review meetings.
7- The need to document the QA system.	7- QA system activities require tremendous amount of paperwork and documentation.	7- QA system documentation is required for auditing and verification purposes.	7- Documentation is needed but to a lesser extent.	7- Documentation supports transparency of the QA system if it is within acceptable limits.
8- The management must inject excitement and enthusiasm. QA system appears to be mostly regulatory.	8- Attitudes towards QA activities are very critical. Staff morale is a real issue.	8- Positive culture of close working relationships with QA division.	8- There is agreement on the positive approach and acceptance of QA personnel but the QA system is relatively complex to manage.	8- The quality culture is a service culture committed to trainees, employers and society.

4.5 Data Analysis Triangulation

This research has generated the data through the surveys of the employers, staff and trainees and the focus groups interviews of the staff, and analysed them. These designs and methods of data generation and analyses constituted crucial steps in the actions envisaged by the Action Research Group. This section seeks to ascertain to what extent the findings of the three surveys converge and the analyses of the focus groups tally with the findings of the surveys. The dimensions 2 to 5 of the study were tested through triangulation **(see Figure 10)** as described in Section 3.10. **Appendix E (E1** - Summary of Data Analysis Triangulation) gives the scheme for the triangulation of the findings.

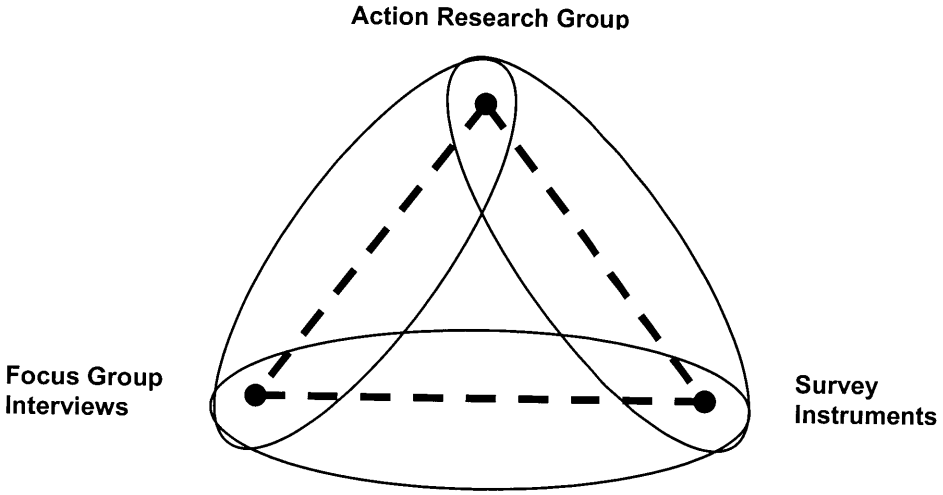


Figure 10 – Data Analysis Triangulation

It was argued in Chapter 2 that the impulse to introduce quality may originate either outside the organisation or within. It was suggested in Chapter 3 that the impulse originated within the BTI, particularly on the part of some trainers and administrators who were studying the turbulent world of manufacturing and service – particularly HE / FE. More specifically, the Action Research Group wanted to ascertain from the three stakeholders – employers, staff and trainees how BTI was responding to the changing external environment.

Generally, more than three-fourths of employer respondents appreciated the conceptual aspects of BTI training, viz., programmes and curriculum being responsive to the training needs of the job market; the learning objectives of training programmes meeting the needs of the employers. But, a lesser extent of support, though substantial, was seen for the responsiveness of BTI to the employers' feedback. While BTI training was relevant to the job market, closer interaction with employers was recommended (**Appendix C1** - Analysis of Employers Survey).

This viewpoint was also supported by the staff: BTI was not adequately ploughing back the requirements of the employers and the experience of the past trainees (**Appendix C2** - Analysis of Staff Survey). The respondent – trainees were only partially satisfied with the BTI's sensitivity to the competitive environment (**Appendix C3** - Analysis of Trainees Survey).

In the focus group interviews the staff members were aware that the BTI should develop more sensitivity to the competitive environment. They dwelt on the idea of how to increase BTI's sensitivity **(see Table - 26)**. They were essentially asking for external standards or national benchmarks. Again, more intensive interaction with industry was stressed. The staff felt the need to be open to self-assessment. The staff went further into the modalities of association with industry.

The Action Research Group was pro-active in regard to the development of quality assurance system at BTI. Its members were aware that many HE / FE institutions all over the world were feeling the heat of the competitive environment. The group was also aware of the increasing demands made on it by industry and other sectors. In regard to being sensitive to the environment, it was closely matched by the employers and to a slightly lesser extent by the staff. The Action Research Group was always anticipating the future steps. Thus, it had come to the conclusion that the quality processes had to be transparent.

The Action Research Group desired to review the process of quality action teams, involvement of critical groups and their implications. The employers' survey contained only three questions on cultural dynamics, as the employers were not expected to know much about internal cultural dynamics of BTI. Generally, frequencies of positive responses were in the lower range. The employers were uncertain whether BTI had produced a culture conducive to quality.

The survey of the staff also reveals a mixed response. Only about half of the staff respondents supported the statements that BTI had a culture of quality and participation, and that there was understanding of the quality systems on the part of all, and a professional working environment. In other words, the staff, too, wanted the development of a sensitive and acceptable quality assurance model. The trainees also were less enthusiastic about access to learning resources, nature of feedback and nature of assessment.

The focus group interviews of staff further highlighted the fractured views of the internal cultural dynamics of quality. The statements in the staff questionnaire, "BTI has demonstrated its commitment to continuous quality assurance improvement" and "The staff are involved in improving the processes under their control on continuous basis and take personal responsibility for their own quality assurance" drew positive responses from an overwhelming proportion of staff.

This support was buttressed in the focus group interviews. The following viewpoints emerged: "We all have a collective responsibility", "Everyone in the organisation has to assume some responsibility", "Training staff should be allowed to decide on excellence in their discipline", "Individuals are totally responsible for their training activities". But, the lukewarm position that about half the staff took about the cultural aspects of quality found expression in the focus group interviews in many ways.

The Action Research Group had come to the conclusion that all the critical groups had to be involved in the endeavour of development of a quality model. Through the staff surveys, the group realised their feelings: many of the staff did not feel that the organisational culture was conducive and BTI quality systems were not understood and supported by all. This made the Action Research Group sit up and think.

In the focus group interviews, members of the staff felt that quality assurance in BTI had many rigidly structured aspects in terms of committees. They suggested that responsibility for quality should be located at the departmental level, implying thereby the power to ensure quality is now concentrated at the top. Also, this could be interpreted as a suggestion for decentralisation. In their view, accessibility of the top administrators was an important aspect of quality. Perhaps, the phenomenon of organisational politics was lurking behind the lukewarm responses to some of the statements in the staff questionnaire. The point was repeatedly made that the organisational politics affected quality adversely.

The Action Research Group was keen to identify in the context of BTI a range of quality 'devices'. In operational terms these devices included resources available to the trainers, how the trainer translated quality into actionable steps, what sort of a power arrangement staff wanted, etc. Also, the group wanted to find out how satisfied the other stakeholders, viz., employers and trainees, were about the ground arrangements.

The Action Research Group was concerned with revising and reviewing the plans of quality management. The analysis of the employers survey showed that out of 6 statements on implementation as many as 4 drew support from less than half of the respondents. The incidence of the percentage frequencies in the 'Not Sure' cells is unusually high, indicating that employers were not apprised of the implementation aspects. This suggests an important step in the quality innovation, i.e. keep the employers better informed of how the quality system is implemented in BTI. The arrangements in BTI for restructuring training programmes, continual review of procedures and similar statements drew less positive response. But, the 8 statements in the staff survey which sought to operationalise the dimension of implementation from the point of view of staff drew generally positive responses from an overwhelming proportion of the staff. Also, the incidence of percentage frequencies of 'Not Sure' is relatively low.

But, when we re-examine the tables of the trainees survey pertaining to the dimension of implementation performance and emergent systems, the statements drew positive responses from less than half of the trainee respondents. In other words there is a mismatch among the views of the employers, staff and trainees. The Action Research Group noticed this ground reality.

The focus group interviews of the staff, however, yielded mixed responses – positive, negative and suggestive – in regard to the implementation of the quality measures and the emergent model. In terms of triangulation, the analyses of the focus group interviews seem to suggest the theme: "Generally the implementation is good; and the emerging system is satisfactory. But, there are a lot of weak points in addition to the strong ones".

Against the background of the analyses of the staff survey, the following points emerged: Staff appraisals were necessary. But, the staff should be assured of fairness and there should not be any subjective criteria to assess their quality. Leadership in quality was different from concentration of power. When training and learning processes were planned effectively, quality was strengthened. Good classroom delivery was required. The state of the art training material and better training methods should be employed. The trainers should be given guidelines about good delivery. The implementation was reasonably good, but bureaucratic rigidity and avoidable paperwork should be eliminated. Above all, the staff should be given honest feedback.

One of the primary concerns of the Action Research Group, particularly in the context of the review of literature, was to evolve a viable and suitable management style of sustaining a good quality system. Through conceptualisation of quality in the field of HE / FE and a study of raging controversies regarding what kind of managerial style would sustain quality in different and difficult circumstances, the Action Research Group came to address the question of appropriate ethos of quality at all levels. Because of their experience as instructors and trainers, the members of the Action Research Group were much uncomfortable with corporatist, or bureaucratic style of management.

The employers survey revealed a high incidence of percentage frequencies in the 'Not Sure' categories. The employers had to be apprised of how the BTI ran its quality system. But, the employers expected that the BTI quality system had been developed through involvement of the layers of hierarchies. Compared with the employers, the staff were generally satisfied. The trainees trailed behind the staff.

Many deeper aspects of management style emerged in the staff focus group interviews. These aspects went beyond the performance of staff, directions given by the BTI management, and opportunities for professional development. This part of the focus group interviews revealed how cultural dynamics and management style were related.

The analyses of the focus group interviews yielded the following supplementary points, which could not be tapped by surveys. The staff held that in regard to management of quality, there should be leadership, rather shared leadership with collective values. The role of the middle management was crucial. Decentralisation and co-ordination were critical. There should be a full and willing participation of all. Appropriate values, tradition and atmosphere should be fostered. Above all, management of quality should be such that it was viewed positively. The focus group interviews complemented the views of the Action Research Group, "Empower the staff and involve them at every level; lead from the front, but inspire and energise the staff".

4.6 Summary

The researcher and members of the Action Research Group, who had taken the initiative to develop an appropriate model of quality assurance in BTI, were driven by a few important values and concerns: there should be transparency in the process of development; all the staff, - administrative and training – should participate in the process; the other stakeholders, too, should be involved; and the latent urge among the staff for pursuit of quality should be tapped. Hence, the methodology of action research was analysed and adopted. There were four cycles of action research between October 1997 and September 2001. Each cycle had four action plans. The Action Research Group reviewed the results of each cycle and its plans, reflected upon the results and devised the subsequent plans and actions.

During cycle 1 in the training year of 1997 / 1998, the Action Research Group examined the uniqueness of education as a service and in this context considered the full implications of introducing quality assurance system in an educational setting. This produced an appropriate conceptualisation of quality in HE and FE.

Cycle 2 was undertaken during 1998 / 1999. The Action Research Group identified the important stakeholders of BTI: employers, staff and trainees. It also decided to collect from the stakeholders through questionnaires the relevant data regarding the quality position during the years 1998-2000. The Action Research Group also intensively analysed the aspects of internal cultural dynamics, implementation and management styles. During cycle 3, 1999 / 2000, the group considered and approved the three questionnaires, which had been earlier vetted by three focus groups. A significant achievement during this cycle was the holding of a two day staff forum on the theme, "Aspects of vocational training". It elicited a spontaneous and constructive response. During this cycle, the Action Research Group examined the preliminary analysis of the survey data and asked the researcher to undertake comparative analyses of the questionnaires of employers, staff and trainees. During cycle 4, 2000 / 2001, the second staff forum was held on the theme, "Improving quality in BTI". A series of focus group interviews involving the staff were held in order to generate further data on Dimensions 2 to 5. The analyses of the transcripts revealed that the latent views of the staff regarding the various aspects of quality had emerged to the surface.

The comparative analyses of the questionnaires revealed that all the three categories of stakeholders were unanimous in their evaluation of competitive environment being the most crucial factor affecting quest for quality in training. The employers and the trainees ranked the internal cultural dynamics second, while the staff ranked implementation second. The management style figured more prominently with the staff than it did with employers and trainees. The analysis of the focus group interviews of the staff revealed the underlying organic linkage among the various dimensions. The triangulation of the data revealed that the fractured views of the staff regarding internal cultural dynamics and implementation found vent in the focus groups. The staff felt that there was a lot of scope for improvement, particularly elimination of bureaucratic rigidity and paper work. One point was abundantly clear: the staff wanted a combination of leadership and collegial styles of management.

CHAPTER FIVE: CONCLUSIONS AND IMPLICATIONS

5.1 Introduction

This Chapter seeks first to recapitulate the genesis of the research problem, objectives and research methodology and design adopted to gather relevant data. It then seeks to answer the research questions against this background. Further, operationalisation of the model and its implications for developing a quality assurance systems model in Further Education institutions and Training sectors are examined. Finally, implications for further research are discussed.

5.2 Recapitulation of the Objectives and Research Methodology

Quality has emerged as the dominant idiom in which the manufacturing and service industries speak today. Nobody denies its crucial role in the survival and success of a business endeavour. If the manufacturing and service industries do not deliver good quality, the cascading effects of this will be felt on the entire economy, society and government. But, developing a quality assurance model appropriate to an organisation is a major challenge. Many organisations cannot cope with the challenge. Instances of giving up development of quality half way through abound. This has generated heated debates.

The problem of defining the product, its features of quality, customers and stakeholders is compounded in education. But, like other services and manufacturing, education, too, cannot escape the responsibility for quality: imparting quality education and training. The students, parents, employers, state and society expect quality education and training. No quality education can be conceptualised without the participation of the groups which have to accept and operate it.

Employers, staff and students / trainees are the most crucial stakeholders. But, like all organisations, educational institutes, too, have their own unique culture. Only certain types of management styles work in educational institutes. Hence developing an appropriate quality assurance model becomes a challenging issue. This is the crux of the research problem. Therefore, the following objectives were developed for this research:

1. Ascertain how a training institute continually conceptualises, operationalises, organises and implements its quality assurance system.

2. Find a way to design and develop a suitable model of quality assurance system processes acceptable to the concerned groups.

3. Establish to what extent the quality assurance processes are dynamic, innovative, learning from their feedback and responsive to the internal and external requirements.

4. Evaluate and interpret the evolution of quality as an institute capability, rather than externally introduced.

5. Identify the interrelationship between development of quality assurance system and the wider management processes and styles.

The above objectives were translated into the research questions.

Bahrain Training Institute in the Arabian Gulf provided an ideal locale for the study. The Kingdom of Bahrain is in the forefront of the Gulf countries in diversifying its economy. This factor and that of localisation of the labour force in the Kingdom make heavy demands on BTI to provide high quality and skilled human resources. It is the largest training organisation in the Kingdom. It imparts skills through regular programmes for the trainees – both self-sponsored and sponsored by private and public sectors in the Kingdom. BTI is also conducting special short-term and long-term corporate programmes. Although established under the aegis of the Ministry of Labour and Social Affairs, it operates autonomously.

