1994

# Implementing Total Quality Management in a College of Business

Jeffrey William Glazer EdD
*University of San Diego*

# IMPLEMENTING TOTAL QUALITY MANAGEMENT IN A COLLEGE OF BUSINESS

by

Jeffrey William Glazer

A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Education

University of San Diego

1994

Dissertation Committee
Joseph C. Rost, Ph.D., Director
Susan M. Zgliczynski, Ph.D.
Michael L. Hergert, Ph.D.

ABSTRACT

IMPLEMENTING TOTAL QUALITY MANAGEMENT
IN A COLLEGE OF BUSINESS

GLAZER, JEFFREY WILLIAM, Ed. D. University of San Diego, 1994. 305 pp.
Director: Joseph C. Rost, Ph. D.

Today, a wide range of organizations are involved in what is commonly referred to as total quality management (TQM). Implementation and associated research have primarily been focused in the business community; however, over the past decade, faced with dwindling enrollment and increased competition, the educational community has also started to embrace TQM at differing levels in a wide variety of settings across the nation, ranging from doctoral granting institutions to community colleges to elementary schools.

This descriptive case study examined the implementation of a TQM process at a College of Business in a large state university on the west coast. Using the methodology of participant observation, the researcher was able to document the successful, yet difficult struggle to implement TQM in the College. This study also examined the influence patterns which occurred among team members, the level of training necessary, which TQM tools were the most effective, and what aspects of the process the participants believed were worthwhile.

Results indicated that significant quality improvements were made within the College by some of the teams. As a result of the team process, many

indirect gains occurred in the areas of job satisfaction, improved co-worker relationships, and office harmony.

Although TQM can be successfully implemented within an educational setting, it is difficult because the most salient principles necessary to the TQM model are virtually unknown in higher education. Thus, ideally the overall zeitgeist of administration and faculty must be changed to reflect an emphasis on customer focus and process orientation. Further, the change effort must be built on the principles of empowerment and mutual trust because without these, the participants will maintain the status-quo.

# DEDICATION

I dedicate this dissertation to my wife, Lisa Braun-Glazer, who was a constant source of inspiration and support, and to my two daughters, Julie and Anna, who kept asking; "When are you going to be done, dad?"

ACKNOWLEDGEMENTS

The doctoral program at the University of San Diego was a wonderful growth and learning experience for me. I have gained a great deal which will help me both personally and professionally for the rest of my life. I want to thank the entire faculty; in particular, I would like to express my gratitude to Dr. Joseph Rost and Dr. William Foster for being such great role models and educators.

I would like to thank Dr. Rost for pushing me to the limits (and possibly his limits as well) on this dissertation. He was demanding, but always fair. Also, despite spending hours of time on my drafts and going through at least two cartridges of red ink, he ceaselessly provided me written feedback in the form of a letter, always signed, "Best wishes, Joe." I always appreciated that touch.

I want to acknowledge Dr. Michael Hergert for keeping me intellectually and physically fit. I value you as a mentor and as a friend.

Dr. Susan Zgliczynski also provided me with extremely valuable input and always kept me on my toes. Her knowledge of TQM was extremely helpful.

I would also like to thank all of the people at West Coast University who helped me on this project. I can't mention them by name, but they know who they are. In particular, I want to thank the Dean and Carol V. for all of their support.

I would like to acknowledge my mom, Maddie, and my dad, Ed, who did a wonderful job raising me and always provided me with the best opportunities in life.

My two daughters, Julie and Anna, are a source of joy to me. They have been so patient and so loving throughout this ordeal. It would just kill me when I would have to say, "Sorry, I can't play now, I have to work on my dissertation." They both kept asking "Dad, when is your dissertation going to be done?" It finally is and I can go out and play.

And finally, I want to thank my wife, Lisa, for inspiring me and supporting me throughout the last three and a half years at USD. I thank you for it all: for believing in me and telling me I could do it, for taking care of the kids, for keeping the house together, for proof reading and editing my papers, for comforting me, and most important, for loving me. I couldn't have done it without you.

## TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

## LIST OF APPENDICES

# CHAPTER ONE

# STATEMENT OF THE ISSUE

## Introduction

Today a wide range of organizations, both large and small, profit and nonprofit alike, are involved in what is commonly referred to as total quality management (TQM) or continuous quality improvement (CQI). As will be discussed in more detail in a later section, TQM or CQI (terms which the researcher is using synonymously) represent both a management philosophy and a set of tools.

While the TQM movement began primarily with Japanese corporations after World War II, American corporations have also become very involved during the last five to ten years. The trend has become so significant that in 1988, Congress enacted Public Law 100-107, which established the Malcolm Baldridge National Quality Award.

During the past decade in response to dwindling enrollment and increased competition, the educational community has also started to embrace TQM at differing levels in a wide variety of settings across the nation ranging from doctoral granting institutions to community colleges to elementary schools. Seymour and Collett (1991) studied over 20 universities that were very involved in total quality management processes, and Stratton (1991) identified over 100 colleges and universities that were in some way attempting to implement TQM.

Pollack (1992), managing editor of the American Association For Higher Education Bulletin wrote:

> A year ago, in the November 1991 AAHE Bulletin, we brought you a first, full take on what seemed a nascent movement in higher education, total quality management (TQM). . . . No Bulletin in recent years has been so reprinted and widely passed around.
>
> A year later, total quality is a movement in full bloom. Hundreds of colleges by now have done homework, instituted training, and deployed processing improvement teams. (p. 2)

This interest by its members has caused the American Association of Higher Education (AAHE) to become very involved in the movement. Ted Marchese (1992), who is vice president of the AAHE, wrote:

> Given this explosion of interest, and with it many calls from members asking for help with TQM, AAHE's Board decided last April--and affirmed again this September--that AAHE will take a leadership role in higher education's encounter with total quality. (p.11)

Higher education is not alone in its ever growing interest in total quality management. The American Association of School Administrators (AASA), an organization of thousands of elementary and secondary school administrators across the country, has also jumped on the bandwagon. Richard Miller (1992), the executive director of the AASA, wrote:

> There is no question an ever-growing number of educators wanting long-term improvements for their school systems are turning to the principles of total quality management. . . . For the past two years, AASA -- the nation's oldest and largest non-profit organization of school leaders -- has been translating TQM principles for school systems and offering its members a systematic approach to improvement. (p. 16)

Each college and university has its own reasons for turning to TQM and while much of the impetus has come from internal sources, a number of businesses have taken a leadership role in encouraging colleges and universities to embrace the total quality management movement in not only the curriculum of their business and engineering schools, but also in their operations.

Judging from the amount of money that corporations have spent or donated to encourage universities to embrace TQM, it appears that the business community is very serious about its desire for students to be trained in total quality management principles and about the need for universities to operate using a total quality management philosophy. As an example, this year IBM awarded nine individual $1,000,000 grants to universities for the implementation of TQM in the curricula as well as in the operations of these schools. For the last three years, American Express, Ford, IBM, Motorola, Procter and Gamble and Xerox have sponsored what is known as the Total Quality Forum, a gathering of over two hundred business executives and universities leaders to discuss total quality management as it relates to universities. Separately, each of these companies also invited over one hundred faculty members and administrators from eight different universities to participate in a week of training at their companies.

One of the most significant reasons for studying TQM in colleges of business is that the American Assembly of Collegiate Schools of Business (AACSB), the primary accreditation body for colleges of business in the United States, has radically revised its accreditation standards. The new standards have placed a strong emphasis on continuous process improvement and the notion of total quality management. A section of the preamble of the AACSB (1992) report reads: "Accreditation focuses on the quality of educational activities. Standards set demanding but realistic thresholds, challenge schools *to pursue continuous improvement* and provide guidance for improvement in educational programs" (p. 2, italics added). As an example of the focus placed on the importance of continuous process improvement in the accreditation process, the new standards require that in each section of the school's self-evaluation report, the school must not only provide information about the area under review, but must specifically demonstrate how the school is achieving quality and continuous improvement.

## The Issue

The primary issue that this research will be addressing is what is entailed in actually implementing TQM at the West Coast University (WCU) College of Business Administration. (The names of the university and all the participants have been changed due to the sensitive nature of some of what transpired during the course of the study.)

Dr. Richard Brady, The Dean of the West Coast University (WCU) College of Business Administration, has publicly stated that he is very committed to TQM and intends to manage the College based upon a TQM philosophy. Eventually he intends to have a multitude of TQM teams addressing all areas within the College, including the design of the curriculum, fund raising, the governance of the faculty and staff and so on.

He established the first senior team in October, 1992 which was composed of himself, some College of Business Administration administrators, faculty members, staff, and students as well as a few senior administrators from outside of the College of Business Administration. This senior team was later split into three sub teams. The purpose of the senior team was to first identify which student services areas were most in need of improvement and then systematically devise ways to improve each of these services. These services include, but are not limited to, the student admissions process to the College, advising, the class scheduling process, career placement processes, and the criteria students must fulfill to qualify for upper division courses.

Despite this strong commitment by the Dean, as well as other deans across the country, no one actually knows for sure how people should go about implementing a TQM program in an academic institution. Ted Marchese, Vice President of the American Association of Higher Education, (1993) wrote:

> It's fascinating to watch the arrival of Total Quality Management (TQM) -- or Continuous Quality Improvement (CQI), as it is called by its health care practitioners -- in higher education. A few campus pioneers began their TQM efforts in the eighties; the big wave of interest kicked in during the 1991-92 academic year; by now, it's hard to find a campus without a knot of people trying to implement the thing.
>
> On almost any campus, thin as the knowledge may yet be, people are already stoutly for total quality or deeply skeptical of it. What the quick-to-judge miss -- what the early triumphalist writing about TQM in higher education also misses -- is that TQM is complicated, important, difficult to implement, and far from figured out. Contrary to the tool driven, seven step workshops that consultants are busily selling, we're years away from knowing what academic versions of TQM will appropriately look like. (p.10)

This descriptive case study will focus on the implementation of TQM in a College of Business Administration and is intended to provide a holistic description and analysis of the process. This study will use the methodology of participant observation.

