# TOTAL QUALITY MANAGEMENT IN SCHOOLS

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# A RESEARCH PROJECT PAPER SUBMITTED IN PARTIAL FULLFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF MANAGEMENT

# MANAGEMENT CENTER INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA



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#### **ABSTRACT**

This study is an exploratory investigation on the practice of TQM in government secondary schools in Perlis. The objective of this study is to examine components of TQM being practiced in schools and their impact on performance. This survey was carried out on 50 school administrators and 93 teachers in 19 secondary schools. Three hypotheses were tested.

The finding reveal that the schools were practicing all components of TOM namely, setting goals, continuous improvement, customer focus, total involvement. There was a significant commitment and measurement. difference in terms of perception between school administrators and teachers on the impacts of TQM on school performance. The finding also indicated that there was a high positive correlation between the extent to which the components of TOM were being practiced and the positive impacts on school performance.

#### APPROVAL PAGE

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PRACTICES IN SCHOOLS

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I hereby declare that this project paper is the result of my own investigation, except where otherwise stated. Other sources are acknowledged by reference notes giving explicit references and a bibliography is appended.

Date: 24<sup>th</sup>.December 1998

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#### **DEDICATIONS**

To my mother, Hajjah Zabedah,
who really knows the importance of knowledge,
To my father,
who taught me how to appreciate life
To my wife,
for the love, motivation and understanding
and
To my lovely Nina and Mira,
for the inspiration they offered me.

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#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.0.0 Introduction

The purpose of this study is to investigate TQM implementation and its impact on performance in government secondary schools in Perlis.

The idea of TQM is not something new especially in industries and businesses organizations. In the Malaysian Public Service, TQM was first introduced officially through The Public Administration Circular No.2 Year 1992 (*Pekelililing Perkhidmatan Awam (PKPA) Bilangan 1*, 1992). A few other circulars regarding the implementation of certain practices related to quality service have been distributed since 1991.

Malaysian government was really serious to implement TQM. One of the steps taken was introducing ISO 9000 into the public service. Malaysia planned to be the first country that will adopt ISO 9000 in its entire public service. (Ahmad Sarji, 1995).

With the vision of Ministry of Education is to make Malaysia as a Center of Learning and as a Center of Educational Excellence by the year 2020, it is vital that concrete steps be taken in order to produce quality education for every one. Thus, education institutions such as schools must have quality management.

#### 1.1.0 Background of the Study

The idea of adopting TQM in Malaysian education was formally announced on the 9<sup>th</sup> oh January 1996 by the Minister of Education even though the first phase of its implementation started from July 1995 to December 1996. The implementation of TQM in education was scheduled to be fully adopted by the year 2000 as shown in Table 1.1.0

Table 1.1.0: TQM Implementation in Ministry of Education

Phase	Duration	Activities
I	July 1995- December 1996	<ul> <li>Development of the system</li> <li>Launching of training system</li> <li>Launching of selected main TQM programs</li> </ul>
II	January 1997 – December 1998	<ul> <li>Dissemination of TQM information</li> <li>Introduction of TQM tools</li> <li>Implementations in selected states and districts</li> </ul>
III	January 1999 – December 2000	<ul> <li>Comprehensive program         <ul> <li>and service implementation</li> <li>at all levels of the ministry</li> </ul> </li> <li>Benchmarking for continuous quality program</li> </ul>

The state of Perlis, has been selected to be the first to implement TQM and ISO 9000. Perlis was chosen because of being small is practical in term of

logistic. It is easy to meet, to conduct training and provide facilities (Ahmad Marican, 1997). Besides that, it is near the consultant, Universiti Utara Malaysia (UUM). Ahmad Marican, the former Director of Perlis Education Department also claimed that the other reason is that Perlis is having a good leadership and management whereby it has a good team works, synergy, and is very receptive to innovation and change.

The chronological events in implementing TQM and ISO 9000 in Perlis is shown in Table 1.2.2 (Ahmad Marican, 1997).

Table 1.1.2: Chronological Implementation of TQM/ISO 9000 in Perlis

Date	Events	
Sept.14 – 17, 1995	Orientation Course for headmasters held in Langkawi.	
Sep. 28, 1995	Secretary General of Ministry of education proposed Perlis to be the first state to implement and achieve ISO 9000.	
Sept.29 – Oct.1995	Officer from Perlis Education Department attended a seminar on TQM at Institute Aminudin Baki.	
Oct.20, 1995	Director General of Education gave his blessing to Perlis Education Department to proceed with the TQM and ISO 9000 project in the state.	
Jan. 5, 1996	Meeting with consultant from UUM on the implementation process in the state.	
Jan.12, 1996	Formation of the TQM Council headed by Director of education with all Sector and Unit Heads as its members (unanimously agreed in the weekly meeting)	