BTI's multi-cultural staff were increasingly becoming aware of the fact that the issues of quality were impinging on education and that BTI had to be pro-active in incorporating quality measures. The researcher and the Action Research Group thought of developing a model of quality assurance. They realised that no model of quality can be developed in a rarefied atmosphere. Such a development is not a one shot job. An abiding and viable model of quality assurance is founded on the active involvement and participation of the stakeholders, - employers, staff and trainees. The doubts, difficulties and reservations of particularly the staff have to be addressed. Hence, the method of participatory action research was found promising. The Action Research Group decided to evolve a model of quality through iterative cycles of action research.

The case study design was adopted. The data were collected through analysis of the results of the cycles of actions, surveys, and focus group interviews. The findings of the analyses of the qualitative and quantitative data were triangulated. The research questions have been sought to be answered with the help of an exhaustive review of literature, findings of data analysis and triangulation.

5.3 Research Questions and Salient Findings

This section will review the data collected for this study in relation to the research questions listed in Chapter 1, "Introduction". These research questions were used as a basis for data collection in this case study, which involves a triangulation of multiple research designs, methods and analyses. The following paragraphs discuss the findings in regard to the effective dimensions of developing a quality assurance systems model in further education institutions and training sectors:

> ***Research Question 1:*** *How have the theories of quality assurance been operationalised and implemented in HE and FE?*

The discourses on quality and its management in manufacturing organizations almost suddenly leapt to the forefront due to a combination of factors: emergence of a buyers' market, sophisticated product-mix, new regime of international trade, etc. Many thinkers have sought to conceptualise quality. Many academicians and practising managers have attempted further analyses of quality related issues. Almost all the quality gurus have built their conceptualisations around their own key ideas: Deming – systems approach and plan, do, check and act cycles; Juran – customer satisfaction and quality trilogy; Crosby – conformance to requirements, zero defects, getting it right the first time and being free of hassles; Feigenbaum – consumer satisfaction and expected features of a product. Still, there are certain common denominators: customer satisfaction, elimination of variance, viewing organization as a system, rejection of Taylorist inspection and the like. Elimination of variation due to either common or chronic causes or, special or sporadic causes is a major step toward ensuring quality in manufacturing. Another major requirement is prevention of mistakes rather than inspecting them out. Most of them stress cross-functional teams.

The writings of Deming (1986; 1993) and Juran and Gryna (1993) suggest proper organisational changes and appropriate culture. But, none of the major thinkers further develop these ideas of culture. There are writers who oppose the new quality systems. Some of them view the quality movement as a new kind of a hegemonic device on the part of the management. Some others mention the problems and difficulties the pursuit of quality will give rise to: bureaucracy, excessive paper work, stifling of imagination and the like. But it is generally felt that quality has to be pursued.

The governments of many countries, too, are taking keen interest in quality assurance. They have not only established their own quality standards, but instituted awards. Businesses, too, seek ISO 9000 certification, probably more as a business stratagem. The definitions of quality and features of quality assurance systems in manufacturing cannot be easily transferred to the service industry, although, they are resembling each other in some respects. But there are major differences. The service industry poses some major problems regarding an appropriate conceptualisation of quality. Many of the cryptic formulations of quality like zero defects, elimination of variations, cannot be applied to the service industry. Consumer satisfaction remains the chief goal, but the means of attaining it are still being analysed and explored. Major contributions to features of quality product in service industry have come from empirical researches: timeliness, reliability, responsiveness, etc.

The quality assurance movement was bound to impact the educational field, particularly HE and FE. The factors responsible for this have been discussed in detail in Chapter 1. Conceptualising quality in education and assuring it pose many problems and difficulties. There are multiple stakeholders and customers: students/ trainees, parents, teachers/ trainers, society, state and the like. In HE/FE there is an intensive interaction between the teachers/ trainers, on the one hand, and students/ trainees, on the other. Every classroom situation is unique. A teacher has to deliberately vary his/ her approach from class to class and within a class from student to student.

The writers on assuring and managing quality in education can be classified along the four approaches as discussed in details in Chapter 2 (Section 2.8). In the first place (see Section 2.8.1), some writers argue - and very unrealistically and unconvincingly, - that the conceptualisations and buzz words of quality in manufacturing, like zero defects, getting things right the first time, can be mechanically applied to education. Secondly (see Section 2.8.2), some scholars and researchers have adapted the definitions and concepts from both manufacturing and service. A few of them have derived, through research, features of quality in education like competence, attitude, content, delivery, etc. The third approach (see Section 2.8.3), while supporting pursuit of quality, points out that education is very unique; there are too many parameters; and we are not dealing with inanimate raw material. Hence, the approach rejects the TQM philosophies. The fourth approach (see Section 2.8.4), which recognises the compulsions of pursuing quality, believes in a humanist and interpretivist approach to quality in HE/FE. Some of them have tried, and advocated action research to pursue quality.

Generally the following features can be discerned in the humanist and interpretivist approach to quality in education: better use of instructional time; a richer repertoire of teaching / training techniques; accommodation of individual differences; self-critical community of students, teachers and managers; "living one's theories"; being different from other institutions; better co-ordination between teaching and administrative staff; and an attitude of empathy toward students.

There is a fair degree of consensus on what the quality product in HE/FE is: development of the capabilities of an individual student / trainee. Quality assurance in HE / FE then becomes a question of balancing harmoniously the requirements and satisfactions of the multiple stakeholders / customers. This quite clearly indicates frequent and regular interactions with stakeholders like employers, teachers, and students, etc. and ploughing back their views.

All organisations are permeated with a unique culture. It comprises the members' shared values, beliefs, customs, organised experiences, norms, behaviour, and the like. Quality assurance connotes a particular kind of culture and requires an appropriate cultural milieu. The leaders should try to anticipate hidden pockets of resistance or non-cooperation. They should educate and accommodate the staff. If the latter feel they are going to benefit, they will change their views. The quality gurus have not paid much attention to the role of culture in developing and managing quality assurance. This requires appropriate cultural changes: team work, freedom from fear, willingness to take responsibility, willingness to delegate, empowerment of staff and the like. The cultural and management aspect of quality assurance – whether in manufacturing or service including education - has received least research attention. The available empirical evidence shows that quality assurance is not likely to succeed where fear, lack of security, etc. prevail.

Most of the major thinkers did not dwell in detail on the managerial aspects and implications of their theories and prescriptions either. Working in horizontal and cross-level teams, conversion of adversarial relationship into mutual respect, decentralisation, devolution of power and responsibility, openness and transparency, and above all rejection of Taylorist inspection – all suggest moving away from the classical command and control or directive command managerial style. HE / FE institutions need a harmonious blend of entrepreneurial and collegial management styles. But, precisely at a time when these institutions are contemplating adoption of quality assurance systems, the governmental crackdown and manufacturing influence have led the institutions to adopt command and control type of mangerialism – more surveillance of teachers, less freedom, more standardisation, more super-ordinate and subordinate relationship among teachers. There is evidence that such a managerial style will be counterproductive. A few experiments in upgrading quality through action research reveal that an enlightened and self-correcting leadership eliciting participation from all levels in the organisation is more likely to achieve the goals.

As discussed in Chapter 2 (Section 2.11), seven interconnected theoretical propositions were derived. The quality movement was bound to come into education. As Gordon (1993) argued, it is easier for younger or new institutes to plan for quality assurance. He continues that the older ones will have to restructure themselves thoroughly and, rather painfully. The impulses to adopt quality may come from outside or arise from within, or both. Identification of the multiple stakeholders and customers / consumers is necessary in HE / FE, so that their satisfactions with the product, i.e. the capabilities of a student / trainee, can be harmonised. The educationists, who seek to introduce quality measures through action research and in a phased manner, are likely to succeed. A culture of team spirit, self-motivation, empowerment etc. and the entrepreneurial – collegial style of mangerialism are necessary for the success of quality schemes.

Research Question 2: *What have been the interactions of BTI with its stakeholders in regard to implementation of the quality assurance systems in a competitive market environment?*

Ever since its establishment in 1992, BTI has sought to interact with employers in the Kingdom of Bahrain. **Table- 5**, Chapter 4, "Employer respondents by source of information about BTI", reveals that about 59 percent of the employer respondents had personal contacts with the Institute. About 28 percent of them have been on the various advisory committees of BTI. **Table- 7** of Chapter 4 shows that almost 75 percent of the employer respondents had sponsored their employees to BTI. These multiple channels of contacts and communications have facilitated continual interactions between the employers and staff. BTI trainees, too, are sensitive to the market trends.

It may be recalled that the questionnaires for each of the stakeholders contained statements pertaining to the competitive environment. **Table- 23**, Chapter 4 (Section 4.3.3) reveals that the mean score (3.75) of the responses of the employers regarding the dimension of competitive environment was higher than the mean scores of the responses of either the staff or trainees. Also, the degree of consistency was high. Like the staff and the trainees, employers ranked the dimension of competitiveness first. As is to be expected, the employers were very alert to the competitive environment. The employers, while appreciating the relevance of the programmes and curriculum of BTI training, emphasised the point that trainees required job specific training after getting a job.

The mean score (3.64) of the staff in regard to competitive environment and implementation of quality assurance systems just trailed behind that of the employers (see Section 4.3.3, **Table- 23**). But, the variance was relatively higher. It was seen that the staff, while agreeing that training outcomes to a great extent matched the requirements of the employers, seemed to suggest more regular consultations with employers to update curriculum. The focus group interviews of the staff across all the eight groups reinforced the need felt by the staff to work closely with the industry. The staff clearly desired that the interactions with the employers should be strengthened. The staff reasoned that BTI's performance should be judged against an accepted benchmark. But, BTI could not benchmark with other institutes in the Kingdom of Bahrain. However, accreditation to a recognised body would provide a benchmark. But this might entail a great deal of preparation work. It is gratifying to note that the staff took a holistic view of implementation of the quality assurance systems in a competitive environment. The mean score of the responses of the trainees to the statements regarding competitive environment was the lowest, i.e. 3.43 (see Section 4.3.3, **Table- 23**). Half of the statements elicited positive responses from less than 49 percent of the trainees.

Research Question 3: *What is the nature of involvement of the different groups in the development, implementation and evaluation of the successive quality assurance action plans?*

It was pointed out in the previous chapters that an appropriate organisational culture was necessary to manage a quality assurance system. Therefore, one has to take into account the group dynamics, while developing a quality assurance model. The employers survey revealed that they appreciated the cultural aspects of BTI quality operations. The mean score (3.64) of the responses to the statements related to the internal cultural dynamics in the employers survey was higher than that of the staff or trainees (see Section 4.3.3, **Table- 23**). The employers accorded the dimension second rank (see Section 4.3.2.1 and **Table- 24**). But, it is clear from the percentage frequency distribution tables presented in **Appendix C** (**C1**- Analysis of Employers Survey, **C2**- Analysis of Staff Survey and **C3**- Analysis of Trainees Survey) that not many employers were sure of the aspects of internal cultural dynamics.

The staff accorded Dimension 3, "Internal Cultural Dynamics", the fourth rank (see Section 4.3.2.2 and **Table- 24**). They ranked other dimensions higher than the internal cultural dynamics. Although the mean score (3.51) for the dimension was slightly lower than that of the employers (see Section 4.3.3, **Table- 23**), the percentage frequency distribution tables give a detailed picture. The levels of disagreement / strong disagreement were high regarding a couple of cultural aspects. The levels of agreement / strong agreement were also high on a couple of the aspects. Only a little more than one-third of staff felt that all of them understood and supported the quality system – an essential requirement. In other words the staff felt that the quality systems in BTI should be simplified and explained to all.

Quite a few inter-related factors emerged forcefully in the focus group interviews, - culture, organisational structure, power and politics and the like. The staff believed that a proper underpinning of positive culture was necessary for the development, implementation and evaluation of successful quality assurance action plans. Many major aspects of the interface of quality assurance and culture were emphasised. The staff felt that quality was more a question of professional pride. While the Heads of Departments and Assistant Directors could set an example or encourage quality improvement, individuals were totally responsible for their own training. Hence, not only every one was and should be responsible for quality, but also should consider it in terms of professional pride. Everyone must be involved in the activities of quality improvement and enhancement. The staff - training and support -, had a crucial role in this regard and they must concentrate on it. It was strongly felt that for the quality initiatives and activities to be successful, the staff members of the unit / department must accept and own them.

The cultures of the staff – their beliefs, values, attitudes and the like - played a critical role in their perception and acceptance of quality initiatives, and willingness and openness not only to participate in, but also to contribute to them. Some staff members had a primary loyalty to their discipline, and were less concerned about issues such as quality of teaching / training, while others indicated that their cultures lacked desire to develop curriculum and training materials. Sometimes the new staff might face a dilemma while setting the priorities: whether to prepare good material or to focus on good delivery. They should be enabled to harmonise these conflicting goals. The participants expressed the need to get quality people continuously involved in the BTI system to help improve quality.

The focus group interviews gave considerable importance to the organisational structure. There were many references to turf fights among the departments. The participants felt that the artificial boundaries between departments led to compartmentalisation of the Institute and this did not help pursuit of quality. The staff were clearly in favour of the cross-departmental teams and operations. This has a striking resemblance to the prescriptions of some of the major thinkers. There was a high level of consensus that organisational politics and interpersonal conflicts would lead to factional feuds and result in lack of trust. Organisational politics might hinder quality activities in situations where everyone is busy looking after his own interests. Often, the issue of organisational politics came down to issues of personalities and personal style. The participants in the focus group interviews clearly regarded power-minded persons or groups as an impediment to quality assurance. Power should be exercised in a beneficial and self-less manner.

The dimension of internal cultural dynamics received the second rank from the trainees (see Section 4.3.2.3 and **Table- 24**). But, the mean score (3.30) of responses to the five statements was low (see **Table- 22** and **Table- 23**). The following suggestions can be gleaned from the percentage frequency distribution tables pertaining to internal cultural dynamics (see **Appendix C3**- Analysis of Trainees Survey): there should be open access to appropriate resources; they should be given realistic feedback; and, they should be involved in the review and evaluation of the modules. These findings pointed to the need for regular course evaluations, whether through surveys or less structured methods. The trainees wanted not only transparency but also participation. The real work as expressed by some of the participants in the focus group interviews was at the level of interaction of trainees and staff members, with everyone else's role as supportive to these efforts. Trainees also had a role to play and must be allowed to provide input on how to improve teaching / training quality.

Research Question 4: *How successful has the implementation of the BTI quality assurance systems been and what is the nature of the emerging model of quality assurance?*

The employers accorded Dimension 4, "Implementation Performance and Emergent Systems", the fourth rank (see **Table- 24**). This dimension got a mean score of 3.48 from the employers (see Section 4.3.3, **Table- 23**). But, of all the four dimensions, it was the least appreciated by them (see Section 4.3.2.1). In most of the percentage frequency distribution tables regarding this Dimension (see **Appendix C1**-Analysis of Employers Survey) the incidence of high percentages in the category of "Not Sure" is high. The BTI management needs to do a better job of explaining to the employers the quality assurance procedures and comprehensiveness of the arrangements. BTI has been continually interacting with the employers. But, the contents of the interaction need to be improved. The staff ranked the dimension of implementation performance and emergent systems second (see **Table- 24**) with a mean score of 3.63 (see Section 4.3.3, **Table- 23**). The level of appreciation of the success of the model and its nature was generally on the higher side. The staff took their role seriously.

