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ABSTRACT

This document consists largely of paper versions of the transparencies used by the author to give his conference paper on Total Quality Management (TQM) in the college and university setting. An introduction lists a series of definitional phrases, a list of what TQM is not, and 11 fundamental principles describing what TQM is. The three major "gurus" of TQM are described, followed by "Dr. W. Edwards Deming's 14 Points" (listing the benefits of TQM), 7 frequently found errors of management and organizational climate, and 14 steps of a quality improvement program. A section on applications for higher education notes institutions implementing the strategy. A chronology lists events in a University of Saint Thomas application of TQM. A concluding section lists structural, political, symbolic, and human resource frames for considering TQM. Also offered are five key management questions. Appended is a TQM bibliography of 45 items published from 1979 to 1992. (JB)

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# TOTAL QUALITY MANAGEMENT (TQM) IN HIGHER EDUCATION

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## OUTLINE

- I. INTRODUCTION
- II. FUNDAMENTALS
- III. EXERCISE
- IV. APPLICATIONS IN HIGHER EDUCATION
- V. UST JOURNEY
- VI. CONCLUSIONS AND RECOMMENDATIONS
- VII. BIBLIOGRAPHY

## DEFINITION

- \* A management science that is
- \* Customer satisfaction driven through
- \* Statistical measurement of customer needs.
- \* Once needs defined, internal orientation to
- \* Eliminate hassles and barriers by
- \* Continously improving systems and procedures to
- \* Reduce the root cause of error and inspection through
- \* The use of statistical tools.
- \* TQM empowers employees to
- \* Work together to improve work conditions by
- \* Improving systems thereby
- \* Reducing error causing
- \* Improved customer satisfaction producing
- \* Capital market and societal improvement.

## TQM IS NOT:

A FAD

COST CONTAINMENT

PRODUCTIVITY STRATEGY

A PANACEA

MASS RIF

HOLY GRAIL (RELIGION)

SINGLE APPROACH

TELLING (CHECKING, INSPECTING)

A PROGRAM

STATISTICAL QUALITY CONTROL

**TQM IS:**

**A MANAGEMENT SCIENCE**

**A WAY OF WORKING**

**CUSTOMER DRIVEN**

**PARTICIPATIVE, EMPOWERING, RESPECTFUL**

**REQUIRES PLANNING AND IMPLEMENTATION  
OF BREAK THROUGH PROCESSES**

**CONTINUOUS IMPROVEMENT**

**BASED ON FACT (STATISTICS)**

**SIMPLIFICATION / ELIMINATION  
OF HASSLES & BARRIERS**

**DEFECT - FREE**

**BOTTOM - UP AND TOP - DOWN**

**SELF INSPECTION AND MOTIVATION**

THE GURUS

DEMING

CROSBY

JURAN

## Dr. W. Edwards Deming's 14 Points

1. Create constancy of purpose for improvement of product and service.
2. Adopt the new philosophy.
3. Cease dependence on mass inspection.
4. End the practice of awarding business on price tag alone.
5. Improve constantly and forever the system of production and service.
6. Institute training.
7. Institute leadership.
8. Drive out fear.
9. Break down barriers between staff areas.
10. Eliminate slogans, exhortations, and targets for the workforce.
11. Eliminate numerical quotas.
12. Remove barriers of pride of workmanship.
13. Institute a vigorous program of education and retraining.
14. Take action to accomplish the transformation.

# The Seven Deadly Diseases

1. *Lack of constancy of purpose.*

A company that is without constancy of purpose has no long-range plans for staying in business. Management is insecure, and so are employees.

2. *Emphasis on short-term profits.*

Looking to increase the quarterly dividend undermines quality and productivity.

3. *Evaluation by performance, merit rating, or annual review of performance.*

The effects of these are devastating—teamwork is destroyed, rivalry is nurtured. Performance ratings build fear, and leave people bitter, despondent, and beaten. They also encourage mobility of management.

4. *Mobility of management.*

Job-hopping managers never understand the companies that they work for and are never there long enough to follow through on long-term changes that are necessary for quality and productivity.

5. *Running a company on visible figures alone.*

The most important figures are unknown and unknowable—the multiplier effect of a happy customer, for example.

DISEASES 6 AND 7 ARE PERTINENT ONLY TO THE UNITED STATES:

6. *Excessive medical costs.*

7. *Excessive costs of warranty, fueled by lawyers that work on contingency fee.*

...