## The Purpose of the Study

Over the next several years, Dean Brady, as well as many other deans of colleges of business, intends to commit a great deal of time, money, and other resources to TQM programs. The purpose of this study is to provide an in-depth description of what actually happened as the College of Business Administration at West Coast University embarked on the total quality management process so that other university administrators and staff members can benefit from the College's experience.

The case study will cover approximately the first year of the program's existence, as it is anticipated that this time period will allow the teams that are being studied an ample amount of time to complete their initial mission. It should be noted that most companies and people involved in the total quality management effort think of it in terms of a process rather than a program, because the word program connotes a beginning and an end point. The continuous improvement process is viewed as having no end, since one of the assumptions held by all the major proponents of the movement is that people are always capable of continually improving both the process used to deliver a service or product as well as the final end product (Bowles & Hammond, 1991; Crosby, 1979; Deming, 1986; Juran, 1988; Mayhew, Ford, & Hubbard (1990). Nonetheless, this study will cover approximately a year and will focus primarily on the policy-making process of these teams rather than on the implementation phase.

The research is intended to be a case study of a college just beginning this process. One of the primary objectives will be to tell the story of what actually happened in the teams and attempt to analyze the "whys" of what did in fact occur. Additionally, it is this investigator's intention to analyze interview data to determine whether the participants thought the process was meaningful and productive and how it could be improved.

## Research Questions

The goal of a researcher is to develop theory. Strauss and Corbin (1990) wrote: "To do this, we need a research question or questions that will give us the flexibility and freedom to explore a phenomenon in depth" (p. 37). While the following research questions are fairly specific, they are also broad enough to allow the examiner an opportunity to develop a theory about why things developed as they did. The reason that these questions were selected is because it is the researcher's belief that the answers will enhance the productivity of subsequent TQM teams which might be started in the College. The nine research questions are as follows:

1. What was the basis for forming the teams and choosing their members?

2. What training in TQM was necessary for the teams to function?

3. What problem identification methods were utilized?

4. What changes in student services policies were recommended before the teams disbanded?

5. During the team meetings, how did influence patterns develop among the faculty, staff, and students?

6. What aspects of the process did the participants feel were worthwhile?

7. What aspects of the process did the participants feel were not worthwhile?

8. What would the participants do differently?

9. Did the participants believe that the efforts of the teams will lead to real quality improvements?

## Need for the Study

Since the student services task force was the first one set up by the Dean and because he intends to set up many other task forces over the next several years, it is important to learn as much as possible from the initial teams. Further, since many other business colleges intend to start TQM programs due to the new accreditation standards of the AACSB, it is important to collect information about what is involved in the implementation of such programs, so that others may understand what works and therefore, perhaps avoid some of the pitfalls WCU went through.

Over the years, people have complained about university systems, but little has been done to try to change them in a systematic, organized way. This researcher hopes that this study will determine if a TQM approach, which is very structured and disciplined, can make a difference in university governance and operation. In terms of research interest, it seems important to understand how and why change can occur within a university. The opportunity to contribute to the improvement of higher public education is also of significant interest to this investigator.

## Definition of Terms

Case Study: "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used" (Yin, 1984, p. 23).

Continuous process improvement: The never ending search for ways to try to improve not only the end product or service, but also the way which the product or service is manufactured or provided.

Customer: There are two types of customers: internal and external. "Internal customers are those persons or units within the organization that interact and depend upon another person or unit within the organization for some particular service" (Corts, 1992, p. 3). Juran (1988) wrote that to determine who external customers are, one should "follow the product to see whom it impacts. Anyone who is impacted is a customer" (p. 24).

Leadership: "Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (Rost, 1991, p. 102).

Process: A sequence of activities that is intended to create added value for a customer.

Team: " A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable" (Katzenbach & Smith, 1993, p. 111).

Team building: "A process of developing and maintaining a group of people who are working toward a common goal. Team building usually focuses on one or more of the following objectives: (1) clarifying role expectations and obligations of team members; (2) improving superior-subordinate or peer relationships; (3) improving problem solving, decision making, resource utilization, or planning activities; (4) reducing conflict, and (5) improving organizational climate" (Hunt, 1992, p. 289).

Total Quality Management (TQM): Total quality management represents both a philosophy and a set of tools. "TQM is continually serving customers better and more economically using scientific methods and teamwork, and concentrating on the removal of all forms of waste" (Harry Roberts, personal communication, January 9, 1993).

## Limitations of the Study

This single case study is limited to one business college. Therefore, although the results can not be completely generalizable beyond this immediate case study, it is the researcher's belief that the findings can be useful to other researchers if they were to compare their specific setting to the College of Business Administration at WCU. Merriam (1988) wrote that another "way of viewing external validity -- one particularly suited to case study research -- is to think in terms of the reader or user of the study. Reader or user generalizability involves leaving the extent to which a study's findings apply to other situations up to the people in those situations. It is the reader who has to ask, what is there in this study that I can apply to my own situation, and what clearly does not apply" (p. 177). For this reason, the researcher's intent is to provide as rich of description as possible of what actually transpired.

## Organization of Dissertation

Chapter One provides a brief history and overview of TQM. It presents the issue, purpose, and rationale for the study; additionally terms are defined and the nine research questions are delineated.

Chapter Two provides a review of the literature relevant to TQM as its relates to higher education. It traces the history of the TQM movement and outlines the research that has been done in the area.

Chapter Three provides a detailed description of the research design and methodology used for this descriptive case study. The chapter also addresses the issues of validity and reliability.

Chapter Four provides a rich description of the history of the teams and what actually transpired. The chapter is purely descriptive in nature.

Chapter Five reports the findings of the case study organized around the nine research questions presented in Chapter One.

A summary of the dissertation is provided in Chapter Six together with the researcher's conclusions. This chapter contains a discussion of the theoretical implications of the data and suggests possible areas for further research.

## CHAPTER 2

## LITERATURE REVIEW

### General Definitions

Total quality management or continuous process improvement represents a new perspective in industry today. There is no agreement in the literature or in actual practice, though, on what the terms total quality management (TQM) or continuous quality improvement actually mean. This becomes obvious from a thorough review of the literature. Hiam (1993) reviewed over fifty different studies and also personally observed a wide range of companies claiming to be involved with TQM. He found that there was a wide discrepancy on how people both defined and practiced TQM. While there is general agreement about some basic principles and philosophies, most TQM theorists including Bowles and Hammond, 1992; Chaffee and Sherr, 1992; Corts, 1992; Hiam, 1993; Marchese 1992; Seymour, 1993; Seymour and Collett, 1991, as well as most practitioners in the field, believe that each organization attempting to implement TQM must decide for itself how to go about doing it, as well as what the term TQM means to the organization. Barrow (1993) summarized this view as follows:

> TQM is both a set of enabling components and a system. Most leaders in this area agree on key TQM components, but they disagree on when and how they are best employed. These enabling components include customer focus, process improvement,

> empowerment, leadership (behavior and change strategies), organizational effectiveness, and information technology. (p. 39)

Seymour and Collett (1991) noted that "the basic principles of TQM can be divided into three groups: philosophy, management, and tools" (p. 1). Hunt (1991), in referring to TQM, stated: "Quality First is both a philosophy and a set of guiding concepts, principles, and practices that represent the foundation of a continuously improving organization" (p. 15).

Cameron (1992) summarized the different approaches people have used as follows:

> Total quality can be defined three ways. One way is by describing the unifying principle that is the basis for all strategy, planning and activity; . . . that principle simply put is total dedication to the customer. . . . A second way is to define the outcomes that a total quality company strives for: the major results of the various activities its people seek to create or enhance. . . .
>
> A third way to define Total Quality is to discuss the various tools, techniques, and other elements that lead to the outcomes.
>
> Finally, modern concepts of leadership are needed. The modern leader guides by creating a vision of what the organization can be and directing the establishment of a climate that encourages each employee to embrace that vision and make it his or her own, to personalize it so that it has meaning. (pp. 7 - 9)

As can be seen, TQM is a complex and comprehensive management system. This complexity makes it difficult to study. The next few sections will discuss each of its core elements.

TQM as A Philosophy

The general philosophy behind TQM is that an organization should strive for perfection in everything it does, while at the same time striving to exceed the goals, needs, and expectations of all its customers. What is unique is that the term customer has a very specific meaning. First, all customers are viewed as individuals. In other words, if a computer software company designs and manufactures a product for a specific university, for example, the customer is viewed as that individual, whether it be a faculty member or secretary who actually uses it. Therefore, the ease of operation and accompanying instructions must equal or exceed the expectations of the actual user.

Further, customers include individuals both within and outside the organization. Internal customers include anyone or any group of individuals who receive a product or service from another individual or group within the organization. Hunt (1992) wrote: "In traditional management lore, attention is usually given only to external customers. In quality first companies however, a second, equally important customer is the internal customer" (p. 22). Not much research has been done addressing the needs of internal customers though.

According to every proponent of TQM, organizations that are committed to TQM must get employees to buy into the new philosophy. This requires creating a new cultural environment where workers are seen as vital links in the quality effort. In order for this to happen, organizations must reinforce this change effort through training and later empowerment; however, very little research has focused on how this transformation should take place. In TQM organizations, employees are empowered to make decisions. According to Senge (1990a), if an organization is going to empower its workers it must first insure that all employees are headed in the same direction or have a shared vision. Senge (1990b) wrote that a shared or collective vision can only "emerge from personal visions" (p. 211). Therefore, employees must first enroll in the vision themselves, yet no one has documented how this should be done. Also, no one has researched what happens when employee's personal visions are at odds with the visions of their managers.