The trainees accorded the third place (see **Table- 24**) to the Dimension 4, "Implementation Performance and Emergent Systems". The mean score was 3.29 (see Section 4.3.3, **Table- 23**). Substantial sections of the trainees suggested more helpful guidance before, and on entering BTI, learning materials of better quality, and well planned delivery. This is a very useful discovery. The staff, too, desired that there should be up-to-date teaching and learning materials and more fruitful classroom interaction. They regarded the trainees as the final judges of their performance. This called for better communication between staff and trainees, appropriate mechanism for ascertaining the trainees' views, building their needs into the training technology.

As discussed in Chapter 4 (see Section 4.4.2.3), the focus group interviews elicited some deeply held opinions. Most importantly, a closer interpretation of these opinions revealed that the staff did not find quality assurance intimidating. But, they required clear cut guidance and instructions. They needed frank and fair feedback. They wanted state of the art training material. They seemed to say, "Tell us how to deliver better in the classroom". The participants felt that smaller departments and units had greater control over a number of issues related to quality. For example, they (the smaller departments) could judge the competencies of the direct entry trainees; they could respond quickly and creatively to the curriculum changes when required.

Many implementation strategies were helpful in enhancing the overall quality of the BTI system. The review and evaluation of the modules of training were carried out regularly and meaningfully. This helped in removing the short term and long term difficulties. Appropriate ad hoc and standing committees had been set up to look into the problems or implementation of the policies. Above all, there were regular meetings with the trainees.

Research Question 5: *How has the BTI managerial approach evolved, in terms of managing quality assurance systems and processes?*

The review of literature revealed that quality assurance systems, whether in manufacturing or service (including education), require not only an appropriate culture, but also a suitable management style. In fact, culture and management style represent almost the two sides of the same coin.

The dimension of management style received a mean score of 3.57 (see Section 4.3.3, **Table- 23**) and the third rank from the employers (see **Table-24**). But, some of the percentage frequency distribution tables reveal that the incidence of frequencies in the "Not Sure" category was quite high (see **Appendix C1**- Analysis of Employers Survey). The BTI management needs to apprise the employers of the nature of its management style. Particularly, the involvement of the levels of hierarchy in the development of quality strategies should be clarified to them. However, many employers might not be keen on knowing all the aspects of managerial style in BTI.

The staff accorded Dimension 5, "Management Style", the third rank (see **Table- 24**) and this Dimension obtained a mean score of 3.59 (see Section 4.3.3, **Table- 23**). Any management style impacted the staff and the trainees, the staff more than the trainees. The staff represented the cutting edge and the frontline of the training system. The management style affected almost every aspect of the staff activities: training delivery, preparation for training, co-curricular interaction with the trainees, design and development of programmes, assessment and the like.

The percentage frequency distribution tables reveal almost uniformly above-the-average levels of appreciation for the statements relating to management style (see **Appendix C2**- Analysis of Staff Survey): flexible targets set by BTI for the performance of the individual staff and groups, availability of specialist equipment and resources to support training and learning outcomes, proper direction from the top for achieving targets, professional development opportunities, and BTI's commitment to develop its employees.

In the discussion of the findings of the staff survey in regard to Dimension 3, "Internal Cultural Dynamics", it was found that the staff desired a culture conducive to quality and greater participation for themselves. The focus group interviews of the staff revealed many complementary aspects. When a few trainers expressed doubts about the precise measurability of quality in education and training, ("We are trying to measure something that is not measurable"; "We do not address quality systematically", etc.) the consensus emerged that all efforts should be made to develop dependable performance indicators for such factors as value addition to the trainees, satisfaction of the employers, employability of the trainees and the like.

The participants of the focus groups felt that the staff should be fully involved and engaged in decision-making of quality issues. The Heads of the Departments should create a proper environment. The participants pointed out that participatory decision-making was a proper way of doing things in educational institutions. This led to an open and collective decision-making style. They believed that the culture of collective decision-making should be nurtured. Quality must be a goal commonly held by all members of the system. The staff should develop collective values focusing on quality. They believed if there was a consensus on values and norms throughout the department or division, they would need few rules, as everyone would internalise the values and norms. Not everyone from the training staff shared the objectives of the Institute and same culture. In some training departments, there was often a division of cultures. Some staff members might have a scholarly orientation, while others were more interested in the profession and its practices. This could lead to unwillingness to set priorities. There might be duplication of efforts in some departments and organisational politics often prevented addressing such issues. The participants also mentioned that the lines of communication should be shortened. Accurate feedback should be given to staff. As discussed in detail (see Section 4.4.2.4), the staff desired a management style combining collegiality and entrepreneurship. The message of the staff was clear: there was considerable scope for further improvement in the management style.

Through their responses to only two statements concerning Dimension 5 "Management Style", the trainees accorded this dimension the fourth rank (see **Table- 24**) with a mean score 3.21 (see Section 4.3.3, **Table- 23**), which was considerably lower than the mean scores of the other categories of stakeholders. Most of the trainees wanted to have a better access to specialist equipment and resources. Also, they desired that realistic targets be set for performance of individuals and groups.

5.4 A Model for Developing Quality Assurance Systems in Further Education Institutions and Training Sectors

5.4.1 Elements of the Model

The process of improving quality assurance systems in Further Education institutions and training sectors is complex. Developing an appropriate quality assurance systems model becomes a challenging task for any educational / training institution. The major elements of the processes which led to the development of a quality assurance systems model in BTI through action research techniques are shown in **Figure 11**. The figure also highlights the salient features of the emergent system of quality assurance. This system constitutes the strategic framework within which the detailed operations of quality can be planned. As the previous chapters reveal, that this particular model involving these processes would emerge was not evident at the beginning of Action Research Group Cycles (see Section 4.2).

The model consists of eight elements: Action Research Group Process, Quality Performance Measurement, Adjustment of Quality Policy and Strategy, Conceptualisation and Nature of Quality Assurance in Higher Education and Further Education, Competitive Environment, Internal Cultural Dynamics, Management Style, and Implementation and Emergent System of Quality Assurance.

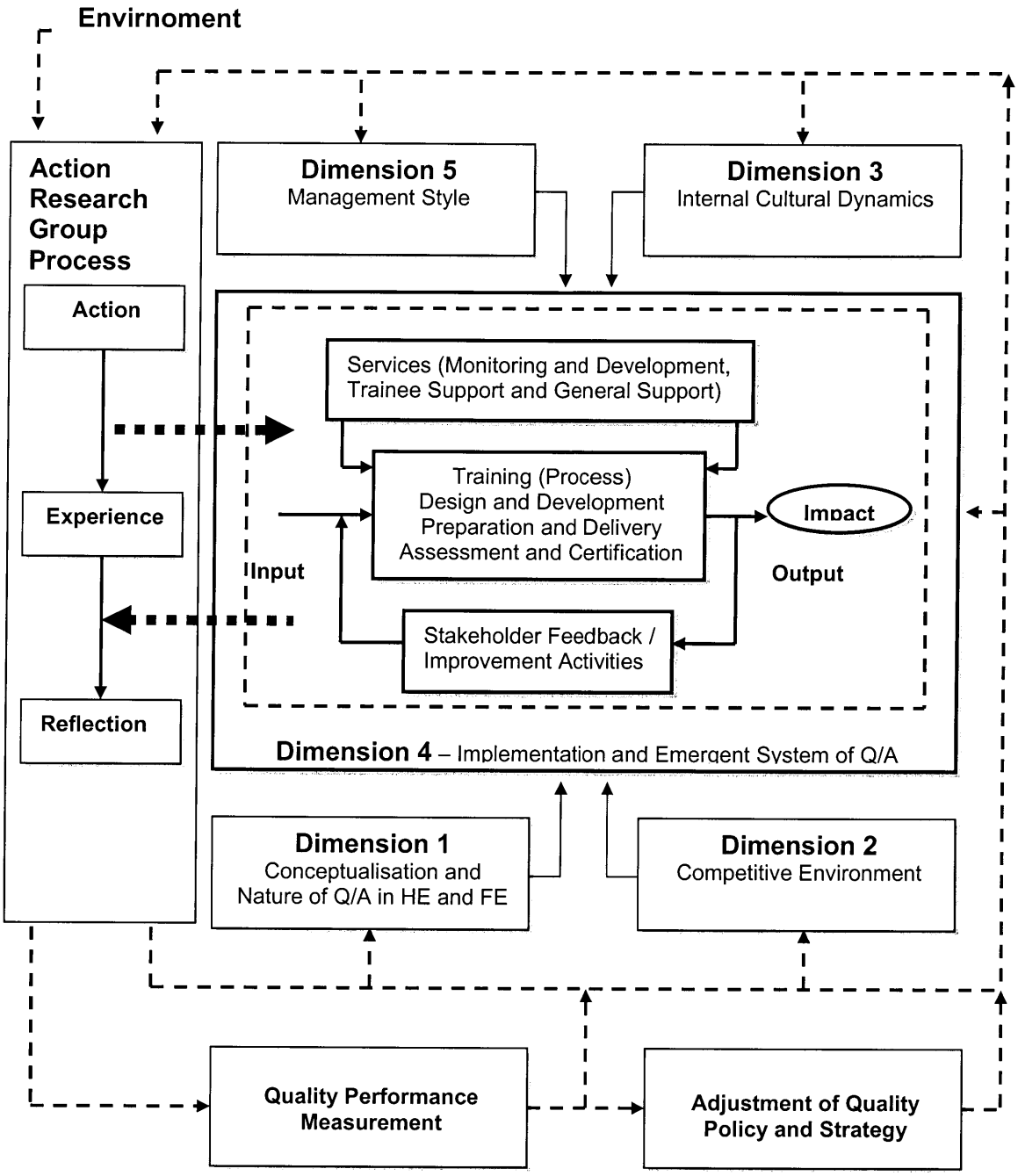


Figure 11 – A Model for Developing Quality Assurance Systems in Further Education Institutions and Training Sectors.

5.4.2 Operationalisation of the Model

The Action Research Group process receives the inputs from the environment, processes them through action, experience and reflection and takes actions. The outcomes of the actions are assessed and reflected upon. These constitute a very vital input into the implementation and emergent system of quality assurance. The process of implementation and emergent system is surrounded by a complex environment, which impinges on the quality assurance process. **Figure 11** seeks to depict the dynamics of this process. The dimensional and environmental aspects of the model and their operational correlates are described below.

Dimension 1, "Conceptualisation and Nature of Quality Assurance in HE and FE", constitutes the first element of the environment. It represents the continuing efforts to conceptualise quality assurance in the context of HE and FE. In Chapter 2, "Review of the Literature", Section 2.11, "Development of Theoretical Framework in the Context of the Study", a product in HE/FE was defined as value added to the individual student / trainee. It was also argued that an HE/FE institute, aspiring to produce quality products, seeks to satisfy "all the customers and stakeholders in an increasingly balanced way". Operationally, the conceptualisation of quality indicates that an HE/FE institute needs to ascertain from the employers, instructors / teachers and students / trainees what should the features of the product or added value be. The conceptualisation of quality assurance is affected by how, from time to time, quality performance is measured. In the fast changing business world, where knowledge is not static, capacity for self-development also has to be included. While doing this, the Institute, – in this case the Action Research Group – will have to review the quality policy and strategy. The quality policy and strategy are developed from the actions taken by the Action Research Group. The strategy should include quality improvement activities which are explicit or implicit in nature. Also, organisational culture should form an integral part of conceptualisation of quality. Further, it should be recognised that HE and FE involve human interactions.

Dimension 2, "Competitive Environment", is the second aspect of the environment to act on quality implementation. Competition denotes efforts to gain a larger share of the market in relation to the other players and attain higher levels of profits. While the criterion of profit cannot be applied to HE/FE institutes, the latter compete with one another to attract better and more students / trainees by imparting high quality training. Also, the HE/FE institutes compete to win the recognition from the stakeholders that they produce better trained / taught students / trainees. The members of Action Research Group and the participants in the focus group interviews appreciated the various aspects of BTI training and advocated involving industrial representatives to participate in the programme advisory committees, to evaluate programmes and review curricula to meet the requirements of the job market. This was supported by more than three-fourths of employer respondents in the survey instrument. Hence, it could be seen that the participants and respondents wrestled with the conceptualisation of quality, the means of ensuring it and indicators of good quality. Adjustment of quality policy and strategy also affects to a great extent the competitive environment. The state may lay down new quality policies and strategies, in the light of the new regime of international trade. Or, it may, as part of the over all strategy of reduction in state expenditure, reduce financial assistance to educational institutions. This will significantly affect the competitive environment, and HE/FE institutions will have to take these policies and strategies into account.

Dimension 3, "Internal Cultural Dynamics", constitutes another important part of the environment. As discussed in Chapter 4 (Sections 4.3.2, 4.3.3 and 4.4.2.2), this comprises the values, preferences, attitudes and the like of all the stakeholders of quality. Further, the internal cultural dynamics would operationally denote the extent of open-mindedness, willingness to change, willingness to be members of new and cross-level teams, acceptance of new patterns of work and the like. The changes in quality policy and strategy will significantly impact these. Differing values and outlooks have to be continually harmonised. Harmonised or not, they affect the quality mechanism and determine the processes.

In the focus group interviews the participants did not favour a rigid structure of quality assurance system. It can be seen from the patterns of responses that quality assurance involves the cultural development of the individual as well as the organisation. Organisational structure, politics and culture, on the one hand, and quality assurance on the other, are dynamically related. The participants displayed their awareness of the organisation-wide implication of participation. Everyone from the top down to trainees was responsible for quality. Collective responsibility for quality was repeatedly recognised. Various aspects of quality culture came to the surface. A very sensitive aspect of evaluation of culture of quality found expression in the focus groups. The important aspects of commitment and sharing of organisational values were forcefully voiced. The groups sought to unravel the different strands of internal cultural dynamics of quality assurance: culture and participation, organisational and individual roles, inevitability of politics and ways to reduce its adverse impact, conflicts and hidden barriers to quality.

The Dimension 5, "Management Style", constitutes another important element of the environment of implementation and emergent system of quality assurance. It is almost the counterpart of the internal cultural dynamics. As discussed in Section 2.10 "Quality Assurance and Mangerialism", and 4.4.2.4 "Dimension 5: Management Style", operating a quality assurance model would need a collegial style of management, with an element of entrepreneurial style built in, despite the powerful attraction of the corporatist style. The collegial style of management would operationally involve leadership by example, empowerment of the colleagues, regular consultations, shared collective values, timely feedback and a good sense of discipline on the part of all. A few barriers to the development and management of quality assurance systems in HE / FE institutes should be mentioned. Some instructors/ teachers and managers of education are not willing to accept students, and their parents and employers as customers. Also, they resist the technical language of quality assurance. Quality assurance means change, and many resist change. But, importantly, the false notion that quality assurance means intense super-ordinate – subordinate relationships must go.