Jan.9 – 19, 1996	2 secondary school principals attended the TQM/ISO 9000 course at IAB
Mac 20 – 23, 1996	Orientation course for all senior officers from education department, school principals and senior assistant of Perlis secondary schools.
April 8, 1996	Assessment on the quality status for teachers of secondary school.
•	All school in the state was asked to form the TQM Council and the list of committee members must be submitted to the state education department.
April 10 – July 6, 1996	Training of 141 teachers to become Special Trainer Facilitators (STF) from the entire primary and secondary school in the state.
May 10, 1996	Meeting between consultant and STF to determine the areas to be documented.
July 9 and 20, 1996	Two workshops on documentation of curriculum area. (This documentation process were to be completed by July 31, 1996 and sent to the state education department by August 15, 1996).
July 29 – 31, 1996	ISO 9000 documentation workshop for 75 STF
August 29 – 30, 1996	ISO 9000 second documentation workshop
Sept.16 and 17, 1996	Soft launch by the Perlis Director of Education.
Nov.19, 1996	Launching of ISO 9000 for national level by Minister of education
Sept.17, 1996 – June 26,1997	Auditing process
August 12, 1997	ISO 9000 certification award by SIRIM to the two schools in Perlis

#### 1.2.0 Statement of the Problems

The Ministry of Education has put a target that by the year 2000, all levels including schools will go for ISO 9000. Perlis is one of the states that had made a good reaction. As early as 1995 they had made the first step of the journey by sending their school headmasters to attend the orientation course on TQM. Since then, schools were slowly adopting TQM.

In this work we investigate the extent to which TQM is implemented and the impact of TQM implementation on school performance

#### 1.3.0 Objective of the Study

Among the objectives of this study are firstly to examine the components of TQM the schools are practicing. Secondly, to study the impact of practicing TQM on the school performance. Thirdly to study the correlation between the extent of practicing TQM and impact of school performance.

#### 1.4.0 Research Question.

- I. What are the components of TQM that are being practiced by the schools?
- II. What are the impacts of TQM implementation on school performance?

III. Is there a correlation between the extent of implementing TQM components and the impact on schools performance?

#### 1.5.0 Hypotheses

Based on the general knowledge and the literature reviewed the following hypotheses will be tested:

- H<sub>1</sub> All schools are practicing the five components of TQM
- H<sub>2</sub> There is no significant different of perception between school administrators and the teachers on the impacts of TQM on school performance
- H<sub>3</sub> There is no significant correlation between extent of implementing TQM components and school performance

#### 1.6.0 Definition of Term

For this study, the following definitions will be used.

#### Total Quality Management (TQM)

Total Quality Management is defined as continually satisfying agreed customer requirements at lowest cost through harnessing everyone commitment. (Burton and Frankeiss, 1994).

#### **Practices**

The normal ways things being done.

#### Components of TQM

The components of TQM practices in this study were based on the pillars of quality for TQM schools namely customer focus, total involvement, measurement, and continuos improvement (Arcaro, 1995) in addition to cooperation. Different components might be determined after the factor analysis

#### **School**

School in this study refers to all the government secondary schools in Perlis

## 1.7.0 Organization of the Project Paper

Basically this study is organized into five chapters. Chapter One presents an outline of the introduction of the study, the background of the study, the statement of problems, the objective of the study, the research question, the statement of hypotheses, and the definition of terms.

Chapter Two is on the related literature review. It comprises of definition of quality and TQM, the historical background and the philosophy of TQM, TQM in education, and TQM and performance of educational Institution.

In Chapter Three, research methodology was discussed regarding the collection and analyzing of the data. Among the sub-topics of this chapter are the introduction, sample, research instrument, data collection, data analysis, and reliability testing of the instrument and analysis of mean scores.

Chapter Four briefly explains the results of the data collection and analysis. It also reports the demographic characteristics of the respondents and the results of hypotheses testing.

The last chapter of this project paper discusses the major findings of the study, and its implications for practitioners and academicians.

#### CHAPTER TWO

#### REVIEW OF LITERATURE

#### 2.0.0 Introduction

This chapter is devoted to the review of related literature on the development of Total Quality Management (TQM) and its impact on the organization as a whole.

This will include the history of TQM in industries and its applications in education.

The first part of this chapter briefly discusses the philosophy of TQM. Besides that, this part will also discuss history of TQM in industries and how it had improved the organization.

The second part discusses how TQM is being translated into education. In this part, we will see what are the adaptations of TQM practices in industries that are similar or related to education.

The last part of this chapter's discussion will focus on the impacts as well as the problems of practicing TQM in education.