Carothers (1992) described this philosophy associated with TQM when he wrote:

> Although the concept of "quality" is often talked about as a theory of business management developed by W. Edwards Deming and refined by J. M. Juran and by Philip Crosby, it is more appropriately thought of as a philosophy about work, people and organizations. It aims at the creation of an organization and a work culture which are centered on a collective vision and on shared values. (p. 1)

Another philosophical aspect of TQM that is universally accepted is the emphasis on continual process improvement. True proponents of TQM continually question how and why something is done. The goal is to eliminate all forms of waste. Waste is defined as "eliminating all steps that do not add value" (Harry Roberts, personal communication, January, 18, 1993). Roberts added that one way to identify waste is to ask whether the final customer would be willing to pay for the step or part if he knew he was paying for it.

Attempting to produce or serve the customer in the shortest period of time is also a critical component of any TQM effort. The rationale behind this is fairly self-evident: for the most part, customers want the product or service today. Also, longer production cycles and slower service to customers generally result in higher costs or lower revenues. For example, if a fast food restaurant can shorten the time it takes to serve a customer, more customers should be able to be serviced in a given period of time. Further, customers should be more satisfied leading to more repeat business and referrals.

All the leaders in the field including Deming, Juran, and Crosby believe that TQM entails continuous process and product improvement. The significance of this is that quality improvement efforts are viewed as never ending. TQM is not viewed as a program, but rather is thought of as a process. The belief is, that programs have a start and an end, but TQM is a never ending process of continually searching for a better way to do things and make things. True proponents of TQM would compare this process to what MacIntyre (1981) called a "practice."

> By a 'practice' I am going to mean any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence and human conceptions of the ends and goods involved are systematically extended. (p. 187)

While TQM leads to external goods, the true motivator and stimulant of successful TQM programs has been what MacIntyre would label as "goods internal to a practice" or what others would call "intrinsic benefits". In the educational community, this might be the satisfaction a teacher receives when he or she receives positive feedback from students.

TQM as A Managerial Principle

McGregor (1960) wrote that managers make assumptions about human nature in general, and these assumptions, in turn, determine the manager's style. He called these two contrasting assumptions Theory X and Theory Y. TQM is built around the work of McGregor and his assumptions about Theory Y and the nature of workers. McGregor (1960) listed the assumptions of Theory Y:

1. The expenditure of physical and mental effort in work is as natural as play or rest. The average human being does not inherently dislike work. Depending upon controllable conditions, work may be a source of satisfaction (and will be voluntarily performed) or a source of punishment (and will be avoided if possible).

2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.

3. Commitment to objectives is a function of the rewards associated with their achievement. The most significant of such rewards, e.g., the satisfaction of ego and self actualization needs, can be direct products of effort directed toward organizational objectives.

4. The average human being learns, under proper conditions, not only to accept but to seek responsibility. Avoidance of responsibility, lack of ambition, and emphasis on security are generally consequences of experience, not inherent human characteristics.

5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.

6. Under the conditions of the modern industrial life, the intellectual potentialities of the average human being are only partially utilized. (pp. 47-48)

Uzelac (1993) stated that if a manager's beliefs reflect Theory X assumptions, his/her role will be to coerce and control people and manage in an autocratic manner. The leader's assumptions in turn, will determine the climate of the organization.

> In an autocratic environment the managerial orientation is a formal, official authority. This authority is delegated by right of command over the people to whom it applies. Management believes that it knows what is best and the employee's obligation is to follow orders. It assumes that employees have to be directed, persuaded, and pushed into performance, and this is management's task. . . . As a result, employees' performance is minimum and their behavior is passive.(p. 76)

McGregor believed that most people inherently enjoy work assuming they are given meaningful things to do and that they would willingly take on more responsibilities if given the opportunity. At companies utilizing TQM, management's role "is to develop the potential in employees and help them release that potential toward common objectives (Uzelac, 1993, p. 77). In other words, one of the driving principles underlying TQM is that employees should be given more responsibilities.

Despite the fact that there has been so much written on the importance of managing based on Theory Y assumptions in TQM organizations, there have been no empirical studies linking a college administrator's leadership style with the success of a TQM process. This case study will partially explore this question.

Some studies have found that employees working at companies using TQM reported increased satisfaction following the implementation of TQM. (Bowles & Hammond, 1992; Uzelac, 1993); however there has been no research looking at whether the same thing holds true in educational settings. This study will also partially address this question as well.

## The Leading Experts in the Field

There are thousands of authors and consultants working in the area of total quality management. Three people stand out in the field: W. Edwards Deming, Philip Crosby, and Joseph Juran. These proponents each have their own views and their own followers, although there is a certain amount of overlap in the philosophies of these three quality experts.

W. Edwards Deming. One of the most significant individuals in the field was W. Edwards Deming, who died in 1994. Up until his death, he conducted four day workshops several times a month to audiences of between 700 to 1,000 participants. He also did a great deal of private consulting work for individual companies.

Deming became a legend in Japan after World War II because of his teachings about quality. In fact, the highest award given to any industrial company in Japan is called the Deming Prize. For Deming, quality was producing a "dependable, customer-satisfying product or service at a low cost" (Hunt, 1992, p. 79).

Deming (1986) claimed that American managers did not understand what motivated people. He placed the decline in the competitiveness of American companies directly on those who have been in management positions for the last forty years. He wrote that nearly all of the problems related to quality in America have not been caused by incompetent workers, but were rather the result of harmful management practices. While Deming placed great emphasis on statistical tools in his approach to improving quality, he also believed that managers must adopt a whole new philosophy. His main focus was on improving the system in order that workers can do a good job.

A wide range of corporations, including Ford, General Motors, Hospital Corporation of America, Hughes Aircraft, Dow Chemical, Honeywell, AT&T and Campbell Soup have adopted the Deming method. Also, many universities have adopted the Deming method, including Oregon State University, the University of Chicago, and Samford University, to name just a few. Many authors and researchers have taken Deming's philosophy and applied it partially or totally to higher education, including Butterfield, 1991; Cavalier, 1992; Dew, 1992; Fendt, 1992; Fendt & Vavrek, 1992; Master & Leiker, 1992; Seymour, 1991; Siu-Runyan & Heart, 1992, and Vavrek, 1992.

Because of the tremendous influence Deming has had on the implementation of TQM, it is appropriate to expand on some of Deming's fourteen points and summarize how other authors have adapted Deming's philosophy to higher education. Deming's influence was exhibited when Chaffee and Sherr (1992), in a American Association of Higher Education - ERIC sponsored report, wrote:

> Although we advocate colleges' and universities' reviewing all the major literature on TQM and using the portions they find most helpful, we find that Deming's approach is especially well-suited to post-secondary settings. The language of his Fourteen Points is

> appropriate for nearly any kind of organization, and the philosophical basis of his work is generally compatible with the activities and values of educators. A deep understanding of Deming's points would provide everything one needs to know to create a continuously improving organization. (pp. 4-5)

While Deming published several books and papers, most of his message is spread through his workshops, the popular press, people who have worked and studied with him and the writings of others including Bowles & Hammond, 1991; Butterfield, 1991; Cavalier, 1992; Dew, 1992; Fendt, 1992; Fendt & Vavrek, 1992; Garvin, 1986; Hunt, 1992; Joiner & Gaudard, 1992; Lewis, 1992; Master & Leiker, 1992; Rhodes, 1990; Siu-Runyan & Heart, 1992; Tollett, 1992; Vavrek, 1992; Walton, 1986.

In the following section, Deming's fourteen points will be summarized and then applied to higher education. Only those principles which have attracted the most attention in educational circles will be elaborated upon.

Deming's fourteen points are as follows:

1. Create constancy of purpose for improvements of product and service, with the aim to become competitive and to stay in business and to provide jobs.

2. Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.

3. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.

4. End the practice of awarding business on the basis of price tag alone. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.

5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.

6. Institute training on the job.

7. Institute leadership. The aim of leadership should be to help people and machines and gadgets to do a better job.

8. Drive out fear so everyone may work effectively for the company.

9. Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and problems in use that may be encountered with the product or service.

10. Eliminate slogans, exhortations, and targets for the work force, asking for zero defects and new levels of production. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the work force.

11. Eliminate work standards (quotas) on the factory floor. Substitute leadership. Eliminate management by objectives. Eliminate management by numbers, numerical goals. Substitute leadership.

12. Remove barriers that rob the hourly worker of his right to pride of workmanship. This means, inter alia, abolishment of the annual or merit rating and management by objective.

13. Institute a vigorous program of education and self-improvement.

14. Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job. (Deming, 1986, pp. 23 - 24)

The Seven deadly diseases referred to by Deming are as follows:

1. Lack of constancy of purpose.

2. Emphasis on short term profits.

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

4. Mobility of management.

5. Running a company on visible figures alone.

6. Excessive medical costs.

7. Excessive costs of warranty, fueled by lawyers that work on contingency fee. (Walton, 1986, p. 36)

Deming's first point is lack of constancy of purpose. Deming believed that most American corporations, as well as most schools are too short-term oriented. Further, he felt that if an organization had no vision or plan for the future then that organization was destined to fail. Organizations should be proactive rather than reactive. To do this, organizations should have a vision of where they are trying to go and then be willing to commit all the resources necessary to get there. "Establishing constancy of purpose means: (1) innovation; (2) research and education; (3) continuous improvement of product and service; (4) maintenance of furniture, fixtures, and equipment, and new aids to production in the office and in the plant" (Walton, 1986, p. 56). With respect to education, Siu-Runyan & Heart

(1992) wrote that "in most schools, the goals and priorities of staff members extend no further than token agreement that schools should educate young people" (p. 24). They added that most schools only focus on fiscal problems and micro issues related to the day-to-day running of the school rather than looking to the future and trying to determine how they can improve instruction and best fulfill the needs of their students.