In the emergent model of quality assurance, the main process is training. It has many operational aspects, like design and development, preparation and delivery, assessment and certification, management and administration of training activities, interaction with the trainees, etc. All these help to enhance the knowledge, skills, etc. of the trainees. This process is highly flexible. The products, i.e. the skills, knowledge, etc. added to the trainees will make varying types of impacts on the economy, society and government. If their skills are up to the mark, the businesses will prosper. The trainees themselves will progress knowledge-wise and financially. This will contribute to the social satisfaction. Improvement in the economy will be appreciated by the government. If the trainees are not up to the mark, these positive gains will not be there and this information will be ploughed back into quality assurance system and the implementation will have to be reorganised. In this way, the quality mechanisms ensure that training and its aspects are sensitive to the ever-changing environment. The Dimension 4, "Implementation and Emergent System of Quality Assurance", is itself a learning system. It receives inputs of the services (monitoring and development, trainee support and general support). It again is responsive to frequent and regular feedback from the stakeholders, particularly regarding employability of the graduate trainees and their ability to continually grow on the job.

It may be noted that at the end of Action Research Cycle 2 (see Section 4.2.2), "Dimension 2: Competitive environment", "Dimension 3: Internal Cultural Dynamics", "Dimension 4: Implementation and Emergent Systems of Quality Assurance", and "Dimension 5: Management Style" emerged. Although the management style is the last on the list, the real end product is the emergent system. The other dimensions contributed to its evolution.

The Action Research Group regarded quality assurance as a philosophy implying a series of developmental actions. The group was not inclined to accept the industrial conceptualisations of quality. Although education should be regarded as a service, the group was not in favour of borrowing the conceptualisations from the service industries like the airlines, hotels and banks, either.

It examined the major differences between industry and education / training. In the first place, industries and services pursue quality in order to stay in business so that they continue to earn profits, which is the commonly used indicator for measuring effectiveness. HE / FE sectors have no such indicators of effectiveness. The objectives of education are far more complex. Education provides opportunities to a student to develop his knowledge, know-how, wisdom and character, which are roughly equivalent to knowledge, skills and attitude. Therefore, the mission of education is complex and relatively a long-term one. There is no single indicator, like profits in industry, which can reflect the effectiveness in achieving these objectives.

As discussed in Chapter 2 (Section 2.8.1), 'Review of literature', some of the indicators of quality of education like, "Average starting salary (of a graduate student/trainee)", are perfunctory and could be misleading. Secondly, education is not like an assembly line production. The instructors / teachers are not performing identical and highly repetitive actions. Education is an interactive process, through which even a teacher learns. Thirdly, whereas "eliminate variance" is a sacred mantra of Deming and others, the quality of the different inputs into education varies considerably. Deming particularly advises purchase of raw materials from a single source to eliminate variance in the quality of raw materials. This simply cannot be done in education. Any number of admission tests or interviews cannot rigorously control the quality of the entrant students. Their personalities, character and values vary from batch to batch and individual to individual. Their interactions with the teachers vary. In fact, a teacher *has* to vary his method and techniques of teaching to deliver the expected outcomes of the programmes to the students / trainees. The quality of output also varies. There is no guarantee that first class school graduate will become a first class college graduate. In education and training, therefore, quality has to be viewed in terms of value added to the student. This added or enhanced value consists of knowledge, wisdom, skills, attitudes, character and also the capability to grow. This enhancement is to be achieved by balancing the interests and demands of the customers and stakeholders, like students, parents, employers, sponsors, teachers, etc.

After an appropriate conceptualisation of quality in HE / FE, the Action Research Group took the steps to gauge the perceptions of competitiveness of the environment, the internal cultural dynamics encountered while implementing quality measures and the management style. BTI was considered as a learning organisation. More importantly, the Action Research Group wanted neither to impose its views about these, nor to have preconceived and *a priori* notions. The opinions and evaluations of the major stakeholders, viz., the employers, staff, and trainees were ascertained through surveys. The key issues of the findings were debated in the staff focus group interviews. Further conclusions were derived through triangulations. These conclusions constituted a crucial input which facilitated the implementations and the emergence of a quality system.

The forces which intensify competition and thus activate the competitive environment are generally autonomous. They are the results of new technological and other inventions, the emergence of new players in the market, or the new regimes of international trade. But, as can be seen from the experience of many countries, the government can also contribute significantly to the intensification of competition through their policies. As discussed in Chapter 1, Section 1.2, "Extension of Quality to Higher and Further Education", the competitive environment impacts the HE/FE institutes. Thus, competitive environment is the main igniter of the model. While encouraging competition in the business world, the government can also demand that HE/FE institutes give more value for less money, and subject themselves to periodic audit, e.g. National (Sir Ron Dearing) Committee of Inquiry into Higher Education (1997). The employers, who sponsor their employees, may also make similar demands. Apart from these two main sources of ignition, viz. business and government, a group of alert and conscientious instructors / teachers and educational leaders may on their own decide to streamline and upgrade the delivery of teaching and training and thus initiate the development of a quality assurance model.

The product has been defined as the value added to a student / trainee by an HE/FE. The features of the product, which are never static, are knowledge, skills, attitude and capability to acquire higher knowledge and skills. Through quality assurance, it is endeavoured to match the requirement of the primary stakeholders: employers, staff and trainees, and also the requirements of the state and society. Though the employers are the first category of stakeholders to be impacted by the product, the latter's quality also affects the trainees themselves, staff and even society and state. The state has a huge stake in an economy which is increasingly getting globally integrated. For these reasons, all the above stakeholders should be considered as the champions of the product.

The developed model of quality assurance systems in further education and training sectors should work, due to the fact that all the key elements of the quality assurance processes have been built into it. Moreover, the linkages among the elements have been established after a critical analysis of the empirical evidence. The model operates continually in an iterative way. If the direct inputs from the four dimensions of the environment and those processed by the leadership are not appropriately converted into acceptable outputs through the implementation stage, the impact will not be a positive one. This would entail an examination to ascertain which dimension went wrong: Managerial style? Nurturing and development of appropriate culture? Implementation? All this would then lead to correction. The theme, "every one must be involved in quality", has emerged prominently in the analysis. At each phase in the operation of the model, the concerned stakeholders are involved. Above all, the Action Research Group is continually conceptualising, implementing and monitoring the impact of the training process. It energises and involves the staff. One of the important findings is that staff do not find quality intimidating. The employers, who are the first group to experience the heat of increasing competition, are keen to be involved. If the employers happen to be the sponsors of the employees, they would expect value for their money. The trainees, too, get involved in the working of the model, as they too are, in their own way, closely assessing the usefulness of their training in the market.

All the dimensions of the model may work almost simultaneously in the sense that they are impacting one another and receiving inputs from others, particularly, the impact of the output of implementation of the quality assurance model. But, the dimensions may not work with same momentum. Some dimensions may get activated and even accelerated earlier than the others. Thus, it may be found that at a particular moment one dimension may be working with greater momentum than the others. This process, particularly, through the operation of the Dimension 4, "Implementation and Emergent System of Quality Assurance", would lead to actual assurance of quality. The training process, and the various aspects directly associated with it are always in a state of unstable equilibrium. They are being continually honed and readjusted. Thus, the quality assurance takes the form of training level of optimal quality, and products which possess the maximum number of desired and expected features.

The multi-cultural nature of BTI has produced an atmosphere of free and open debate on all aspects of quality. The multi-cultural nature also harmonises different perspectives on quality. The following issues are continually discussed: benchmarking, analysing the views of the employers, relevance of training programmes, best methods of training delivery, etc. Above all, there is an overwhelming commitment to quality only waiting to be tapped. The other institutions in the national and regional context can comprehend the model in the following way: They too can set up sensitive and pro-active action research groups. They should clearly identify the ways of understanding the nature of competitive environment as assessed by the various stakeholders. Whether they have multi-cultural staff or not, it is important that the staff should be encouraged to debate freely the issues relating to quality. Thus, open debate, collection and analysis of relevant data and actions are necessary to understand and accept the model. Therefore, it is essential that other institutions at national and regional level should consider the cultural and managerial aspects in adopting and implementing this model. These aspects are very crucial to the success of the implementation of any quality assurance systems model.

Like all models, this model, too is an idealised and simplified version of complex interactions and processes. It has some strengths and weaknesses. The following are the strong points. In the first place, this model has not been developed on the basis of any a priori conceptualisation. True, it involved review of literature and theorisation. But, the model has been developed empirically through phases and cycles of action research. Secondly, the model has been based on the involvement of the stakeholders. Thirdly, the model facilitates self-correction and self-direction. If any dimension of the model does not work in the expected way, it impacts the other dimensions, particularly, implementation of quality assurance. This necessitates examination and correction. Fourthly, the model takes into account the crucial role of culture and managerial style.

The following can be the weaknesses of the model. In the first place, it assumes the active role of the Action Research Group and harmony among them. While differences are inevitable in any group endeavour, it is also necessary to maximise the area of congruence. Secondly, the model requires channels of communications of high fidelity. If the channels of communications among stakeholders, or between the environment and dimensions, or during the cycles of action, experience and reflection fail, the working of the model would be seriously impaired. Thirdly, there can always be an essential tension between the collegial style of management and leadership. The impulses for corporatist style of management may surface. Lastly, there can be sub-cultures within the general organisational culture. Tensions can arise among these subcultures. For example, one group may like greater devolution of power, while another may favour greater centralisation.

5.5 Implications for Further Research

This research constituted an effort to evolve the basic features of an appropriate model of quality assurance in the context of an FE institute. An analysis of the literature including empirical studies revealed the distinctiveness of educational institutions and demonstrated how they differed from other service and manufacturing organisations. The action research employed in this research highlighted this difference. This fact and analysis of the data and interpretations of the findings suggested many implications for further research. Some of the potentially rewarding problem areas of further research are discussed below:

1. An educational institute requires certain standardisation in terms of syllabus, outcomes, teaching / training, assessment and the like. Teachers/ trainers are expected to follow certain standards. But, teaching and training involve and require creativeness even while the teachers / trainers are following the guidelines. Each teacher / trainer is endowed with a certain special talent, capability to innovate and individual approach and style. Conceptualisations by teachers/trainers of an item in the curriculum vary.

   Unlike the assembly line production, good teaching / training cannot be ordered. Individuality and creativity of teachers/trainers should not be curbed. Such a thing will be harmful to a HE / FE institute. But, pursuit of quality standards and a sense of discipline have to spring from within. Hence, it would be rewarding to research how controls and standards are internalised and individual productivity of teachers / trainers blends with the goals of an institute.

2. One of the major findings of this research is that the staff, while desiring to retain the major elements of collegiality, also felt the need for strong leadership. Particularly, they assigned a major responsibility to the middle level managers. These middle level managers are expected to play a key and significant role in providing academic and administrative leadership.

   This points to an important area of research: a comparative study of middle level educational managers. Their values, styles, approaches in managing the teachers/trainers – more or less creative or with more or less initiative, - can be analysed. The following aspect is particularly important: how they energise, inspire and direct colleagues.

3. Power structure and power relations constitute an important aspect of cultural dynamics which affect quality. Because of the nature of teaching / training institutions and professions, the rough edges of power in these organisations are expected to be smoothened. Still, power centres remain. It would be rewarding to see why these power centres emerge in educational institutions, how they are contained and how the potential conflicts can be avoided, particularly when managing a quality assurance model.

4. As in other countries, the Kingdom of Bahrain also has many public and private sector manufacturing and service organisations, which have a long tradition of in-house training programmes. There are also other further educational and training institutes and institutes of higher education. This comparative analysis will shed more light on the issues relating to evolving models of quality assurance. It would be interesting to learn about their quality assurance mechanisms and how they evolved them so that other educational and training organisations can learn from their experiences.

5.6 Summary

This research represents a quest for a strategic model of quality assurance systems in further education and training sectors. The researcher and those staff (instructors / teachers and managers) who constituted themselves into Action Research Group reflected the awareness of the staff that the training they impart has to be qualitatively upgraded and made increasingly relevant. Conventional wisdom as well as keen observation revealed that models of quality in other services and manufacturing cannot be transplanted in education, where profit is not the driving force.

The members of the Action Research Group were enthusiastic about, and interested in contributing effectively to this study. They also endorsed the idea of formulating and proposing a model of quality assurance system at BTI. The members of the group appreciated that there was a good deal of enthusiasm for quality among the staff, trainees and employers, and this enthusiasm should be tapped and directed. Again, the group felt that a good quality assurance system should be developed by drawing on the expertise from within the Institute, rather than hiring experts from outside. The desire to pursue quality was clearly internally inspired.

The researcher and the Action Research Group decided to evolve a model of quality assurance through iterative cycles of action research. It was discussed earlier in this Chapter that developing a model of quality assurance required an active involvement, commitment and participation of the stakeholders, particularly the staff. The method of participatory action research was found promising for such a study. The Action Research Group realised that no model of quality can be developed in a rarefied atmosphere. Such a development is not a one shot job. BTI's multi-cultural staff were increasingly becoming aware of the importance of quality issues and that BTI had to be pro-active in incorporating quality measures.

The researcher and the Action Research Group soon came to the conclusion that developing an appropriate quality assurance model is as important as running or managing one. After a proper identification of the product, - value added to a student / trainee and its complex attributes – the Action Research Group identified the stakeholders, - employers, staff (instructors / teachers), trainees. It sought to adopt a humanist approach to quality in education, - trainers' involvement and participation, ownership, empowerment, empathy and the like. The actions and reflections of the Action Research Group and the stakeholders' views and their analysis pointed out the way to the development of the model.

The views on how BTI could cope with competitive environment were important. But, it was found that the mainstream quality thinkers, although tangentially referring to culture, had done little justice to it. In fact, the major contributions to the cultural aspects of organisational change had come from scholars of organisation behaviour.

The Action Research Group looked at the aspects of culture in BTI from the perspectives of the employers, staff and trainees: conduciveness of organisational culture, involvement of the staff, etc. The complementary aspect of management style then came to the fore. A style that would nurture the creativity of teachers/trainers was sought be ascertained.

All these served as an input to the emergent system of quality assurance. Training is the main process; it can be kept well-honed and vibrant only through continual feedback from the stakeholders, and improvement. The impact of training has to be continually monitored. An implementation with a greater role for middle level managers and a management style combining fairness, openness and respect as well as leadership are crucial to operate this model.