# The Quality Improvement Program:

## Phil Crosby's Fourteen Steps

- Step One:** Management Commitment  
**Purpose:** To make it clear where management stands on quality.
- Step Two:** The Quality Improvement Team  
**Purpose:** To run the quality improvement program.
- Step Three:** Quality Measurement  
**Purpose:** To provide a display of current and potential nonconformance problems in a manner that permits objective evaluation and correction action.
- Step Four:** The Cost of Quality  
**Purpose:** To define the ingredients of the cost of quality, and explain its use as a management tool.
- Step Five:** Quality Awareness  
**Purpose:** To provide a method of raising the personal concern felt by all personnel in the company toward the conformance of the product or service and the quality reputation of the company.
- Step Six:** Corrective Action  
**Purpose:** To provide a systematic method of resolving forever the problems that are identified through previous action steps.
- Step Seven:** Zero Defects Planning  
**Purpose:** To examine the various activities that must be conducted in preparation for formally launching the Zero Defects program.
- Step Eight:** Supervisor Training  
**Purpose:** To define the type of training that supervisors need in order to actively carry out their part of the quality improvement program.
- Step Nine:** ZD Day  
**Purpose:** To create an event that will let all employees realize, through a personal experience, that there has been a change.
- Step Ten:** Goal Setting  
**Purpose:** To turn pledges and commitments into action by encouraging individuals to establish improvement goals for themselves and their groups.
- Step Eleven:** Error-cause Removal  
**Purpose:** To give the individual employee a method of communicating to management the situations that make it difficult for the employee to meet the pledge to improve.
- Step Twelve:** Recognition  
**Purpose:** To appreciate those who participate.
- Step Thirteen:** Quality Councils  
**Purpose:** To bring together the professional quality people for planned communication on a regular basis.
- Step Fourteen:** Do It Over Again  
**Purpose:** To emphasize that the quality improvement program never ends.

## TQM in Higher Education

- \* Quality Progress (Oct 91):

78	Implementing
59%	Administrative
68%	Coursework
27%	Both
  
- \* Oregon State University Survey:
  - 20 Institutions
  - 75% Operating Teams (2 - 50)
  - 115 of 183 teams in Administration
  - Only 9 of 20 implement in Academics
  - 3 of 20 in Curriculum
  
- \* Leading Institutions
  - Oregon State University
  - Fox River Valley Technical College
  - Delaware Community College
  - University of Wisconsin - Madison
  - University of Chicago
  - Samford University
  - St. John Fischer University
  - Mount Edgecumbe High School, Sitka, Alaska

## UST JOURNEY

### DATE

Pre 1990

Trustees  
Grad. School of Business  
Management Center

January, 1990

Discovery as a  
Budget Strategy  
(False start # 1)

Spring, 1990

"Productivity" Group  
8 Meetings  
10 Weeks  
Discussion  
7 Participants

Summer, 1990

TQM Task Force  
12 Meetings  
25 Participants  
Evolutionary  
Read/Train/Discuss  
Interview Business  
Compel 91-92  
Institutional Goals

through

Summer, 1991

June, 1991

President's Staff Retreat  
2 Day, Conference Cntr  
Faculty Facilitation  
Decision:  
1. Inst'l Goal  
2. VP move forward  
3. Task Force become:  
Advisory Commit  
4. Steering Committee  
created

July, 1991

through

Present

Training Cascade  
Joint Meetings of  
Advisory & Steering  
Committees

Many trails  
No additional resources  
Corporate Presentations  
Read/Discuss

Next

Go/No Go Decision  
Summer 92

## TQM through Four Frames

Human Resources: Customer, Empowering, Team

Structural: Mgmt Science, Statistical  
Techniques

Political: System Orientation  
Top Down and Bottom Up

Symbolic: ZD Day, Awards, Recognition  
and Compensation

## Key Management Questions

Are you willing to change?

Will you demonstrate by your actions?

Will you train others?

Will you positively reinforce progress?

Will you create the environment for change?

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The Quality Press Publications catalog (1991) is available through the American Society for Quality Control (ASQC), 310 West Wisconsin Avenue, Milwaukee, WI 53203. Most of the books discussed above are included in the ASQC catalog. The catalog contains sections on human resources management, service quality and target industries. It also offers audiotapes and videotapes and is fully annotated.

SPC Press publishes a series of books from introductory levels to advanced "how tos." Their catalog is available by writing to: SPC Press, 5908 Toole Drive, Knoxville, TN 37919.

A Total Quality Management (TQM) Resource Bibliography has been compiled by Susan Ziemba at the Center for Business and Industry, Northern Essex Community College, Haverhill, MA 01830. This exhaustive listing includes not only texts but also videos/films, magazines/newsletters and bibliographies. It is not annotated.

GOAL/QPC, a management consulting firm, produces a catalog that includes both general references as well as books and monographs published through GOAL/QPC Press, 13 Branch Street, Methuen, MA 01844. Additionally, GOAL/QPC distributes a software program (QFD/CAPTURE) that includes a glossary of terms, tutorials and a relational database.

A newsletter that networks higher education institutions having an interest in Total Quality Management is organized and distributed by William A. Golomski and Associates, 59 East Van Buren Street, Chicago, IL. 60605-1220.

Another newsletter, National Quality in Education Consortium newsletter, links people interested in the role of academia in national competitiveness and Total Quality Management, Contact Professor Forrest Gale, Defense Systems Management College, Room 202, Bldg. 202, Fort Belvoir, VA 22060-5426.