Deming believed that in order for an organization to be innovative it must know who its customers are, what they want, and from there design the product or service that surpasses their needs. Top managers must be committed to providing a product or service which is unsurpassed in quality and is designed or delivered in the most efficient process possible. Trying to improve a product or service never ceases.

> It is a mistake to assume that efficient production of product and service can with certainty keep an organization solvent and ahead of the competition. It is possible and in fact fairly easy for an organization to go downhill and out of business making the wrong product or offering the wrong type of service, even though everyone in the organization performs with devotion, employing statistical methods and every other aid that can boost efficiency" (Walton, 1986, p. 57).

The same holds true for higher education. The downward trend in the number of incoming freshman is putting tremendous pressure on both public and private colleges and universities to improve the quality of their programs in order to attract new students. As just one example, at the College of Business at West Coast University, the number of majors has dropped from approximately 8,000 in 1991 to around 5,600 in 1994. Masters and Leiker (1992) wrote that to create constancy of purpose, a successful university must anticipate the future needs of its students. "The needs of the students (who are the primary customers) must be gauged. . . . It is also important to anticipate how these needs might change to be able to plan for these changes and maintain a stable system" (p. 28).

Masters and Leiker (1992) added that, in colleges and universities, top administrators should concentrate on the following objectives:

> 1. Establish a mission and core values for the institution and provide a road map for achieving long-term stability and a process for innovate ideas to be brought forth.
>
> 2. Make employees aware of, and be sure that they completely understand, the mission and values in order to achieve them in the most efficient and effective manner.
>
> 3. Assess the needs of students. Students come to an institution of higher education to receive knowledge, via a degree, in a specified field of study. They require the latest technology and methodology to be competitive in the job market after graduation. Also, student needs in terms of financial aid, housing, food service, social interaction, and extracurricular activities must be explored.
>
> 4. Obtain feedback from students and alumni regarding their educational experiences so improvements can be made wherever necessary.
>
> 5. Use resources effectively to accomplish the previous four objectives. (p. 28)

Chaffee and Sherr (1992) noted that every United States college or university president espouses the importance of quality, yet their research indicated that most students and other stakeholders did not believe this to be the case. In other words, the perceptions of the administrators and the perceptions of students were at odds with one another. It doesn't matter in an objective sense who is right, but what is important is that university stakeholders are not satisfied with what universities are delivering.

> To bridge the gap, we need to act on our commitment to quality, first by hearing the complaints instead of denying them, and then by taking the most excruciating step -- changing.
>
> If a denial based, status quo view of post-secondary education seems harsh, consider the number of people and processes in your organization that tolerate inadequate results: the dean who does nothing about faculty with poor evaluations from students, . . . or the personnel office that cannot find the records of part-time personnel. . . .
>
> Recognizing these dynamics, TQM turns the concept of "problems" upside down. People who are serious about continuous improvements understand that probiems represent concrete opportunities to improve. . . .
>
> Demonstrating a commitment to quality could involve a willingness to suspend activities while you fix them, as well as a willingness to invest in "nonproductive" activities that will have long term payoffs. . . .
>
> Commitment to quality is impaired by a focus on short-term, results. . . . One of the reasons we think in the short term is that those above us expect speedy results. . . . Administrators need to reward small, solid improvements in the work of those who report to them. They need to keep the organization's big picture alive for themselves and their colleagues.

> When they do so in the context of a philosophy of total quality, they find a payoff in satisfied and motivated personnel who participate in achieving organizational aims, satisfied customers, more time to spend on productive activities, less waste, and lower costs. (pp. 31-32)

In other words, the authors felt that colleges and universities often look for short-term, quick fixes instead of focusing on the long term. As an example, a College might hire student assistants to work in its advising office to temporarily help out. This might relieve the short term work load pressures, but if the students are not trained or if it causes the office to neglect the root causes of its problems, then this stop gap measure may prove detrimental in the long run.

Deming's second point is to adopt the new philosophy. In order for TQM to be implemented on a university-wide basis, top officials in the university must support it. "Change in any organization is usually difficult to accomplish, but it is even more difficult if top management is not committed to the new philosophy" (Masters & Leiker, 1992, p. 28). Adopting a new approach means that university leaders must challenge the status quo and be willing to break from tradition. Just because something has been done a certain way in the past is no justification for its continuation; everything must be examined and questioned.

As part of adopting this new philosophy, administrators must be willing to commit the resources needed to transform the university. Masters and Leiker (1992) wrote that:

> The leaders of the institution need to recognize the need to educate everyone in the organization so that Deming's management methods can be implemented effectively. . . . This means using resources for

> training of employees, the salaries of people who will help implement the process, the equipment necessary to maintain and improve the quality of the education provided, and the implementation of the feedback process. (p. 28)

According to Halverson (1992), now is the time for those in higher education to get started on TQM. "Unfortunately higher education is oftentimes slow to adopt any new philosophy and we are comfortable with this reluctance as the designated repositories of knowledge and the preservers of history and tradition. In the end, time will require education to be more inclusive of discovery and creativity" (p. 56). He described one institution which failed because it waited too long to address the new economic age. "Education requires leadership to ask the right questions which clearly define its purpose with faculty, administrators, and staff so that all share a common understanding of its constancy of purpose and will to achieve its purpose" (p. 58). This case study will explore whether meaningful change is possible if the change effort begins with a dean rather than the president of the university. Most of the literature suggests that this approach will be more difficult.

Deming's fifth point is to improve constantly and forever the system of production and service. Deming believed that an organization can always be improved and that the best way to improve a system is to have members of the organization work together towards that end. Continual process improvement requires that an organization be able to document and then measure or determine the cost of each process within an organization. The goal, of course, is to try to improve internally over time. As part of this improvement process, an organization should attempt to learn from not only itself, but also from other organizations. <u>Benchmarking</u>

is a TQM technique utilized to compare a process in one organization to a similar process in another organization. Colleges and universities have used benchmarking sparingly in recent years, although its popularity has grown as more data has become more readily available. "Benchmarking is an ongoing, systematic process for measuring and comparing the work processes of one organization to another. It identifies best practices that can lead to improvements in operations and customer service" (Shafer and Coate, 1992, p. 28).

Currently over one hundred institutions, including all of the California State Universities are spending $10,000 per year to participate in the NACUBO (National Association of College and University Business Officers) benchmarking survey. The survey "includes thirty eight processes/functional areas, two general data areas, and five process costing sections" (Shafer and Coate, 1992, p. 34).

Deming's sixth point is to institute on-the-job training. Deming felt that in order to be innovative and stay ahead of the competition, organizations must continually provide training and education to their workers, as well as be willing to spend whatever it takes on research and development.

Masters and Leiker (1992) wrote that "faculty development is important so that faculty can stay apprised of new theories or teaching methods in their respective fields to educate their students. . . . Deming says all employees are doing their best, but doing their best is not always good enough without proper training and education" (p. 30). Many authors have also stressed the importance of helping faculty members become better educators (Austin and Baldwin, 1991; Baggett, 1992; Chaffee & Sherr, 1992; Fendt, 1992; Prince, 1992, Seymour, 1992; Siu - Runyan & Heart, 1992; Spanbauer, 1992, and Teal, 1992). These authors are in agreement that the key to faculty development is training and support. While many authors have stressed the importance of helping faculty members become better educators, there has been very little research on how administrators can get faculty to voluntarily participate in these types of programs. In general, it has been quite difficult to get faculty members to embrace TQM (Chaffee & Sherr, 1992; Coate, 1989; Seymour, 1992). While this is generally believed, there has been very little research on how leaders can enhance faculty involvement.

Deming's seventh point is to provide leadership. Just about every author stressed the importance of effective leadership and noted that, unless a TQM program has the backing of people at the top of the organization, any change effort is destined to fail (Barker, 1992; Barrow, 1993; Chaffee and Sherr, 1992; Crosby, 1979; Deming, 1986; Dew, 1993; Dibiaggio, 1989; Fendt & Vavrek, 1993; Halverson, 1993; Harris and Baggett, 1992; Holmes, 1992; Hull, 1992; Johnson, 1993a; Senge, 1990a; Seymour, 1992; Spanbauer, 1992; Walton, 1986; and Williamson, 1993). More on the importance of strong leadership can be found later in this chapter.

Deming's eighth point is to drive out fear. It is important that people feel secure in their jobs. Deming (1986) wrote "that *se* comes from Latin, meaning without, *cure* means fear or care. *Secure* means without fear -- not afraid to express ideas, not afraid to ask questions" (p. 59). Deming said that workers should not be afraid of making mistakes because it is through mistakes that people learn. In industry, as well as higher education: "workers should not be afraid to report broken equipment, to ask for additional instructions, or to call attention to conditions that interfere with quality" (Walton, 1986, p. 73). Faculty members should not be afraid to seek assistance in order to improve their teaching methods nor should staff members be afraid to ask for more training if they do not understand a process.