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APPENDICES A - E

APPENDIX A ACTION RESEARCH GROUP

A1- Action Research Group Cycles

Action Research Group Cycles

Research Cycle / Plan	Training Year	Year	Period	Term	Month	Meeting	Day / Date	Record
One – Plan 1	1997 / 1998	1997	October – December	1	November	1	Tuesday, 11/11/1997	01
One – Plan 2		1998	January - March	2	February	2	Wednesday, 25/02/1998	02
One – Plan 3			April - June	3	May	3	Sunday, 03/05/1998	03
One – Plan 4			July - September	-	August	4	Saturday, 01/08/1998	04
Two – Plan 1	1998 / 1999		October - December	1	November	5	Monday, 02/11/1998	05
Two – Plan 2		1999	January - March	2	January	6	Tuesday, 05/01/1999	06
Two – Plan 3			April - June	3	April	7	Wednesday, 07/04/1999	07
Two – Plan 4			July - September	-	July	8	Monday, 05/07/1999	08
Three – Plan 1	1999 / 2000		October - December	1	October	9	Wednesday, 06/10/1999	09
Three – Plan 2		2000	January - March	2	February	10	Tuesday, 01/02/2000	10
Three – Plan 3			April - June	3	May	11	Sunday, 07/05/2000	11
Three – Plan 4			July - September	-	August	12	Saturday, 05/08/2000	12
Four – Plan 1	2000 / 2001		October - December	1	November	13	Monday, 06/11/2000	13
Four – Plan 2		2001	January - March	2	February	14	Thursday, 01/02/2001	14
Four – Plan 3			April - June	3	May	15	Tuesday, 01/05/2001	15
Four – Plan 4			July - September	-	July	16	Monday, 30/07/2001	16
Write - Up	2001 / 2002		October - December	1	-	-	-	-
Write - Up		2002	January - March	2	-	-	-	-

Action Research Group Records Outcomes

Research Phase / Cycle: 1	Training Year: 1997 / 1998

Meeting for plan	Day / Date	Time	Record	Place	Venue	Members Present	Apologies
1	Tuesday, 11/11/1997	09:00-11:00	01	BTI	Building 1 Room (104)	All eight members	None
2	Wednesday, 25/02/1998	11:00-01:00	02	BTI	Building 2 Room (201)	All eight members	None
3	Sunday, 03/05/1998	14:00-16:00	03	BTI	Building 2 Room (201)	All eight members	None
4	Saturday, 01/08/1998	15:00-17:00	04	BTI	Building 1 Room (104)	All eight members	None

Plan	Action	Experience / Reflection / Outcome
1	1. Conceptualising and defining quality systems, 2. Defining quality in the context of HE and FE.	• Evolution of the quality perspectives and theories in manufacturing and service: review of literature. • Distinctiveness of Higher Education (HE) and Further Education (FE) as a Service.
2	1. Envisaging appropriate measures of action, 2. Proposing action Plans.	• Definitions of Quality assurance in Higher Education (HE) and Further Education (FE).
3	1. Planning and implementing actions, 2. Examination of the experiences of other institutions in adopting and implementing quality assurance in HE and FE.	• A systematic and thorough review of issues related to quality management in HE and FE.
4	1. Reviewing the proposed action plans, 2. Reviewing alternative models of quality assurance in HE and FE, 3. Proposing a model of quality management suitable for further education and training sectors.	• **Emergence of Dimension 1:** "Conceptualisation and Nature of quality assurance in HE and FE"

Action Research Group Records Outcomes

continued...

Research Phase / Cycle: 2	Training Year: 1998 / 1999

Meeting for plan	Day / Date	Time	Record	Place	Venue	Members Present	Apologies
1	Monday, 02/11/1998	10:00-12:00	05	BTI	Building 1 Room (104)	All eight members	None
2	Tuesday, 05/01/1999	15:00-17:00	06	BTI	Building 1 Room (104)	All eight members	None
3	Wednesday, 07/04/1999	13:00-15:00	07	BTI	Building 1 Room (104)	All eight members	None
4	Monday, 05/07/1999	15:00-17:00	08	BTI	Building 2 Room (201)	Seven members	One

Plan	Action	Experience / Reflection / Outcome
1	1. Reviewing the difficulties in the quality assurance processes, 2. Reviewing the cultural and psychological barriers to the quality assurance processes, 3. Reviewing how the organisation has changed in behavioural terms, 4. Evaluating the processes of action and conceptualising improvements.	• An examination of methodology of action research; developing a suitable model for BTI. • Identification of the stakeholders.
2	1. Review of qualitative and quantitative indicators of the quality systems, 2. Identifying the approaches to data collection.	• Emergence of the idea of having three questionnaires to assess the quality position and status in the training year 1998/1999 and 1999/2000 one each for: 1. Employers 2. Staff 3. Trainees

Continued... Research Phase / Cycle: 2 (Training Year: 1998 / 1999)

Plan	Action	Experience / Reflection / Outcome
3	Review of: • Management engagement and support to QA initiatives, • The style of managing quality assurance processes (command and control Vs collegiality), • Impact of QA on the role of employees, • Staff involvement in organisational improvements and participation in decision making in relation to QA activities, • Involvement and contributions of various groups to the development of the QA systems.	• Design of the Survey Instrument (Three Questionnaires – Employers, Staff and Trainees).
4	Analysing: 1. Main driving forces behind the adoption of the quality measures, 2. Transparency of quality assurance processes, 3. Opinions, reactions and attitudes of the stakeholders, 4. Reviewing the process of quality action teams, 5. Involving the critical groups in the action schemes, 6. Evaluating qualitative and quantitative indicators of quality system at each cycle of action, 7. Identifying a range of quality devices, 8. Reviewing and revising the progress and plans of quality management and improvement, 9. Implementing, monitoring and evaluating the impact of the quality systems, 10. Overall strategic direction to quality assurance and total quality, 11. Reviewing the quality systems mechanism to date and sustaining the ethos toward quality at all levels. 12. Proposing a quality system suitable to FE and BTI.	**Emergence of dimensions 2, 3, 4 and 5:** • **Dimension 2** "Competitive Environment" • **Dimension 3** "Internal Cultural Dynamics" • **Dimension 4** "Implementation Performance / Emergent Systems and Organisational Structure" • **Dimension 5** "Management Style"

Action Research Group Records Outcomes continued...

Research Phase / Cycle: 3	Training Year: 1999 / 2000

Meeting for plan	Day / Date	Time	Record	Place	Venue	Members Present	Apologies
1	Wednesday, 06/10/1999	13:00-15:00	09	BTI	Building 2 Room (201)	Seven members	One
2	Tuesday, 01/02/2000	15:00-17:00	10	BTI	Building 1 Room (104)	All eight members	None
3	Sunday, 07/05/2000	13:00-15:00	11	BTI	Building 1 Room (104)	All eight members	None
4	Saturday, 05/08/2000	14:00-16:00	12	BTI	Building 1 Room (104)	All eight members	None

Plan	Action	Experience / Reflection / Outcome
1	1. Examining the draft survey instrument (three questionnaires), and 2. Setting up three focus groups to review the draft survey instrument.	1. Formation of the three focus groups. 2. **1st Staff Forum 11-12 January, 2000**
2	1. Review of the survey instrument, opinion of the three focus groups recruited to review the survey instrument. 2. Piloting and pre-testing the survey instrument, 3. Analysis of the data of piloting and pre-testing of the three questionnaires.	1. Summary of the results of the three focus groups to review the three questionnaires, 2. Finalisation of the three questionnaires: • Trainees • Staff • Employers
3	1. Administration plan of the survey instrument, 2. Distribution and follow-up of the three survey instrument.	1. Plans and schedules for the distribution of the questionnaires, 2. Collection of the filled in questionnaires.
4	1. Review of the preliminary analysis of the data collected through the survey instrument (three questionnaires).	• Outcomes of the preliminary analysis.

Action Research Group Records Outcomes

continued...

Research Phase / Cycle: 4	Training Year: 2000 / 2001

Meeting for plan	Day / Date	Time	Record	Place	Venue	Members Present	Apologies
1	Monday, 06/11/2000	15:00-17:00	13	BTI	Building 1 Room (104)	All eight members	None
2	Thursday, 01/02/2001	14:00-16:00	14	BTI	Building 2 Room (101)	Seven members	One
3	Tuesday, 01/05/2001	08:00-10:00	15	BTI	Building 1 Room (104)	All eight members	None
4	Monday, 30/07/2001	14:00-16:00	16	BTI	Building 1 Room (104)	All eight members	None

Plan	Action	Experience / Reflection / Outcome
1	1. Monitoring and measuring through appropriate tools the perception of the stakeholders viz. employers, staff and trainees, 2. Quantitative analysis of the data collected through the questionnaires using SPSS.	1. Findings of the data analysis of the three questionnaires. 2. 2nd Staff Forum 16 April 2001.
2	1. Recruitment, constitution and composition of eight focus groups to examine the entire range of proposed quality assurance steps and to reflect the emerged dimensions, 2. Action plan for the list of themes for discussion in the focus group interviews, 3. Finalisation of the interview schedules and membership composition.	1. The importance of changing economic environment to Further education and Vocational training and the quality actions taken by BTI, 2. Involvement and contributions of various groups to the development of the quality assurance systems, 3. Dynamics of re-orienting the BTI systems in terms of quality assurance, 4. Impact of quality assurance on the role of employees.

Continued... Research Phase / Cycle: 4 (Training Year: 2000 / 2001)

Plan	Action	Experience / Reflection / Outcome
3	1. Analysis of the dimensions of the eight focus groups • Assessment of the dimensions, through focus group interviews, • Transcripts of the eight focus group interviews, • Analysis of the eight focus group data, • Outcome summary of the eight focus group interviews data.	1. The categories for analysing the dimension of the eight focus groups interviews: • Extent of awareness, • Extent of acceptance, • Evaluation of implementation / impact, • Intensity / frequency of opinions, • Strength / forcefulness of the system.
4	1. Developing a QA model suited particularly to BTI, 2. Evaluating qualitative and quantitative indicators of quality system at each cycle of action, 3. Implementing, monitoring and evaluating the impact of the quality systems, 4. Triangulation of: • Action Research Group outcomes, • Stakeholders' quality perceptions (obtained through the three questionnaires), • Outcomes of the eight focus group interviews.	1. Emergence of the developed Model of Quality Assurance System Processes in Further Education and Training Sectors, 2. Findings, recommendations and conclusions.

APPENDIX B SURVEY INSTRUMENTS

B1- Employers Survey

B2- Staff Survey

B3- Trainees Survey

B4- Summary of Pilot Study Findings

B5- Employer Letter

Employers

Survey

Background

We are currently undertaking research into the Quality Assurance Systems at Bahrain Training Institute (BTI). We would be grateful, if you could spend a few minutes completing this questionnaire to help us evaluate your views and perceptions about the Quality Assurance Systems at Bahrain Training Institute. As a result, we aim to use your feedback to improve the Quality Assurance Systems. Responses will be anonymous and all information will be treated in the strictest confidence and no individual will be identified.

Further Information

Please return the completed questionnaire to:

Basim Al-Baharna
Bahrain Training Institute
P O Box 33090, Isa Town – Bahrain
Tel: 688406 – **Fax:** 688499

If you have any queries, please feel free to contact me at the above number.

Thank you for sparing your valuable time.

Direction

This questionnaire is structured in a way that it will give a picture of your views and perceptions on the quality assurance at BTI as a user of the system. For each of the following, place a tick (✓) mark in the appropriate box indicating your opinion about BTI's Quality Assurance Systems.

Personal profile:

1. Please specify your gender: ☐ Male ☐ Female

2. Your age group: ☐ 30 years or younger ☐ 31 – 40 ☐ 41 – 50 ☐ 51 or above

3. Your position in your organisation:

☐ Chief Executive ☐ Director ☐ General Manager ☐ Manager
☐ Section Head ☐ Supervisor ☐ Staff ☐ Others

BTI and yourself:

4. What is your source of information about BTI? (Please tick as many as applicable)

☐ Personal contact ☐ BTI graduates ☐ Media
☐ As member of BTI advisory committees ☐ Others

5. Are BTI graduates employed in your organisation?

☐ Yes ☐ No
If 'Yes', how many? ☐ 1 - 5 ☐ 6 – 10 ☐ More than 10

6. Has your organisation sponsored any of your employees to BTI programmes?

☐ Yes ☐ No
If 'Yes', how many? ☐ 1 - 5 ☐ 6 – 10 ☐ 11 or more

BTI Systems:

		Strongly Agree	*Agree*	*Not Sure*	*Disagree*	*Strongly Disagree*
7.	Programmes and the corresponding curriculum are responsive to the training needs of job market.	☐	☐	☐	☐	☐
8.	The learning objectives of training programmes offered meet the requirements of the employers.	☐	☐	☐	☐	☐
9.	The training programmes are cost effective and make efficient use of personnel and other learning tools.	☐	☐	☐	☐	☐
10.	BTI programmes are generally well matched to meet the individual needs of trainees, employers and other users.	☐	☐	☐	☐	☐
11.	BTI is able to support flexible learning needs with the objective of widening participation.	☐	☐	☐	☐	☐
12.	BTI is responsive to the employer feedback and has demonstrated evidence of incorporating them.	☐	☐	☐	☐	☐
13.	BTI graduates are well trained to have appropriate skills and knowledge to take up industrial placements.	☐	☐	☐	☐	☐
14.	There is a positive attitude towards quality of all concerned within BTI.	☐	☐	☐	☐	☐
15.	BTI has comprehensive arrangements for quality assurance involving stakeholders.	☐	☐	☐	☐	☐
16.	Quality Assurance has helped in restructuring and redesigning the programmes, leading to measurable gains in the performance of the trainees.	☐	☐	☐	☐	☐
17.	Quality assurance procedures are reviewed continuously with appropriate stakeholders.	☐	☐	☐	☐	☐
18.	BTI implements self-assessment of its performance to identify its strengths and weaknesses.	☐	☐	☐	☐	☐
19.	BTI has created an organisational culture that is conducive to continuous quality improvement.	☐	☐	☐	☐	☐
20.	BTI's senior management is visibly committed to Quality Assurance.	☐	☐	☐	☐	☐
21.	BTI's quality objectives and strategies are developed and deployed down through the organisational hierarchy.	☐	☐	☐	☐	☐
22.	The senior management of BTI initiates actions for identifying and tackling the main quality problems.	☐	☐	☐	☐	☐
23.	All the BTI processes have built-in mechanism to ensure Quality.	☐	☐	☐	☐	☐
24.	Organisations have to impart additional training to enable graduates to perform acceptably soon after entering the workplace.	☐	☐	☐	☐	☐

25. If you have any other comments or suggestions regarding BTI's quality systems, please list them below:

_____

_____

Staff

Survey

Background

We are currently undertaking research into the Quality Assurance Systems at Bahrain Training Institute (BTI). We would be grateful, if you could spend a few minutes completing this questionnaire to help us evaluate your views and perceptions about the Quality Assurance Systems at Bahrain Training Institute. As a result, we aim to use your feedback to improve the Quality Assurance Systems. Responses will be anonymous and all information will be treated in the strictest confidence and no individual will be identified.

Further Information

Please return the completed questionnaire to:

Basim Al-Baharna
Bahrain Training Institute
P O Box 33090, Isa Town - Bahrain
Tel: 688406 - **Fax:** 688499

If you have any queries, please feel free to contact me at the above number.

Thank you for sparing your valuable time.

Direction

This questionnaire is structured in a way that it will give a picture of your views and perceptions on the quality assurance at BTI as a user of the system. For each of the following, place a tick (✓) mark in the appropriate box indicating your opinion about BTI's Quality Assurance Systems.