#### 2.1.1 Definition of Quality

According to Mukhtar (in Abdul Hassan and Khaliq, 1996) the evolution of the quality concept has gone through 3 stages. The first stage emphasized on quality control. The dimensions of this paradigm were inspection and measurement of results. The second stage was quality assurance. The dimensions of this paradigm were statistical analysis, which focuses on problem definition, and process improvement. The third stage is TQM, or sometimes known as continuous improvement. The dimensions that define the paradigm of TQM have primarily employee empowerment, team accountability, customer-supplier focus, and speed.

There are various ways in which quality can be defined depending on the context in which it was used. In other words quality might means different things to different people at different situation and time. According to Cuttance (1995), quality can be defined according to the intrinsic values associated with the service or product. He also suggested that quality could be defined as the meeting of customer requirements.

Cuttance definition is concurrent with Murgatroyd (1991) definitions.

Mourtgroyd gave three definitions of quality as stated below:

- Q1. Quality is defined in terms of some absolute standard and evaluations are based on the application of these standards to the situations experiences across a variety of organizations, irrespective of their strategy of differentiated services.
- Q2. Quality is defined in terms of the objectives set for a specific program or process in a specific location at a specific time.
- Q3. Quality is defined as 'fitness for use' as attested by end-users on the basis of their direct experience.

In the Malaysian context, Industrial Research Institute of Malaysia (SIRIM) is the body that certified the quality of the product of Malaysian industry. They (SIRIM, 1994) defines quality as:

The totality of features and characteristics of product or service that bears on its ability to satisfy stated or implied needs.

Most of the definitions seem to be slippery and depend on the 'customers/end users' who will definitely have various perceptions. Since organization existence is much dependable on customer, is it internal or external, so it is important to understand what quality means to them so that we can serve them better.

Where as quality in the quality management context, Rhode (in Berry, 1996) equated it with 'appropriateness to purpose', the ability to consistently meet or exceed perceived customer needs and organizational capacity for continuous improvement of process and systems (Berry, 1996).

#### 2.1.2 Definition of Total Quality Management

Total Quality Management (TQM) has been well known approach by organizations that are striving in making quality as their culture for doing business. This approach seems to be working very well in the private sector. It was also claimed that TQM is applicable to the public sector.

Like in case of quality, there are different writers have adopted various definitions of TQM. Oakland as quoted by Berry (1996) defines TQM in the following way:

TQM is an approach to improving the effectiveness and flexibility of business as a whole. It is essentially a way of organizing and involving the whole organization; every department, every activity, every single person at every level. Within this definition it is obvious that TQM is applicable to all types of organizations be they product based or service type businesses. This definition also implies that TQM requires total involvement of people that have direct or indirect contact within and outside the organization beside the concern on the system and culture of the organization.

Another definition considered TQM as a philosophy of organizational culture change which, through employee participation and co-operation, focuses on the satisfaction of customer expectations (Sallis, 1993).

In the context of education, according to Harris (in Kwan, 1996) there are three generic approaches to TQM. The first approach has customer focus, where the idea of service to students is fostered through staff training and development. The second has a staff focus, and is concerned with value and enhance the contribution of all members of staff to the effectiveness of the school. The third approach takes a service agreement stance, and seeks to ensure conformity to specification at certain key measurable points of educational process.

In summary, TQM is continually satisfying agreed customer requirements at lowest cost through harnessing everyone's commitment (Burton and Franckeiss, 1994).

# 2.2.0 The Historical Background and the Philosophy of Total Quality Management

The end of Second World War left the United States not only as the world's military leader, but as economic leader as well. During this time quantity, not quality became the operational philosophy. If the customer didn't like the product, he didn't have to buy it. At that time United States was able to out produce and outsell their global competitors, because there weren't any (Schargel, 1994).

Between 1945 and 1949 Japanese products were considered to be of inferior quality and poorly made, until in 1949 Deming introduce TQM in industries' management (Sharrgel,1994). By 1960, the Japanese became the world's largest ship builders. In the 1970's United States experienced the erosion and ultimately the loss in industries like radio, television, and watches. On the other hand Japanese became pre-eminent in automobiles, steel, textiles, television and watches. One of the factors that Japanese can outran United State is the fact that commitment to TQM has become a part of their culture (Sharrgel,1994).

As recently as the 1970's, managers and customers in Europe and the United States of America still put their emphasis on the simple goals of efficiency and cost reduction. Quality was considered an expandable ideal that could be sacrificed to the 'need' to produce and sell goods cheaply (Born, 1994). Only in the 1980's a number of American company became very concerned about TQM. In 1982, Xerox duplicated the Japanese emphasis on quality manufacturing and service when she experienced the lost 50% of its market share in a product she had invented, and their initiative proved to be successful. Nowadays, in the United States of America, the success of implementing TOM in established or reestablished firms had been