There are four separate bodies of literature on faculty evaluation, improving instruction, student assessment, and evaluation. I have reviewed each in a cursory fashion. The one constant in all four strands of the literature is that the purpose of each process is not to point blame, but rather to improve a person or institution. Each of the four areas represent a form of evaluation. Kaufman and Thomas (1980) wrote:

> Evaluation may determine what is working, what is not working, what to change, and what to keep. Evaluation is a process used to assess the quality of what is going on.
>
> Evaluators have often been confused with judges and auditors. The term *evaluation* often conjures up threat and blame-placing. This is an incorrect use and interpretation of evaluation.
>
> Evaluation , if correctly used, will provide quality control by determining the gaps between what happened and what should have happened. The data coming from an evaluation should be used only to determine changes in organizational efforts and results -- never to place blame. (p. 4)

Deming's ninth point is to break down barriers between staff. TQM requires systems thinking and the recognition that all parts of the organization are dependent upon one another (Senge, 1990a). In order for an organization to implement TQM, the walls that separate various units or divisions within an organization must be broken down, as TQM requires that all parts of the organization work together for the good of the whole organization and not for the good of one department or unit.

This is a radical concept to most organizations and to most Americans as most organizations view various functional areas as autonomous units. As just one example, it is rather rare that representatives from engineering, manufacturing, and marketing get together in the design phase of a product despite the fact that it is the logical thing to do. The failure to work together causes manufacturing to blame engineering for a faulty design and the marketing people to blame both departments because the product does not work or is not what the customer wants.

Universities are no exception and, in fact, may be even worse with respect to working together as teams rather than as autonomous units. Most colleges of business have separate departments for finance, management, marketing, and so forth. Bellah, Madsen, Sullivan, Swidler and Tipton (1985) described how and why this specialization evolved.

> When we look at the history of our disciplines and their professionalization, it turns out to be the same history that has preoccupied us throughout this book. We have repeatedly noticed that during the nineteenth century, the social world changed from being a community, a cosmos of callings, into an industrial-corporate society organized around competing professional careers. Educational institutions were transformed in ways comparable to the transformation of other institutions. The American college throughout much of the nineteenth century was organized on the assumption that higher learning constituted a single unified culture. The purpose of college education was to produce a man of learning who would have an uplifting and unifying influence on society. . . . It was only late in the nineteenth century that the research university replaced the college as the model for higher education -- contemporaneously

> with the rise of the business corporation. The two were manifestations of the same social forces. Graduate education, research, and specialization leading to largely autonomous departments were the hallmark of the new universities. (pp. 298-299)

Austin & Baldwin, 1991; Bateman & Roberts, 1992; Chaffee & Scherr, 1992; Halverson, 1992: and Hau, 1991 all noted that faculty members should work together to improve the quality of instruction provided to students. Each author also suggested that teams of students should be formed to try to improve specific classes.

Hau (1991) and Bateman and Roberts (1992) wrote that students and faculty members formed teams at the University of Wisconsin and the University of Chicago respectively for the sole purpose of trying to improve the quality of teaching in a class. They wrote that the faculty members who participated in the process found it very helpful in improving their teaching methods. Most of the faculty members stated that they found deficiencies in their approaches which really surprised them. Some of these deficiencies included such easily remedied items as the professor could not be heard, the professor wrote too small on the blackboard, and so on.

Halverson (1992) wrote that Samford University uses student mid-term course evaluations, as well as evaluations at the end of the semester. He wrote that "students use them as an opportunity to reinforce those things the instructor is teaching or doing which positively contribute to the learning process and to comment on those things which frustrate the learning process. These comments are available at a time when improving changes can be made which will enrich the experience of students and instructors" (p. 9).

Bateman and Roberts (1992) suggested getting feedback at the end of each class session. They provided examples of several questionnaires which they had used at the University of Chicago. One questionnaire used by Roberts asked the following questions:

> Overall, how much did you get out of today's class?
>
> What was the most important thing you learned?
>
> What was the muddiest point?
>
> What single change by the instructor would have most improved the class?
>
> Please comment briefly on the helpfulness of the advance reading assignments for today's class.
>
> Overall, how much did you get out of your preparation for today's class?
>
> What one thing can the instructor do to help you to improve your future class preparations? (p. 18)

Austin & Baldwin (1991) wrote that it is important for faculty members to develop collaborative relationships in order to improve both teaching and research. "Both empirical evidence and anecdotal reports testify to the value of collaborative relationships. Faculty who collaborate tend to be more prolific and in many cases produce higher quality scholarship than academics who conduct research and write independently" (p. 84). They acknowledged though that the current reward system in higher education makes collaboration unattractive.

> Many invisible but strong barriers in higher education inhibit faculty collaboration, limiting faculty interaction and confining many professors to narrow fields of study and a limited assortment of professional activities. . . . Academic rank often keeps professors

> from interacting in a meaningful way. It is common, for example, for academic departments to reserve large introductory courses for junior faculty, and small, upper division courses for veteran professors. Such arrangements deter junior and senior faculty from working together to solve complex problems in teaching and research. . . .
>
> Higher education must find effective strategies to break down barriers inhibiting collaboration. Many of the problems that now confront Western civilization and humankind in general are too complex to be solved by independent scholars or single disciplines. (pp. 88-89)

Deming's thirteenth point is to institute a vigorous program of education and retraining. Senge (1990a) wrote that "the organizations that will truly excel in the future will be the organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization" (p. 4). Many organizations fail to provide their employees with any opportunities to take classes or attend workshops, yet they expect these very same workers to be on the cutting edge in whatever their discipline may be. Other organizations expect their staff personnel to be computer literate, yet do not provide any training despite that the fact that new innovations are occurring on almost a daily basis in the industry.

Helping people improve themselves benefits an organizational as well. Masters and Leiker (1992) wrote that "this includes improvements in job related skills as well as improvements in skills that are not job related. The message to the employee is that management is supportive of any type of training in which an employee wishes to engage" (p. 31). They added that this "point could be pursued easily in an educational setting by allowing employees free access to any of the courses offered by the institution" (p. 31).

Organizations which are committed to TQM encourage their employees to enroll in as many classes as possible, because they recognize the link between personal learning growth and development and organizational learning growth and development. Senge (1990a) wrote quite extensively on this subject when discussing the relationship between personal mastery and team learning. Unfortunately, many organizations falsely assume that people do not want to learn.

> Learning organizations are possible because, deep down, we are all learners. No one has to teach an infant to learn. In fact, no one has to teach infants anything. They are intrinsically inquisitive, masterful learners who learn to walk, speak, and pretty much run their households all on their own. Learning organizations are possible because not only is it our nature to learn but we love to learn. (Senge, 1990b, p. 4)

Deming's fourteenth point is to take action to accomplish the transformation. Starting the process is the most difficult step. According to Deming, top managers must be fully committed to embark on the journey for the long term or it is destined to fail. The question is, how to begin? Walton (1986) wrote: "Follow the Shewhart Cycle. In Japan, it is called the Deming Cycle because it was Dr. Deming who introduced it. Some refer to it as the PDCA Cycle for Plan, Do, Check, Act. Today it is a staple of the planning process" (p. 47).

Deming felt that in order to begin the TQM journey, an organization should utilize what he referred to as the Shewhart Cycle. He felt that the first step in any improvement process was to first totally understand the current way things are being done. Far too often managers would try to change the way something was done without understanding the strengths or weaknesses of the current method. The first step in improving quality is to organize appropriate teams to understand the various processes within an organization. From there, an organization should determine its mission, determine its customers, and then identify its critical processes. Deming (1986) described the Shewhart Cycle or what is known as PDCA (plan, do, check, act) as follows:

> Step 1: What could be the most important accomplishment of this team? What changes might be desirable? What data are available? Are new observations needed? If yes, plan a change or a test. Decide how you will use the observations.
>
> Step 2: Search for data that could answer the questions propounded in Step 1. Or, carry out the change or test decided upon, preferably on a small scale.
>
> Step 3: Observe the effects of the change or test.
>
> Step 4: Study the results. What did we learn?
>
> Step 5: Repeat Step 1, with knowledge accumulated.
>
> Step 6: Repeat Step 2, and onward. (p. 88)

As one can see from Deming's description, the continuous process improvement cycle is never ending. Further, he felt that everyone in the organization must be headed in the same direction. "Dr. Deming stressed that it is not just constancy of purpose, but consistency as well. It is important, he said, for people to work together with a mutual understanding of the foregoing Thirteen Points and how to accomplish them. Otherwise, they will go off in different directions, well meaning but misguided, diluting their efforts and sometimes working at cross purposes" (Walton, 1986, p. 88).

Deming has been very influential in the field. As noted, several colleges and universities have used his principles as guidelines, yet little research has been done on whether using his model works any better than any other model.

Philip Crosby. Crosby is considered one of the leaders in the area of quality improvement. After working for fourteen years at ITT and consulting for a variety of businesses, he concluded that virtually every business in America was a problem organization. In 1979 he founded the Philip Crosby Associates and the Crosby Quality College, which by 1986 approximately 35,000 executives and managers had attended. "General Motors owns over 10% of Crosby's stock and has set up its own Crosby school, as have IBM, Johnson & Johnson, and Chrysler" (Garvin, 1986, p. 7).

Crosby's view of quality is somewhat unique. Crosby (1979) wrote that quality means "conformance to requirements and that quality management is a systematic way of guaranteeing that organized activities happen the way they are planned" (p. 19). Crosby believed that if a worker strictly adhered to making something according to the requirements, then he or she was doing quality work. The focus on the customer is of primary importance to Crosby, but he believed that it is management's responsibility to determine what and how something should be made. Crosby was at odds with Deming and Juran who believed that those involved in doing the job should also help set the requirements and be involved in defining the process.

Crosby's philosophy is at odds with most of the TQM literature, especially with respect to the role of the manager. Crosby's approach is much more Theory X oriented, as he felt that managers should set the standards for employees and tell them what to do.