Personal profile:

1. Please specify your gender: ☐ Male ☐ Female

2. Your age group: ☐ 30 years or younger ☐ 31 – 40 ☐ 41 – 50 ☐ 51 or above

3. Your highest educational qualification:

☐ Ph.D. ☐ Postgraduate ☐ Graduate
☐ HND ☐ Others

BTI and yourself:

4. How many years of service have you completed at BTI?

☐ less than 1 year ☐ 1 year ☐ 2 years ☐ 3 years
☐ 4 years ☐ 5 years ☐ more than 5 years

5. What is your present position at BTI?

☐ Trainer ☐ Program Co-ordinator ☐ Assistant HoD ☐ HoD
☐ Manager ☐ Support staff ☐ Others

BTI Systems:

		Strongly Agree	*Agree*	*Not Sure*	*Disagree*	*Strongly Disagree*
6.	The learning outcomes of training programmes offered meet the requirements of the employers.	☐	☐	☐	☐	☐
7.	Training programmes designed and delivered are relevant to the job market.	☐	☐	☐	☐	☐
8.	The training programmes are cost effective and make efficient use of personnel and other learning tools.	☐	☐	☐	☐	☐
9.	Flexible targets are set by the institute for the performance of the individual staff and groups.	☐	☐	☐	☐	☐
10.	Teaching and learning processes are planned effectively to achieve required standards.	☐	☐	☐	☐	☐
11.	Appropriate training methods are used to meet the trainees' individual learning needs and the needs of the programmes.	☐	☐	☐	☐	☐
12.	Specialist equipment and resources are available to support training and learning outcomes.	☐	☐	☐	☐	☐
13.	Trainer's participation in the review and evaluation through the module teams and programme management committees is normally very critical and productive.	☐	☐	☐	☐	☐
14.	Review of curriculum is based upon regular consultation with the employers and past trainees.	☐	☐	☐	☐	☐
15.	Industrial feedback on trainees doing on-job-training (OJT) serves as valuable input to the quality assurance system.	☐	☐	☐	☐	☐
16.	The direction given by BTI management facilitates achieving targets and keeps training and learning under constant review.	☐	☐	☐	☐	☐
17.	Trainers are appropriately qualified and have up to date knowledge / skills to be effective.	☐	☐	☐	☐	☐
18.	Trainers are provided with suitable opportunities for professional development.	☐	☐	☐	☐	☐
19.	BTI is committed to the development of its employees with the recognition that they are an asset.	☐	☐	☐	☐	☐

		Strongly Agree	*Agree*	*Not Sure*	*Disagree*	*Strongly Disagree*
20.	Appropriately qualified technical and support staff are effectively deployed to support trainers and trainees.	☐	☐	☐	☐	☐
21.	The existing organisational culture is conducive to continuous quality improvement and enables every one to participate.	☐	☐	☐	☐	☐
22.	BTI has demonstrated its commitment to continuous quality assurance improvement.	☐	☐	☐	☐	☐
23.	Staff are involved in improving the processes under their control on a continuous basis and take personal responsibility for their own quality assurance.	☐	☐	☐	☐	☐
24.	Staff appraisal and professional development are integral parts of BTI's quality assurance.	☐	☐	☐	☐	☐
25.	Trainers are vital links in the quality chain within BTI.	☐	☐	☐	☐	☐
26.	BTI's quality assurance procedures cover every aspect of its functions: training / teaching, assessment and administrative processes.	☐	☐	☐	☐	☐
27.	BTI quality systems are well understood and supported by all the staff.	☐	☐	☐	☐	☐
28.	The quality culture at BTI is promoted by the professional working environment.	☐	☐	☐	☐	☐
29.	The positive attitude towards quality of all involved at BTI is responsible for making BTI a premier training institution.	☐	☐	☐	☐	☐

30. If you have any other comments or suggestions regarding BTI's quality systems, please list them below:

_____

_____

_____

_____

_____

Trainees

Survey

Background

We are currently undertaking research into the Quality Assurance Systems at Bahrain Training Institute (BTI). We would be grateful, if you could spend a few minutes completing this questionnaire to help us evaluate your views and perceptions about the Quality Assurance Systems at Bahrain Training Institute. As a result, we aim to use your feedback to improve the Quality Assurance Systems. Responses will be anonymous and all information will be treated in the strictest confidence and no individual will be identified.

Further Information

Please return the completed questionnaire to:

Basim Al-Baharna
Bahrain Training Institute
P O Box 33090, Isa Town – Bahrain
Tel: 688406 - **Fax:** 688499

If you have any queries, please feel free to contact me at the above number.

Thank you for sparing your valuable time.

Direction

This questionnaire is structured in a way that it will give a picture of your views and perceptions on the quality assurance at BTI as a user of the system. For each of the following, place a tick (✓) mark in the appropriate box indicating your opinion about BTI's Quality Assurance Systems.

Personal profile:

1. Please specify your gender: ☐ Male ☐ Female

2. Your age group: ☐ 20 years or younger ☐ 21 – 30 ☐ 31 – 40 ☐ 41 – 50 ☐ 51 or above

BTI and you:

3. How many years of training have you completed at BTI?

☐ less than 1 year ☐ 1 year ☐ 2 years ☐ 3 years ☐ 4 years ☐ 5 years ☐ more than 5 years

4. What is your training programme?

☐ Foundation ☐ First Diploma ☐ National Diploma ☐ Higher National Diploma ☐ Industry Specific Programme ☐ Others

5. When do you attend training?

☐ Morning ☐ Evening

6. Are you a sponsored trainee?

☐ Private ☐ Sponsored

	BTI Systems:	***Strongly Agree***	***Agree***	***Not Sure***	***Disagree***	***Strongly Disagree***
7.	The guidance given by BTI before and on entry helps the trainees to choose the right programme.	☐	☐	☐	☐	☐
8.	Induction programmes enable the trainees to understand BTI quality system.	☐	☐	☐	☐	☐
9.	Trainees receive effective learning support to meet their needs.	☐	☐	☐	☐	☐
10.	Appropriate training methods are used to meet the trainees' learning needs in terms of knowledge, skills and attitude.	☐	☐	☐	☐	☐
11.	Specialist equipment and resources are available to support training and learning.	☐	☐	☐	☐	☐
12.	BTI training process adds a range of values to the trainees before they pass out as graduates.	☐	☐	☐	☐	☐
13.	Delivery of training is well planned and helps to achieve the programme/module outcomes.	☐	☐	☐	☐	☐
14.	Support learning materials prepared by BTI are relevant and of high quality.	☐	☐	☐	☐	☐
15.	Independent / self-learning by trainees is helped by open access to appropriate learning resources and materials.	☐	☐	☐	☐	☐
16.	Trainee – Trainer interaction is encouraged in the learning process.	☐	☐	☐	☐	☐
17.	Trainers are appropriately qualified and demonstrate their ability for transferable skills.	☐	☐	☐	☐	☐
18.	Trainees are given realistic feedback about their achievements at appropriate points in the progress of the modules.	☐	☐	☐	☐	☐
19.	The standard of training programmes offered meets the expectations of the trainees.	☐	☐	☐	☐	☐
20.	Training programmes at different levels meet the specific requirements of the job market.	☐	☐	☐	☐	☐

		Strongly Agree	*Agree*	*Not Sure*	*Disagree*	*Strongly Disagree*
21.	The training programmes are cost effective and make efficient use of personnel and other learning tools.	☐	☐	☐	☐	☐
22.	The aims and objectives of the programmes / modules are clear to the trainees.	☐	☐	☐	☐	☐
23.	Trainees understand the purpose of the assessments and what is expected of them.	☐	☐	☐	☐	☐
24.	BTI assessment system is consistent with the learning objectives of the programmes.	☐	☐	☐	☐	☐
25.	Assessments are realistic, and differentiate the ability and skills of the trainees.	☐	☐	☐	☐	☐
26.	BTI sets realistic targets for the performance of individuals and groups at various levels.	☐	☐	☐	☐	☐
27.	Trainees and graduate trainees contribute to the review and evaluation of the different modules and programmes.	☐	☐	☐	☐	☐
28.	The quality systems at BTI have ensured the programmes to add real values to the trainees.	☐	☐	☐	☐	☐
29.	On Job Training (OJT) and Graduate Follow-up give BTI the job market's direct feedback about the extent to which the trainees meet the requirements of the job market.	☐	☐	☐	☐	☐

30. If you have any other comments or suggestions regarding BTI's quality systems, please list them below:

_____

_____

_____

_____

_____

_____

_____

Summary of Pilot Study Findings - (Survey)

List of Participants - Focus Group 1

Participant No.	Position	Department / Division	Category
1	Senior Instructor	Communication and Language Studies	D
2	Head of Department	Mechanical and Chemical Technology	D
3	Senior Instructor	Computer and I T	D
4	Head of Department	Electrical, Electronics and Instrumentation Control	D
5	Senior Staff	Research and Development	M and D
6	Assistant Director	Product Design and Development	M and D
7	Assistant Director	Quality Assurance	M and D
8	Manager	Trainee Affairs and OJT	T
9	Internal Auditor	Internal Auditing	GS
10	Manager	General Services	GS

List of Participants - Focus Group 2

Participant No.	Position	Department / Division	Category
11	Senior Instructor	Computer and I T	D
12	Head of Department	Communication and Language Studies	D
13	Assistant Head of Department	Communication and language Studies	D
14	Assistant Head of Department	Business Management and Supervisory Studies	D
15	Head of Department	Entrepreneurship Development	D
16	Assistant Head of Department	Electrical, Electronics and Instrumentation Control	D
17	Manager	Quality Assurance	M and D
18	Manager	Special Project	M and D
19	Manager	Admission and Registration	T
20	Manager	Maintenance and General Services	GS

List of Participants - Focus Group 3

Participant No.	Position	Department / Division	Category
21	Head of Department	Computer and I T	D
22	Assistant Head of Department	Computer and I T	D
23	Head of Department	Building and Construction	D
24	Senior Staff	Health and Safety	D
25	Head of Department	Garment Technology	D
26	Director	Bahrain Training Institute	M and D
27	Assistant Director	Research and Development	M and D
28	Senior Instructor	Communication and Language Studies	D
29	Head of Department	Business Management and Supervisory Studies	D
30	Senior Accountant	Accounts	GS

D Delivery M and D Monitoring and Development
T Trainee Support GS General Support

Focus Group 1 – Summary of Pilot Study Findings Continued ...

Participant No.	Questionnaires Comments		
	Trainees	Staff	Employers
1	-Changes in Language Proposed.	-Changes in Language Proposed.	-Changes in Language Proposed.
2	-Minor corrections. -An Arabic version is suggested. -Modifications suggested in Q10, Q14, Q15 and Q16. -"No opinion" to be removed in all the questionnaires.	- No Feedback given.	-Link Q7 and Q10. -All the employers may not be aware of all the Quality Assurance Systems at BTI, Hence Restructuring of the questionnaire suggested.
3	-Better logical sequence suggested	- Better sequence. -Questions on trainers/support staff commitment to Q/A.	-Better logical sequence. - Tune down the questions for easy understanding of the employers.
4	- No Feedback given	-Minor corrections.	-Instead of "BTI and yourself", "BTI and your organisation" suggested.
5	-Modification of Q16. -Suggests a question on whether the trainee is sponsored /private. -Good questionnaire	-Good questionnaire.	-The employers need to have lot of information about BTI to answer many questions.
6	-Changes in Language Proposed. -Modifications in Q12 and Q16.	-Modify Q14 to include curriculum definitions, delivery materials. -Modifications in Q24 and Q25.	-Questions Q16. -Suggests some new questions.
7	-Several questions are broad based. -Suggests that wherever possible same questions should be asked for cross-referencing.	-Several questions are broad based.	-Employers need lot of information to answer these questions.
8	-Minor corrections.	-Minor corrections.	-Rewording of Q17.
9	-Minor corrections.	-Minor corrections.	-Q10, Q13, Q14, Q16, Q18 and Q20. Some questions raised.
10	-Minor corrections.	- No Feedback	- No Feedback

Focus Group 2 – Summary of Pilot Study Findings Continued ...

Participant No.	Questionnaires Comments		
	Trainees	Staff	Employers
11	-Suggest 2 more questions.	-Minor corrections.	-Modification of Q21.
12	-Changes in Language Proposed.	-Changes in Language Proposed.	-Some grouping of questions suggested (e.g. Q14, Q21 and Q19).
13	-Minor corrections.	-Minor corrections.	-Minor corrections.
14	-Rewording of Q4.	-Rewarding of Q4. -Two more questions suggested.	-Suggestion for Q4, Q5 and Q6 made.
15	-Minor corrections.	- No Feedback given	-Rewording of Q5.
16	-Three more questions suggested on quality issues.	-Two more questions suggested.	-Two more questions suggested.
17	-Q6 to be modified to gains in knowledge and skills.	-Questions to be asked about the quality of trainee materials.	-Questions to include the satisfaction level about BTI and products (graduates).
18	-Changes in Language Proposed.	- No Feedback given	-Whether many employers will be able to answer many of these questions.
19	-Some more points raised.	-Some suggestions on "BTI and yourself".	- No Feedback given
20	-Another questionnaire for those trainees who got graduated before two years to get their feedback on Quality Assurance suggested.	-Changes in Language proposed.	-Minor corrections.

Focus Group 3 – Summary of Pilot Study Findings Continued ...

Participant No.	Questionnaires Comments		
	Trainees	Staff	Employers
21	- Suggested overall improvement in the questionnaires.	- Suggested overall improvement in the questionnaires.	- Suggested overall improvement in the questionnaires.
22	- He has proposed changes in the questionnaires.	-Changes in Language Proposed.	-Minor corrections.
23	- No Feedback given	-Suggests some new questions.	-Rewording of Q17.
24	- No Feedback given	-Modifications in Q24 and Q25.	-Minor corrections.
25	-Minor corrections.	-Changes in Language proposed.	-Needs good internal information to answer many of these questions.
26	- Suggested overall improvement in the questionnaires.	- Suggested overall improvement in the questionnaires.	- Suggested overall improvement in the questionnaires.
27	-Changes in Language Proposed. -Modification in Q16.	-Changes in Language proposed.	-Many employers may not have enough information to answer many questions. -Suggests revision of this questionnaire.
28	-"Background" some suggestions made and also for "Direction".	- No Feedback given	-Suggestions made for Q5, Q6. Q8, Q19 and Q20.
29	-Minor corrections.	-Minor corrections.	-Minor corrections.
30	- These questionnaires cover mostly on the "Training Side" Quality Assurance and not on the "Support Side".	-Minor corrections.	-Rewording of Q5.

BTI.2.2000 5th February, 2000

«Title» «Name»
«Position»
«Organisation Name»
«P_O_Box»
Bahrain

Fax. #: «Fax»
Tel. #: «Tel»

Dear «Title» «Name»,

We are undertaking a research project into the dimensions of developing a quality assurance model at Bahrain Training Institute (BTI) and the value of its training programmes.

We would be grateful if you could spend a few minutes completing the questionnaire, which is designed to provide us with your views and perceptions of BTI training and the quality of its programmes. Our aim is to use the information provided to improve the quality of our provision and increase the value of our programmes.

Responses will be anonymous and all information will be treated in the strictest confidence. No individual responder will be identified in our findings.

Thank you in anticipation, and I look forward to receiving your reply.