According to Crosby, management is primarily responsible for setting the requirements and for determining the needs of potential customers. While Crosby generally focused on the organization as a whole, he felt that it is imperative to start with the top managers to help correct the problems. Crosby offered a 14 point program for quality improvement. Garvin (1986) summarized Crosby's approach as follows:

> It emphasized prevention over detection, and focused on changing corporate culture rather than on analytical or statistical tools. The program was designed as a guide for securing management commitment and gaining employees' involvement through actions such as Zero Defects Day. Crosby believed every company should tailor its own defect prevention program; nevertheless, the goal should always be zero defects. In this process top management played a leadership role; quality professionals played a modest but important role as facilitators, coordinators, trainers, and technical assistants, and hourly workers were secondary. (Garvin, 1986, p. 6)

Crosby believed that an organization must go through fourteen sequential steps in order to inject quality into the organization. His fourteen point plan is summarized as follows.

Step 1. Management commitment: "The first action that must take place is for management of the company to take a moment to understand what is needed, and then make the decision themselves that they indeed want to improve" (Crosby, 1979, p. 149).

Step 2. Form the quality improvement team: Management should form a team of supervisors or department heads to oversee the improvement process.

Step 3. Quality measurement: The purpose is to provide "a display of current and potential non-conformance problems in a manner that permits objective evaluation and corrective action" (Crosby, 1979, p. 169).

Step 4. Determine the cost of quality: Crosby felt that the cost of quality includes the cost of scrap, rework, covering warranties, service, the cost of inspection, engineering changes, purchase order changes, quality control labor and other costs of doing things wrong. He believed that the cost of quality should not exceed 2.5% of sales.

Step 5. Quality awareness: Everyone in the company must understand the importance of product conformance. Further, everyone in the company must be committed to promoting the quality reputation of the company through whatever publicity means are possible.

Step 6. Take corrective action: These opportunities for correction should have been identified in the previous steps.

Step 7. Zero defect planning: The quality improvement team should "list all the individual action steps that build up to Zero Defect day" (Crosby, 1979, p. 198).

Step 8. Supervisor training: The team should identify all the training that is needed in order to implement the quality improvement program.

Step 9. Zero Defects Day: The purpose of the day is "to create an event that will let all employees realize through a personal experience, that there has been a change" (Crosby, 1979, p. 207).

Step 10. Goal setting: Crosby felt that everyone individual in the organization should set improvement goals for him or herself and the groups to which each person belongs.

Step 11. Error cause removal: The employees are provided "a method of communicating to management the situations that make it difficult for the employee to meet the pledge to improve" (Crosby, 1979, p. 215).

Step 12. Recognition: Crosby believed in the importance of publicly recognizing those who have contributed to the quality improvement effort.

Step 13. Quality councils: The people who spearhead the quality improvement teams should meet regularly to share problems and ideas.

Step 14. Do it all over again. Like Deming, Crosby felt that the quality improvement is a never-ending process.

It is this researcher's view that Crosby's approach is not very well suited for higher education because of his belief that quality means "conformance to requirements" which are determined by management based upon the needs of potential customers. This approach would be problematic in higher education, because there is no consensus on what these standards should be. Further, because of the tradition of academic freedom and a host of other reasons, it would be impossible, and probably not desirable either, for administrators to force all faculty members to teach the same content in a given course in the same way. Also, because of the diversity inherent among universities, and the consequent differences in purpose, and in some cases goals, there is little agreement on which stakeholder's needs are most important.

Joseph Juran. Another leader in the field, Juran took a more micro approach to quality issues. In 1979 he established the Juran Institute and his clientele has included Xerox, Du Pont, Texas Instruments, and Monsanto.

Hunt (1992) wrote "the focal point of Juran's quality management philosophy is the firm's individual product or service, not the organization per se" (p. 65). Juran (1988) defined quality as "fitness for use" (p. 5). When Juran wrote about fitness for use, he emphasized that a product or service must not only provide satisfaction to the customer, but it must also be free from defects over the product's entire life.

> Note that product satisfaction and product dissatisfaction are not opposites. Product satisfaction is why customers buy the product. Product dissatisfaction is why they complain. It is quite possible for a product to have no deficiencies and yet be unsaleable because some competing product has a better performance. (Juran, 1988, p. 5)

He believed that fitness for use has five major dimensions on which customers judge a product: quality of design, quality of conformance, availability, safety, and field use. "To achieve fitness for use, Juran developed a comprehensive approach to quality that spanned a product's entire life -- from design through vendor relations, process development, manufacturing control, inspection and test, distribution, customer relations, and field service" (Garvin, 1986, p. 4).

Juran felt that in order to attract the top manager's attention, a firm should use a quality accounting system which identified all the costs associated with defective products. The costs of quality could be broken into the following major categories: internal failure costs (the costs from product defect before shipment to the customer), external failure costs (costs associated with defects found after shipment to the customer), appraisal costs (the costs associated with discovering the condition of the products and raw materials), and prevention costs (the costs associated with preventing defects).

Juran wrote that an organization should go through a series of sequential steps in order to institute a quality program. Juran's Breakthrough Sequence is summarized below.

Step 1. Breakthrough in attitudes: Managers must first demonstrate that a change is needed, then create a climate conducive for the quality improvement process.

Step 2. Identify the vital few projects: Juran wrote that a Pareto analysis should be utilized to identify the vital few processes that can lead to the greatest improvement. Juran felt that 80% of the quality problems could be solved by identifying those 20% of the processes which were leading to the defects.

Step 3. Organize for breakthrough in knowledge: Juran felt that a steering group as well as a diagnostic group should be formed in order to address the quality issues in the organization.

Step 4. Conduct the analysis: The diagnostic group should determine the causes of quality problems within the organization. As part of the process, the group should determine whether the cause of defects are operator controllable or management controllable. "A defect is operator controllable only if it meets three criteria: operators know what they are suppose to do, have the data to understand what they are actually doing, and are able to regulate their own performance" (Hunt, 1992, p. 71).

Step 5. Determine how to overcome resistance to change: Juran felt that people are often very reluctant to change and that the best way to get people to change is to emphasize to employees the need for the change.

He also believed that getting people to change required much more then just presenting these employees with rational arguments as he understood the social aspects of a change process.

Step 6. Institute the change: "Departments that must take corrective action must be convinced to cooperate. Presentations to those departments should include the size of the problem, alternative solutions, the cost of recommended changes, expected benefits, and efforts taken to anticipate the change's impact on employees. Time for reflection may be needed, and adequate training is essential" (Hunt, 1992, p. 71).

Step 7. Institute controls: Controls must be set up to ensure that the system continues to improve.

Juran's model has been used primarily in industry because of the model's emphasis on statistical quality control. Juran emphasized that quality means "fitness for use" which is determined by a product's design, the degree to which the product conforms to the specifications of that design, and the reliability of that product. These standards are determined by a quality council which should be composed of top management.

While this model could work in higher education, it would be difficult to implement because it requires that a quality council agree on specifications and standards which are not as clear cut in education, as they are in industry. Also, Juran emphasized the importance of quality councils which should be made up of top management. For this to work in academia, a dean or college president must be willing to empower a group of administrators and faculty members to deal with quality issues. In turn, those empowered must be willing to make quality issues a priority.

While each of the three leading gurus has his own specific approach, most practitioners in the field have advised that it is best to be flexible and do whatever works best for one's own organization since each organization is unique. No one has documented this fact though.

The models presented by the three leaders in the field have been widely utilized in a variety of settings. Despite this fact, no empirical study has ever examined whether Crosby's, Deming's or Juran's model works best in one setting over another, or whether one model is best suited for higher education. Further, no one has actually documented whether a university using Crosby's, Deming's or Juran model's is any more successful than a university using its own model.

TQM: How to Implement and What To Expect

It is important to have a strategic plan when embarking on a TQM process. Brigham (1993) wrote TQM is most effective when it is a centrally planned part of the organization's forward thrust, a thrust that requires top level leadership, that's built around an intense commitment to customers, and that emphasizes big improvements in core processes" (p. 45). Hiam (1993) suggests that "the core set of TQM process elements are training, customer focus, employee participation and empowerment, quality planning and direction, leadership, and teamwork" (p. 35). He felt that these elements must be present to insure that TQM will work.

While there are a variety of approaches for starting a TQM program, generally, the first step recommended is to determine the organization's current status. People at Motorola refer to this process as determining the as is state, which is done through a variety of tools such as Pareto charts and flow charts. The quality experts at Motorola (Jim Robertson, personal communication, June, 7, 1992) emphasize that an organization cannot figure out "what" or "how" to change unless the organization first determines where it is currently at. Brigham (1993) described this approach as follows: "Organizations start the process by conducting a thorough diagnosis of the organization (this can often take several months), with data drawn from customer groups, employees, and middle management to assess current organizational practices. Values, mission, and vision statements are also reworked. Finally a strategic quality plan emerges that sets company-wide performance goals and targets critical processes for first address". (p. 45)

A crucial part of this process entails surveying current customers according to Brigham, 1993, and others (Ceridwen, 1992; Coate, 1989; Corts, 1992a; Crosby, 1979; Deming; 1982; Hiam, 1993; Hunt, 1992; Juran, 1988; Seymour, 1992 and Spanbauer, 1992). As should be obvious, the only way an organization can truly satisfy its customers is to first understand their wants and needs. Most of the same authors commented that until an organization actually surveys its customers, it really doesn't know what its customers want.

Once the organization has determined 'where it is at' and what its customers want, the next step is to determine which processes or areas should be addressed first. The general belief, according to Deming (1986) and Juran (1988), is that an organization should attempt to improve the few critical processes which can have the greatest impact on the organization. Coate (1989), on the other hand, wrote that it is more important to choose simpler processes which are easier to improve in a relatively short period of time. He felt that, for psychological reasons, it is more important to be successful at something small, then to try to tackle something complex which might take many months to complete. He also felt that there is a learning curve involved and that it is important to start small.

An organization should not expect all employees to jump on the quality band wagon immediately as any kind of change takes time. Even if some members of an organization accept this new philosophy, it is not easy to change the culture of an entire organization. Generally, where TQM has been attempted, there was an initial resistance to its acceptance. In fact, most of the experts (Crosby, 1979; Hunt, 1991: Walton, 1990) felt that it took a minimum of three to five years for the culture of TQM to really take hold in an entire organization. This is also true for any change in a corporate culture. The time it takes for it to be accepted within a particular part of the organization, however, is much shorter.

Brigham (1993), who is the director of the Continuous Quality Improvement Process at the American Association for Higher Education, wrote that higher education could learn a great deal from the mistakes of industry with respect to the implementation of TQM programs. He wrote that what's gone wrong in implementing TQM reflects the following points of agreement.

> *Lack of leadership.* Many companies encounter early trouble because, having heard of TQM commotion and excitement, they leap in with little understanding of what total quality entails and of why it differs from traditional management. . . . Without executive leadership setting the strategy and championing the cause TQM efforts suffer, moving in fits and starts that ultimately can drown out even those units or teams that have produced impressive results. . . .
>
> *Misunderstanding of perception.* One mistake is to bring in employees too early, providing them with initial training tools and philosophy but not with an immediate opportunity to use them. . . .

*Obsession with process.* If you focus on the basis processes of the organization, some TQM champions argue, the results will take care of themselves. But the danger of such a focus is that companies take their eye off the results that the process improvements are supposed to yield. . . .

*Failure to include the customer.* Finally, many companies have concentrated all their efforts on improving internal processes with little or no regard for the relationships between those processes and the organization's ultimate customers. (p. 44)

Senge (1990b) believed that one of the primary reasons why there is so much resistance to TQM and why a company often experiences an initial buy-in but then resistance is because managers at all levels are forced to give up much of their authority as part of empowering workers. Many of the managers who resist this new philosophy are those who have fought their way up through the organization in a quest for power and authority and now must give up some of what they have been striving for years to achieve. Senge (1990b) addressed this issue when he wrote:

Limits to growth structures often frustrate organizational changes that seem to be gaining ground at first, then run out of steam. For example, many initial attempts to establish "quality circles" fail ultimately in U. S. firms, despite some initial progress. Quality circle activity begins to lead to more open communication and collaborative problem solving, which builds enthusiasm for more quality circle activity. But the more successful the quality circles become, the more threatening they become to the traditional distribution of political power in the firm. Union leaders begin to fear that the new openness will break down traditional adversarial relations between workers and

> management. . . . Managers, on the other hand, are often unprepared to share control with workers whom they have mistrusted in the past. (p. 99)

No one has documented though whether it is even possible to get controlling managers to change the way they manage, or if it is possible, how to do so. This is an area that requires further research.

TQM Research Findings

Despite this massive movement towards TQM, very few empirical studies have actually been completed on the effectiveness of using TQM. While major corporations have claimed in the popular press that embracing quality has led to dramatic improvements in the bottom line, there is very little data to prove this, and in fact, some of the results of the few research studies that do exist are conflicting.

Robert Kaplan of Harvard University gave the keynote address at the 1991 Total Quality Forum and spoke about the lack of research in business and engineering schools on the topic of quality.

> To find out what's going on in research in quality at these schools [business and engineering colleges], I went to the Baker Library at Harvard to review operations management journals. I looked at all the issues published by four leading journals in 1990. Management Science published 12 issues containing a total of 95 articles, none of them on quality. Operations Research published six issues in 1990 containing 110 articles, none of them on quality. In seven issues of the Journal on Operations Management published in 1989 and 1990, there were 37 articles, none on quality. . . . Apparently, quality is not yet part of the research agenda for our business schools. (p. 6)

Not everyone is convinced that the quality efforts have actually worked. In fact, the results are mixed. Brigham (1993) wrote:

> The best evidence to date that TQM works come from a May, 1991 U. S. GAO report that examined the impact of TQM on the performance of United States companies that were among the highest-scoring applicants in 1988 and 1989 for the Malcolm Baldridge Award. In nearly all cases, these companies achieved better employee relations, higher productivity, greater customer satisfaction, increased market share, and improved profitability. (p. 45)

Rick Tetzeli (1992) reported that while all companies that comprise the Fortune 500 list of companies have implemented some sort of quality program, only 36% of the 500 executives who participated in an Arthur D. Little survey "believed that quality programs had improved their competitiveness" (p. 13). He also reported that "a poll by the Rath and Strong consulting firm found that 38% of senior managers at 95 corporations gave their quality efforts a failing grade" (p. 12). Tetzeli added:

> So, what separates the winners? The CEO. Rath and Strong President Dan Ciampa and others say the research proves that a quality program works only when the chief executive visibly backs it. Says Ciampa: "A quality effort that doesn't have such leadership is a recipe for disaster." (p. 12)

Hiam (1993) just completed one of the most extensive research studies to date about the usage and impact of TQM. His research is known as a meta-analysis and was sponsored by the Conference Board. Hiam (1993) summarized his methodology as follows:

> Studies were identified for analysis through a multi-step search and review process. First, leads were collected through a search of academic literature, review of press reports on TQM for the past five years, and review of the publications lists of relevant professional associations and organizations. More than 50 leads were identified . . . . Finally, each study was examined to see if it met the following criteria:
>
> - a focus on TQM practices of organizations;
> - results based on a sample of multiple organizations;
> - information provided concerning the nature of the TQM practices studied; and
> - no obvious and major flaws in technology.
>
> The resulting list of twenty studies reflects a lack of formal academic research on TQM. The largest share, 45 percent, is by business membership organizations. The second largest share, 25 percent, is by consulting firms. Only 15 percent are formal, published academic studies. (p. 6)

The report added that while the results of these studies were often mixed, certain patterns were found to emerge.

> Quality initiatives were on the rise. . . . A long and variable list of changes in management practices and corporate culture is associated with TQM. . . . TQM is not, as sometimes stated, a short term fad or waste of money. . . . TQM efforts are often, but not always, considered by executives to have a beneficial effect on their firm's performance. . . . The specific combination of techniques defined as TQM varies from study to study and company to company, and these variations in approach appear related to the

> success of TQM efforts. None of the studies reviewed provides any substantial evidence that TQM is having a negative impact on company performance. . . .
>
> In summary, the many studies of TQM reviewed for this report suggest that a substantial segment of large and mid-sized companies have made significant investments in new TQM defined approach to management, that a range of managers report significant benefits in a range of performance measures, that a smaller but significant share report resulting profit improvements, and managers do not generally report negative results for TQM. (pp. 5-6)

According to Hiam (1993) the "findings do not provide much in the way of specific conclusions about how TQM ought to be pursued" (p. 34). The twenty studies identified a wide range of implementation strategies and that no one approach to TQM could be universally applicable. "In fact, few of the study authors present their findings as general prescriptions, and most would argue there will never be a single, guaranteed TQM recipe" (p. 34).

Hiam (1993) did report that certain elements were generally found in organizations which reported success with TQM. "This analysis suggests that the core set of TQM process elements are training, customer focus, employee participation and empowerment, quality planning and direction, leadership, and teamwork" (p. 35).

Given the mixed track record of TQM, the question remains, why is TQM growing in popularity? It is hard to justify on the basis of performance alone. One of the primary reasons that TQM is growing in popularity is that American consumers, in general, now demand higher quality products. The decline of General Motor's market share is just one example of this trend.

Today, most Americans perceive Japanese products to be of higher quality and, in turn, believe that Japan's success is primarily due to Deming and others involved in the quality movement.

Another reason for the popularity of TQM is that intuitively it makes sense. Most managers view the core elements of TQM as logical and reasonable.

TQM and Higher Education - Who Is Involved?

The movement in higher education towards TQM continues to snowball. The author has personally either reviewed written documents or heard presentations by representatives from the following colleges and universities about the implementation of TQM on their campuses: Babson College, Duquesne University, Emory University, Fordham, Fox Valley Community College, Harvard University, Jackson Community College, Maricopa Community College District, Miami University, Oregon State University, Regis University, Southern Methodist University, Samford University, St. John Fisher College, University of Arizona, University of Chicago, University of Michigan, University of Minnesota, University of Pennsylvania, and the University of Wisconsin. Sherr and Teeter (1991) identified another eighteen colleges, universities, or community colleges involved in the movement, including Carnegie Mellon University, Colorado State University, Columbia University, Florida State University, Illinois Institute of Technology, Pepperdine University, University of North Carolina, and the University of Wyoming.

Another study by Seymour and Collette (1991) mentioned another one hundred universities doing some aspect of TQM. As is obvious, many schools have jumped on the band wagon.

TQM in Education - The Results

Most school administrators believe that the implementation of TQM has been well worth the effort based upon improvements in customer satisfaction, the time to complete various processes, and in the reduction of costs, according to Seymour and Collette (1991). Spanbauer (1992) and Harris and Baggett (1992) reported the success of TQM at Fox Valley Technical School and Samford University. The quality program at Oregon State University has also been extremely successful, according to Coate (1991). McWilliams (1991) wrote:

> In just the first weeks of a project to revamp how it assigns sponsored research and bills companies for it, the University of Pennsylvania recouped $5 million of the $18 million owed it in corporate research charges. At St. John Fisher College . . . enrollment information is now mailed in four days vs. six weeks previously. (p. 145)

Seymour and Collett (1991) surveyed 22 universities and asked the participants at these schools whether, from a cost-benefit standpoint, TQM had been worth it. They wrote:

> As might be expected, the answers to this question fall into several broad categories. One can be called "it's too early to tell," a second is "unconditional yes," and the third is "conditional yes." The obvious omission is anything that seems to suggest that the answer is no; the costs have been too great for what we have gotten out of it. (p. 24)

Seymour and Collett (1991) wrote that one of the greatest benefits of TQM was the intrinsic benefit felt by the participants. Hunt (1992) also wrote about the benefits derived from empowering employees.