Yours sincerely,



Basim AL-Baharna

APPENDIX C ANALYSIS AND FINDINGS OF THE SURVEY

C1- Analysis of Employers Survey

C2- Analysis of Staff Survey

C3- Analysis of Trainees Survey

Analysis of Employer Survey

Dimension 2: Competitive Environment *
Specific Questions: 7, 8, 12, 13, and 24

Q7: Programmes and the corresponding curriculum are responsive to the training needs of job market.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
7	76	12	5	0	100 (90)**

*** Total Positive Response Frequency (TPRF) = 83%

Q8: The learning objectives of training programmes offered meet the requirements of the employers.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
7	69	19	5	0	100 (90)**

*** Total Positive Response Frequency (TPRF) = 76%

Q12: BTI is responsive to the employer feedback and has demonstrated evidence of incorporating them.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
16	44	30	9	1	100 (89)**

*** Total Positive Response Frequency (TPRF) = 60%

Q13: BTI graduates are well trained to have appropriate skills and knowledge to take up industrial placements.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
11	45	33	8	3	100 (89)**

*** Total Positive Response Frequency (TPRF) = 56%

Q24: Organisations have to impart additional training to enable graduates to perform acceptably soon after entering the workplace.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
27	50	17	5	1	100 (90)**

*** Total Positive Response Frequency (TPRF) = 77%

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* Notes:

(*) The row cells in this table and subsequent tables do not always add up to 100, due to rounding off to the nearest integer,

(**) Employer sampling frame = 225; response rate **41 %**

(***) TPRF = Percentage "Strongly Agree" + Percentage "Agree"

(****) Dimension 1- Conceptualisation of Quality Assurance in Higher Education/ Further Education is being tested only by the Literature Review.

Dimension 3: Internal Cultural Dynamics
Specific Questions: 14, 18, and 19

Q14: There is a positive attitude towards quality of all concerned within BTI.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
13	52	29	6	0	100 (90)**

*** Total Positive Response Frequency (TPRF) = 65%

Q18: BTI implements self-assessment of its performance to identify its strengths and weaknesses.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	44	47	1	0	100 (89)**

*** Total Positive Response Frequency (TPRF) = 52%

Q19: BTI has created an organisational culture that is conducive to continuous quality improvement.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
11	44	42	3	0	100 (89)**

*** Total Positive Response Frequency (TPRF) = 55%

Dimension 4: Implementation and Emergent Systems Specific Questions: 9, 10, 15, 16, 17, and 23

Q9: The training programmes are cost effective and make efficient use of personnel and other learning tools.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	53	34	5	0	100 (90)**

*** Total Positive Response Frequency (TPRF) = 61%

Q10: BTI programmes are generally well matched to meet the individual needs of trainees, employers and other users.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
7	58	27	8	0	100 (89)**

*** Total Positive Response Frequency (TPRF) = 65%

Q15: BTI has comprehensive arrangements for quality assurance involving stakeholders.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
6	34	59	1	0	100 (89)**

*** Total Positive Response Frequency (TPRF) = 40%

Q16: Quality Assurance has helped in restructuring and redesigning the programmes, leading to measurable gains in the performance of the trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	34	51	6	0	100 (88)**

*** Total Positive Response Frequency (TPRF) = 43%

Q17: Quality assurance procedures are reviewed continuously with appropriate stakeholders.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
5	20	72	3	0	100 (88)**

*** Total Positive Response Frequency (TPRF) = 25%

Q23: All the BTI processes have built-in mechanism to ensure Quality.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
2	44	51	2	1	100 (89)**

*** Total Positive Response Frequency (TPRF) = 46%

Dimension 5: Management Style
Specific Questions: 11, 20, 21, and 22

Q11: BTI is able to support flexible learning needs with the objective of widening participation.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
6	58	29	7	0	100 (90)**

*** Total Positive Response Frequency (TPRF) = 64%

Q20: BTI's senior management is visibly committed to Quality Assurance.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
12	46	42	0	0	100 (90)**

*** Total Positive Response Frequency (TPRF) = 58%

Q21: BTI's quality objectives and strategies are developed and deployed down through the organisational hierarchy.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
5	34	58	2	1	100 (87)**

*** Total Positive Response Frequency (TPRF) = 39%

Q22: The senior management of BTI initiates actions for identifying and tackling the main quality problems.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
10	42	44	3	1	100 (89)**

*** Total Positive Response Frequency (TPRF) = 52%

Analysis of Staff Survey

Dimension 2: Competitive Environment *
Specific Questions: 6, 14, 15, and 17

Q6: The learning outcomes of training programmes offered meet the requirements of the employers.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
12	61	17	7	3	100 (207)**

*** Total Positive Response Frequency (TPRF) = 73%

Q14: Review of curriculum is based upon regular consultation with the employers and past trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
13	37	33	13	4	100 (205)**

*** Total Positive Response Frequency (TPRF) = 50%

Q15: Industrial feedback on trainees doing on-job-training (OJT) serves as valuable input to the quality assurance system.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
24	45	24	4	3	100 (205)**

*** Total Positive Response Frequency (TPRF) = 69%

Q17: Trainers are appropriately qualified and have up to date knowledge / skills to be effective.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
15	50	20	11	4	100 (206)**

*** Total Positive Response Frequency (TPRF) = 65%

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* Notes:

(*) The row cells in this table and subsequent tables do not always add up to 100, due to rounding off to the nearest integer,

(**) Staff sampling frame = 300; response rate **70 %**

(***) TPRF = Percentage "Strongly Agree" + Percentage "Agree"

(****) Dimension 1- Conceptualisation of Quality Assurance in Higher Education/ Further Education is being tested only by the Literature Review.

Dimension 3: Internal Cultural Dynamics
Specific Questions: 13, 21, 22, 23, 27, 28, and 29

Q13: Trainer's participation in the review and evaluation through the module teams and programme management committees is normally very critical and productive.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
17	42	29	10	2	100 (206)**

*** Total Positive Response Frequency (TPRF) = 59%

Q21: The existing organisational culture is conducive to continuous quality improvement and enables every one to participate.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
10	37	34	14	5	100 (208)**

*** Total Positive Response Frequency (TPRF) = 47%

Q22: BTI has demonstrated its commitment to continuous quality assurance improvement.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
15	51	22	9	3	100 (206)**

*** Total Positive Response Frequency (TPRF) = 66%

Q23: Staff are involved in improving the processes under their control on a continuous basis and take personal responsibility for their own quality assurance.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
16	58	15	8	3	100 (205)**

*** Total Positive Response Frequency (TPRF) = 74%

Q27: BTI quality systems are well understood and supported by all the staff.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
10	33	25	19	13	100 (206)**

*** Total Positive Response Frequency (TPRF) = 43%

Q28: The quality culture at BTI is promoted by the professional working environment.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
13	41	23	16	7	100 (202)**

*** Total Positive Response Frequency (TPRF) = 54%

Q29: The positive attitude towards quality of all involved at BTI is responsible for making BTI a premier training institution.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
22	47	22	5	4	100 (205)**

*** Total Positive Response Frequency (TPRF) = 69%

Dimension 4: Implementation and Emergent Systems
Specific Questions: 7, 8, 10, 11, 20, 24, 25, and 26

Q7: Training programmes designed and delivered are relevant to the job market.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
15	58	18	7	2	100 (207)**

*** Total Positive Response Frequency (TPRF) = 73%

Q8: The training programmes are cost effective and make efficient use of personnel and other learning tools.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
13	54	21	11	1	100 (202)**

*** Total Positive Response Frequency (TPRF) = 67%

Q10: Teaching and learning processes are planned effectively to achieve required standards.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
14	54	17	12	3	100 (207)**

*** Total Positive Response Frequency (TPRF) = 68%

Q11: Appropriate training methods are used to meet the trainees' individual learning needs and the needs of the programmes.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
11	55	22	11	1	100 (206)**

*** Total Positive Response Frequency (TPRF) = 66%

Q20: Appropriately qualified technical and support staff are effectively deployed to support trainers and trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
15	53	18	10	4	100 (206)**

*** Total Positive Response Frequency (TPRF) = 68%

Q24: Staff appraisal and professional development are integral parts of BTI's quality assurance.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
17	44	20	14	5	100 (206)**

*** Total Positive Response Frequency (TPRF) = 61%

Q25: Trainers are vital links in the quality chain within BTI.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
28	47	15	8	2	100 (203)**

*** Total Positive Response Frequency (TPRF) = 75%

Q26: BTI's quality assurance procedures cover every aspect of its functions: training / teaching, assessment and administrative processes.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	44	21	19	7	100 (202)**

*** Total Positive Response Frequency (TPRF) = 53%

Dimension 5: Management Style
Specific Questions: 9, 12, 16, 18, and 19

Q9: Flexible targets are set by the institute for the performance of the individual staff and groups.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	50	20	13	8	100 (202)**

*** Total Positive Response Frequency (TPRF) = 59%

Q12: Specialist equipment and resources are available to support training and learning outcomes.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
18	50	16	13	3	100 (206)**

*** Total Positive Response Frequency (TPRF) = 68%

Q16: The direction given by BTI management facilitates achieving targets and keeps training and learning under constant review.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
15	51	20	10	4	100 (207)**

*** Total Positive Response Frequency (TPRF) = 66%

Q18: Trainers are provided with suitable opportunities for professional development.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
12	51	20	12	5	100 (206)**

*** Total Positive Response Frequency (TPRF) = 63%

Q19: BTI is committed to the development of its employees with the recognition that they are an asset.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
25	41	20	10	4	100 (208)**

*** Total Positive Response Frequency (TPRF) = 66%

Analysis of Trainees Survey

Dimension 2: Competitive Environment *
Specific Questions: 12, 17, 19, 20, 28, and 29

Q12: BTI training process adds a range of values to the trainees before they pass out as graduates.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	50	33	7	1	100 (422)**

*** Total Positive Response Frequency (TPRF) = 59%

Q17: Trainers are appropriately qualified and demonstrate their ability for transferable skills.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
13	48	26	9	4	100 (410)**

*** Total Positive Response Frequency (TPRF) = 61%

Q19: The standard of training programmes offered meets the expectations of the trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
5	38	36	15	6	100 (420)**

*** Total Positive Response Frequency (TPRF) = 43%

Q20: Training programmes at different levels meet the specific requirements of the job market.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
15	46	25	10	4	100 (420)**

*** Total Positive Response Frequency (TPRF) = 61%

Q28: The quality systems at BTI have ensured the programmes to add real values to the trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	35	32	18	7	100 (423)**

*** Total Positive Response Frequency (TPRF) = 43%

Q29: On Job Training (OJT) and Graduate Follow-up give BTI the job market's direct feedback about the extent to which the trainees meet the requirements of the job market.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
16	33	38	8	5	100 (415)**

*** Total Positive Response Frequency (TPRF) = 49%

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* Note:

(*) The row cells in this table and subsequent tables do not always add up to 100, due to rounding off to the nearest integer,

(**) Trainees sampling frame = 500; response rate **87 %**

(***) TPRF = Percentage "Strongly Agree" + Percentage "Agree"

(****) Dimension 1- Conceptualisation of Quality Assurance in Higher Education/ Further Education is being tested only by the Literature Review.

Dimension 3: Internal Cultural Dynamics
Specific Questions: 15, 16, 18, 23, and 27

Q15: Independent / self-learning by trainees is helped by open access to appropriate learning resources and materials.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	37	32	15	8	100 (422)**

*** Total Positive Response Frequency (TPRF) = 45%

Q16: Trainee – Trainer interaction is encouraged in the learning process.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
13	48	25	11	3	100 (419)**

*** Total Positive Response Frequency (TPRF) = 61%

Q18: Trainees are given realistic feedback about their achievements at appropriate points in the progress of the modules.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	38	27	20	6	100 (422)**

*** Total Positive Response Frequency (TPRF) = 47%

Q23: Trainees understand the purpose of the assessments and what is expected of them.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
10	38	26	18	8	100 (424)**

*** Total Positive Response Frequency (TPRF) = 48%

Q27: Trainees and graduate trainees contribute to the review and evaluation of the different modules and programmes.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
7	31	40	16	6	100 (421)**

*** Total Positive Response Frequency (TPRF) = 38%

Dimension 4: Implementation and Emergent Systems
Specific Questions: 7, 8, 9, 10, 13, 14, 21, 22, 24, and 25

Q7: The guidance given by BTI before and on entry helps the trainees to choose the right programme.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	37	20	25	10	100 (422)**

*** Total Positive Response Frequency (TPRF) = 45%

Q8: Induction programmes enable the trainees to understand BTI quality system.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
6	43	29	16	6	100 (418)**

*** Total Positive Response Frequency (TPRF) = 49%

Q9: Trainees receive effective learning support to meet their needs.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	45	29	14	3	100 (423)**

*** Total Positive Response Frequency (TPRF) = 54%

Q10: Appropriate training methods are used to meet the trainees' learning needs in terms of knowledge, skills and attitude.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
11	53	22	10	4	100 (423)**

*** Total Positive Response Frequency (TPRF) = 64%

Q13: Delivery of training is well planned and helps to achieve the programme/module outcomes.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	39	30	18	5	100 (426)**

*** Total Positive Response Frequency (TPRF) = 47%

Q14: Support learning materials prepared by BTI are relevant and of high quality.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
10	30	28	24	8	100 (426)**

*** Total Positive Response Frequency (TPRF) = 40%

Q21: The training programmes are cost effective and make efficient use of personnel and other learning tools.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
8	35	36	15	6	100 (425)**

*** Total Positive Response Frequency (TPRF) = 43%

Q22: The aims and objectives of the programmes / modules are clear to the trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	44	24	16	7	100 (427)**

*** Total Positive Response Frequency (TPRF) = 53%

Q24: BTI assessment system is consistent with the learning objectives of the programmes.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
9	41	29	16	5	100 (422)**

*** Total Positive Response Frequency (TPRF) = 50%

Q25: Assessments are realistic, and differentiate the ability and skills of the trainees.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
6	42	29	16	6	100 (422)**

*** Total Positive Response Frequency (TPRF) = 48%

Dimension 5: Management Style
Specific Questions: 11, 26

Q11: Specialist equipment and resources are available to support training and learning.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
10	35	23	23	10	100 (428)**

*** Total Positive Response Frequency (TPRF) = 45%

Q26: BTI sets realistic targets for the performance of individuals and groups at various levels.

Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Total % (N)
7	39	36	11	7	100 (426)**

*** Total Positive Response Frequency (TPRF) = 46%

APPENDIX D FOCUS GROUP INTERVIEWS

D1- Focus Group Interviews Themes

D2- Introduction to Participants

D3- Schedule and Membership Composition

D4- Focus Group Interviews Participants Sheet

Focus Group Interviews Themes

Group: A / B / C / D / E / F / G / H

Dimensions	Research Question	Detailed Research Questions	Sub-Themes
1 Conceptualisation and Nature of QA in HE and FE	**Q1.** How have the theories of Quality Assurance been operationalised and implemented in HE and FE?	1.1) Has the implementation of the quality assurance processes been successful in improving the institute performance? Were the outcomes influenced by the quality assurance processes implementation approach used at the institute? 1.2) (a) How have, as seen in the review of literature, the theories of quality assurance, particularly in the area of HE / FE, been operationalised and tested? (b) If the implementation plans of quality assurance, particularly in the area of HE / FE did not always yield the expected results, what have been the explanations? How were the theories of quality assurance amended? 1.3) What kinds of designs of organisational change have the implementers of quality assurance, particularly in HE and FE adopted? What have been the results? 1.4) What have, as seen in the review of literature, been the different models of implementation, including the roles of the drivers of quality assurance and other members of the organisation in HE / FE? Do these models yield to any classification?	This Dimension is being tested only by the Literature Review.

Theme 2: The importance of changing economic environment on Further Education and Vocational Training and the quality actions taken by the BTI.

Dimensions	Research Question	Detailed Research Questions	Sub-Themes
2 Competitive Environment	**Q2.** What have been the Interactions of BTI with the employers in regard to implementation of the quality assurance systems in a competitive market environment?	2.1) What are the successive quality assurance action plans conceptualised and implemented by the institute to ensure quality in a competitive market oriented environment? 2.2) What have been the opinions and attitudes of the employers, and the nature of their interaction with BTI in regard to implementation of the quality assurance processes? 2.3) What are the demographic and economic factors that led the institutions of Further Education and Vocational Training to make decision to implement quality assurance processes?	- Importance of standardising and representing outcomes from training to assure value added, - Alignment of Q/A organisational practice to International Standards, - Transparency of Q/A processes to internal and external inspection, - Inclusion of the views of the employers in the Q/A processes.

Theme 3: Involvement and contributions of the various groups to development of Quality Assurance.

Dimensions	Research Question	Detailed Research Questions	Sub-Themes
3 Internal Cultural Dynamics	**Q3.** What is the nature of involvement of the different groups in the development, implementation and evaluation of the successive quality assurance action plans?	3.1) Which were the groups involved in the development of the action plans? What was the nature of their involvement? 3.2) How were further action plans formulated and evolved? How were the plans implemented and their impact assessed and evaluated? 3.3) What are the reactions of the trainees, to and their involvement in the BTI quality assurance processes? 3.4) What have been the opinion and attitude of the staff, and the nature of their interaction with the management in regard to the quality assurance processes? 3.5) How have the staff and management been promoting the culture of quality at the BTI?	- Q/A viewed as a developmental process, - Q/A viewed as individual and group responsibilities, - Q/A is responsibility for the organisation to manage, - Q/A needs to be documented and made explicit through interactions process, - Feedback and improvement implicit in organisational procedures, - Perception of the staff and management in relation to Q/A.

Theme 4: Dynamics of re-orienting the BTI system in terms of Quality Assurance.

Dimensions	Research Question	Detailed Research Questions	Sub-Themes
4 Implementation Performance / Emergent Systems and Organisational Structure	**Q4.** How successful has the implementation of the BTI quality assurance systems been and what is the nature of the emerging model of quality assurance?	4.1) Are their any barriers to the development of the BTI quality assurance systems processes? 4.2) What are the distinguishing features of the BTI quality assurance systems processes? 4.3) What is the nature of the emerging model on managing quality assurance at the BTI, which can be adapted elsewhere?	**Implementation Performance** - Top Down- Bottom Up / Side way approach, - Open processes, - Sensitive to feedback from stakeholders, - Sensitive to developmental needs, - Evidence of actions being implemented, - Consultative / Involving / Directive. **Emergent Systems** - Q/A seen as key activities, - Q/A system depend upon involvement, - Clarity of methods of defining quality system, - Clarity and knowledge of review process, - Evidence of actions linked to review, - Other external motivation, - Balance required for managing the emergent system.

Theme 5: Impact of quality assurance on the role of the employees.

Dimensions	Research Question	Detailed Research Questions	Sub-Themes
5 Management Style	**Q5.** How has the BTI managerial approach evolved, in terms of managing quality assurance systems and processes?	5.1) Which techniques of quality assurance processes used in the business world to increase productivity, can be translated successfully to improve the management and operation of institutions of Further Education and Vocational Training? 5.2) What are the critical success factors for implementing quality assurance processes in Further Education and Vocational Training? 5.3) Has the institute adopted a managerialism approach in managing and improving the quality assurance processes?	- Time spent / engaged on quality activities, - Support given to enable quality activities / enhancement, - Involvement of staff in organisational improvements, - Staff empowerment, decision making and participation, - Set clear expectation of standard, - Evidence of actions linked to review, - Feedback and review as important parts for team meeting, - Documentation of Q/A system, - Attitude and awareness of Q/A.

Focus Group Interviews: Introduction to Participants

Λ

Group: □ A □ B □ C □ D □ E □ F □ G □ H

Day / Date: Tuesday, 24th April, 2001 **Time:** 11:30 – 01:30 **Venue:** 2.103

Background

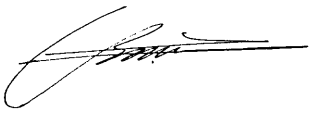
We have undertaken a research project, **"Developing a Quality Assurance Model in Further Education Institutions and Vocational Training sectors: *"A Case Study of the Bahrain Training Institute"*.** The following have been identified as the main dimensions of managing quality assurance. The themes of these dimensions have been given. Focus groups interviews / discussions have been recognised as one the effective methods of generating relevant qualitative data. You will be asked a series of questions pertaining to the themes around which the discussions can take place:

Dimensions	Theme
Competitive Environment	The importance of changing economic environment on Further Education and Vocational Training, and the quality actions taken by the BTI.
Internal Cultural Dynamics	Involvement and contributions of the various groups to development of Quality Assurance.
Implementation Performance / Emergent Systems and Organisational Structure	Dynamics of re-orienting the BTI system in terms of Quality Assurance.
Management Style	Impact of quality assurance on the role of the employees.

The moderator will tape record the interview for the purposes of transcription and analysis. Please note that all information (field notes, tape transcriptions) will be identifiable by code only and will be kept strictly confidential. Your identity and that of your department / unit will be held confidential and not identified in the final report. Transcription and field notes will only be identified only by code.

If you wish to have a summary of the findings, I would be happy to send you upon completion of my research. This interview will is likely to take about 1.5 - 2 hours.

Your participation and interactions, which will generate useful data, will help to formulate further action plans.



Basim AL-Baharna

Focus Group Interviews Schedule and Membership Composition

Group	No. of Participants	Participants Designation	Date / Time
A	6 Training Staff	2 Instructors and 4 Senior Instructors	Monday 26 February 09:30-11:30
B	6 Training Staff	2 Instructors and 4 Senior Instructors	Monday 12 March 09:30-11:30
C	7 Training Staff	2 Instructors Senior Instructor Program Co-ordinator Assistant Head of Department Head of Department Division Assistant Director	Monday 19 March 09:30-11:30
D	7 Training Staff	2 Instructors 2 Senior Instructors Program Co-ordinator Assistant Head of Department Head of Department	Sunday 25 March 10:30-12:30
E	7 Training Staff	2 Instructors 3 Senior Instructors Program Co-ordinator Assistant Head of Department	Sunday 1 April 12:30-02:30
F	8 Training Staff	Instructor Senior Instructor Program Co-ordinator Assistant Head of Department 3 Heads of Department Division Assistant Director	Monday 2 April 11:30-01:30
G	6 Support Staff (Trainee Support and General Support)	2 Administrators 2 Head of Sections 1 Manager 1 Senior Manager	Monday 23 April 11:30-01:30
H	10 Support Staff (Trainee Support and General Support)	3 Administrators 1 Counsellor 2 Head of Sections 3 Managers 1 Senior Manager	Tuesday 24 April 11:30-01:30

Venue: Building 2, Room 2.103 at Bahrain Training Institute

To: Focus Group Interviews Participants
Participant 1
Participant 2
Participant 3
Participant 4
Participant 5
Participant 6
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>

From: Basim AL-Baharna

CC: Moderator

SUB: Your Participation in the Focus Group Interviews held on **Monday, 2nd April 2001.**

Many thanks for your participation in the Focus Group Interviews / Discussions, pertaining to the research project, **"Developing a Quality Assurance Model in Further Education Institutions and Vocational Training sectors: *"A Case Study of the Bahrain Training Institute"***. Your views and responses were characterised by refreshing frankness, combined with a desire to strengthen the quality systems in the Institute. You did full justice to each one of the themes.

Your comments on some of the practices that have evolved in BTI showed positive and constructive spirit.

We will be glad to share with you a summary of the findings, when the transcripts are analysed.

APPENDIX E DATA ANALYSIS TRIANGULATION

E1- Summary of Data Analysis Triangulation

Dimension 1: Conceptualisation and Nature of Quality Assurance in Higher Education / Further Education

Dimensions / Research Questions	Detailed Research Questions	Research Method		
		Action Research Group Issues	Focus Group Interviews Sub-Themes	Questionnaires
Dimension 1 **Conceptualisation and Nature of QA in HE and FE** **Question 1** **Q1.** How have the theories of Quality Assurance been operationalised and implemented in HE and FE?	1.1) Has the implementation of the quality assurance processes been successful in improving the institute performance? Were the outcomes influenced by the quality assurance processes implementation approach used at the institute? 1.2) (a) How have, as seen in the review of literature, the theories of quality assurance, particularly in the area of HE / FE, been operationalised and tested? (b) If the implementation plans of quality assurance, particularly in the area of HE / FE did not always yield the expected results, what have been the explanations? How were the theories of quality assurance amended? 1.3) What kinds of designs of organisational change have the implementers of quality assurance, particularly in HE and FE adopted? What have been the results? 1.4) What have, as seen in the review of literature, been the different models of implementation, including the roles of the drivers of quality assurance and other members of the organisation in HE / FE? Do these models yield to any classification?	1) Defining quality in the context of HE and FE, 2) Envisaging appropriate measures of action, and 3) Proposing a model of quality management suitable for further education and training sectors. Note: This Dimension is being tested only by the Literature Review.	Note: This Dimension is being tested only by the Literature Review.	Note: This Dimension is being tested only by the Literature Review.

Dimension 2: Competitive Environment

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Dimensions / Research Questions	Detailed Research Questions	Research Method				
		Action Research Group Issues	Focus Group Interviews Sub-Themes	Questionnaires**		
				Employer	Staff	Trainee
Dimension 2 ***Competitive Environment*** **Question 2** **Q2.** What have been the Interactions of BTI with the Employers in regard to Implementation of the quality Assurance systems in a Competitive market environment?	2.1) What are the successive quality assurance action plans conceptualised and implemented by the institute to ensure quality in a competitive market oriented environment? 2.2) What have been the opinions and attitudes of the employers, and the nature of their interaction with BTI in regard to implementation of the quality assurance processes? 2.3) What are the demographic and economic factors that led the institutions of Further Education and Vocational Training to make decision to implement quality assurance processes?	1) Main driving forces behind the adoption of the quality measures, 2) Transparency of quality assurance processes, and 3) Opinions and attitudes of the major stakeholders.	- Importance of standardising and representing outcomes from training to assure value added, - Alignment of Q/A organisational practice to International Standards, - Transparency of Q/A processes to internal and external inspection, and - Inclusion of the views of the employers in the Q/A processes.	7,8,12,13, 24	6,14, 15,17	12,17 19,20 28,29

Dimension 3: Internal Cultural Dynamics

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Dimensions / Research Questions	Detailed Research Questions	Research Method				
		Action Research Group Issues	Focus Group Interviews Sub-Themes	Questionnaires**		
				Employer	Staff	Trainee
Dimension 3 ***Internal Cultural Dynamics*** **Question 3** **Q3.** What is the nature of Involvement of the different Groups in the development, Implementation and Evaluation of the Successive quality Assurance action plans?	3.1) Which were the groups involved in the development of the action plans? What was the nature of their involvement? 3.2) How were further action plans formulated and evolved? How were the plans implemented and their impact assessed and evaluated? 3.3) What are the reactions of the trainees, to and their involvement in the BTI quality assurance processes? 3.4) What have been the opinion and attitude of the staff, and the nature of their interaction with the management in regard to the quality assurance processes? 3.5) How have the staff and management been promoting the culture of quality at the BTI?	1) Involving the critical groups in the action schemes, and 2) Ascertaining the values and perceptions of stakeholders, and 3) Evaluating qualitative and quantitative indicators of quality system at each cycle of action.	- Q/A viewed as a developmental process, - Q/A viewed as individual and group responsibilities, - Q/A is the responsibility of the organisation to manage, - Q/A needs to be documented and made explicit through interactions process, - Feedback and improvement implicit in organisational procedures, and - Perception of the staff and management in relation to Q/A.	14,18,19	13,21 22, 23,27 28, 29	15, 16, 18 23, 27

Dimension 4: Implementation Performance / Emergent Systems and Organisational Structure Continued...

Dimensions / Research Questions	Detailed Research Questions	Research Method				
		Action Research Group Issues	Focus Group Interviews Sub-Themes	Questionnaires**		
				Employer	Staff	Trainee
Dimension 4 ***Implementation Performance /*** ***Emergent Systems and Organisational Structure*** **Question 4** **Q4.** How successful has The implementation of the BTI quality assurance Systems been and what is the nature of the merging model of quality assurance?	4.1) Are their any barriers to the development of the BTI quality assurance systems processes? 4.2) What are the distinguishing features of the BTI quality assurance systems processes? 4.3) What is the nature of the emerging model on managing quality assurance at the BTI, which can be adapted elsewhere?	1) Identifying a range of quality devices, 2) Reviewing and revising the progress and plans of quality management and improvement, and 3) Implementing, monitoring and evaluating the impact of the quality systems.	**Implementation Performance** -Top Down- Bottom Up or Side way approach, -Open system and processes, -Sensitive to feedback from stakeholders, -Sensitive to developmental needs, -Evidence of actions being implemented, and - Consultative and Involving Staff or directive approach. **Emergent Systems** - Q/A seen as key activities, - Q/A system depend upon involvement/ accountability, - Clarity of methods of defining quality system, - Clarity and knowledge of review process, - Evidence of actions linked to review, and - Balance required for managing the emergent system.	9,10,15, 16,17,23	7,8,10, 11,20,24, 25,26	7,8,9,10 13,14,21 22,24,25

Dimension 5: Management Style

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Dimensions / Research Questions	Detailed Research Questions	Research Method				
		Action Research Group Issues	Focus Group Interviews Sub-Themes	Questionnaires**		
				Employer	Staff	Trainee
Dimension 5 ***Management Style*** **Question 5** **Q5.** How has the BTI managerial approach evolved, in terms of managing quality assurance systems and processes?	5.1) Which techniques of quality assurance processes used in the business world to increase productivity can be translated successfully to improve the management and operation of institutions of Further Education and Vocational Training? 5.2) What are the critical success factors for implementing quality assurance processes in Further Education and Vocational Training? 5.3) Has the institute adopted a managerialism approach in managing and improving the quality assurance processes?	1) Overall strategic direction to quality assurance and total quality, 2) Reviewing the quality systems mechanism to date, and 3) Developing and sustaining an appropriate ethos toward quality at all levels.	- Time spent and engaged on quality activities, - Support given to enhance quality activities, - Involvement of staff in organisational improvements, - Staff empowerment and participation in decision making, - Set clear expectation of standard, - Evidence of actions linked to review and evaluation, - Feedback and review are important parts of team meetings, - Documentation of Q/A system, - Attitude and awareness of Q/A.	11,20, 21 22	9, 12, 16, 18, 19	11, 26