> In many companies, employees, by design, are doers, not thinkers. They are expected only to perform to minimum standards. In "Quality First" companies, on the other hand, all employees are expected to solve problems, participate in team building efforts, and generally expand the scope of their role in the organization. The goal of employee empowerment is to stop trying to motivate workers through external incentives, as is the case in traditional practices, and build a work environment in which all employees take pride in their work accomplishments and begin motivating themselves from within. (p. 25)

Some universities on the verge of failure have also turned to the model. As an example, according to Charlier (1991), ten years ago, Regis University had fewer than 1,000 students and was about to go under. The new President David Clarke took office and "made a leap of faith. . . . . Education, he decided, was a service industry" (p. 1). Ten years later after implementing a TQM program, "the college bustles with 8,000 students" (p. 1).

Other organizations decided to implement TQM, not because of their need for survival, but because they thought they could do much better than they had in the past. The Fuqua School of Business at Duke University, the University of Chicago and Harvard University are examples of universities that were involved in TQM for that reason ("Taking on the TQM challenge," 1992, p. 32). Each of these schools concluded that its efforts were worthwhile, according to the article.

The Approaches and Lessons Learned From Successful Colleges and Universities

Rather than attempt to compare and contrast all the various approaches used by the above mentioned universities, this writer will summarize the implementation approaches used by four radically different colleges or universities which claim to have been very successful in their efforts. These four are Oregon State University, the University of Chicago Graduate School of Business, Fox Valley Community College, and Samford University. These four were chosen not only because of their diversity and their purported level of success, but also because, over the last three years, the researcher has attended at least half a dozen conferences on TQM in higher education organized by different entities and in just about all instances representatives from these institutions were selected to present their approaches to the attendees. While this is not scientific evidence that the approaches of these colleges or universities represent the best methods, it is indicative of what other universities are paying to hear since the size of these conferences ranged from no less than 100 participants to well over 500 attendees from universities all over the world. The conferences have been sponsored by such diverse entities as Michigan State University, the American Assembly of Collegiate Schools of Business (AACSB), Noel Levitz Associates, Quality Alert Group, GOAL/QPC, and Graduate Management Admission Council (GMAC).

Oregon State University. Oregon State University (OSU) started its TQM journey in 1979. Coate (1991) described the various phases the University went through in its quest for improved quality:

Phase one: Explored total quality management. The purposes of phase one "were to create a critical mass of top management people who would understand what TQM is and why it might be of use to the university who would be willing to test the concept in the university" (Coate, 1991, p. 27). During this phase, top administrators visited a number of companies which were successful at TQM. Also, the university brought in Deming to explain how it might embark on a TQM program.

Phase two: A pilot study is done in one area of the university.

Phase three: Define customer needs. The university began quality function deployment "which is an organized system that identifies and ranks customers needs and translates them into university priorities" (Coate, 1991, p. 30). The university identified all its internal and external customers and then conducted surveys to determine these customer needs.

Phase four: Adopt the breakthrough planning process. According to Coate, the breakthrough (Hoshin) planning process has five major steps, which include defining one's mission, understanding customers, identifying critical processes, stating the vision, and identifying priority breakthrough items. Hoshin planning is a Japanese strategic planning process which develops vision statements indicating where the company should be in five years.

Phase five: Perform breakthrough planning in the divisions.

Phase six. Form daily management teams. The teams were the heart of TQM and the organization was able to get better solutions when people worked together . Team members played specific roles.

> The team leader, typically the supervisor, is responsible for planning meetings, establishing constraints, distributing agendas in advance, keeping minutes, communicating with the sponsor, and ensuring that the team completes its action plans. The facilitator makes problem

> solving suggestions, helps the team stay focused, provides just in time training on the problem solving process, and ensures that everyone has a chance to participate. The team member attends all meetings, contributes ideas, collects data, recommends solutions, and helps to implement them. (Coate, 1991, p. 34)

Each team then followed a "ten step problem solving process designed to provide a common technique and language for process improvement" (Coate, 1991, p. 34). The steps are summarized as follows: Step one: Identify and select the most important opportunity for improvement. Step two: Determine the key customers and the services provided them. Step three: Select the most important issues that customers said need improvement. Step four: Identify and flowchart the key process. Step five: Decide what aspect of the process to measure and set goals for improvement. Step six: Explore the probable causes of the problems and the barriers to improvement. Step seven: Gather data on the probable causes and obtain a benchmark to compare the data to. Step eight: Evaluate the data and show it pictorially. Step nine: Brainstorm and develop permanent solutions and then implement these solutions while monitoring the performance. Then the changes are adopted if they work. Step ten: If the problem is solved, the organization standardizes the solutions as normal operating procedures. (Coate, 1991, pp. 34-35)

Phases seven and eight : Initiate cross functional pilot projects and then implement cross functional total quality management in order to improve areas that overlapped among divisions.

Phase nine: Set up reporting, recognition, and awards systems.

Coate believed that the successful implementation of TQM at Oregon State University depended on the observation of six principles: support from the top; finding a quality champion; acting, rather than researching TQM to death; forming teams; breakthrough planning and starting on the service side first. He felt that OSU had been very successful, as it had saved millions of dollars and increased customer satisfaction.

The University of Chicago Graduate School of Business. In the early 1980s the University of Chicago Graduate School of Business (Chicago GSB) started teaching TQM in its MBA and Ph. D. programs. Harry Roberts, a professor spearheading the quality movement at the University of Chicago, (personal communication, January 18, 1993), described the Graduate School of Business involvement with TQM; it is summarized by this investigator below.

In 1988, the Chicago GSB started doing large scale assessment of its product and service levels. In 1989, Roberts and others started getting students involved on what they referred to as, the Continuous Improvement Committee (CIC). The CIC provided students with a direct avenue for implementing change as CIC members worked with administrative staff to identify specific areas needing improvement and then suggested ways to make such changes. During 1989, the Chicago GSB also started the Suggestion Forum which allowed students, staff and faculty members the opportunity to identify areas where they felt improvements could be made within the college. In 1990, the Chicago GSB hired a full-time quality coordinator who then formed the Quality Steering Committee, which was charged with developing an overall strategy and focus for the school's quality program. In 1991, the Chicago GSB started its actual training programs and began its first improvement projects. In 1992, quality was finally incorporated into the planning process.

Roberts added that, as part of the planning process, the Chicago GSB first: identified who its customers were; defined its overall mission; delineated its vision which was more specific than the mission statement and identified its critical processes. From there, individual quality teams, which included faculty, staff, administrators, and students were formed and trained to address such areas as the curriculum, teaching improvement, research improvement, and administrative operations. He felt that the University had profited immensely from its efforts.

According to W. Koozer, the Quality Coordinator at Chicago GSB, (personal communication, January 18, 1993), the GSB has used TQM to work on a wide range of administrative projects including the admissions process, the phone system, copy center usage, planned giving, gift acknowledgments, and many others. TQM was used quite extensively in the classrooms by professors seeking to improve their teaching methods. Most teachers reported that the effort had improved their student teaching evaluation scores.

While there were many things that the GSB would do differently if it were to start the process over again, such as: provide more follow-up training; create a better communication vehicle; and do a better job monitoring the improvement processes; Koozer said that, overall, he was very pleased with the effort and felt that it was well worth it from both a cost-benefit standpoint, as well as from a customer satisfaction standpoint.

The Chicago GSB successes to date included: a better understanding of its critical processes and the roles people played; improved morale; reduced cycle time for gift acknowledgments; an improved phone system; an improved admissions filing system; better teacher ratings; and a much more comprehensive planning process.

Koozer commented that the successful implementation of TQM requires a strong customer focus, a commitment from top leaders, a program consistent with the institution's mission and goals of the university, an understanding of all critical processes, an understanding of the basic quality tools, a focus on continuous improvement, and employees who were involved and unafraid to speak up when things were not perfect.

When asked how an institution should get started, Koozer outlined the steps as follows:

1. Clarify the mission and vision of the school.
2. Determine how TQM can help.
3. Establish an overall committee to guide progress.
4 Determine key processes.
5 Determine key customers.
6. Develop measures and measurement systems.
7. Develop an ongoing review process.

Fox Valley Technical College. Fox Valley Technical College (FVTC) initiated its quality program in 1985. While Oregon State University's TQM plan was shaped by Deming's philosophy, FVTC's plan incorporates much of Crosby's philosophy. In fact, the President of FVTC and several board members were trained by Crosby and his associates. FVTC has been so successful that it recently formed an alliance with Noel Levitz Centers to form the National Quality Academy which is intended to serve as a training center for other colleges and universities involved with TQM.

The FVTC model is a sixteen step strategy which is a more micro-operationally oriented then Oregon State's model. Spanbauer (1992), President of FVTC, described the model as follows:

1. Demonstrate Management Commitment.

Management has the power to make decisions that will create a quality organization. Their commitment must be assured first . . .

2. Establish a Total Quality Leadership Council.

A Total Quality Leadership Council needs to be established very early to define the process and to develop its framework. . . .

3. Determine the Cost of Quality. . . .

Careful determination and a continual monitoring of the cost of quality is essential to the process, providing a critical measure of its success.

4. Provide Education and Training.

All members of the organization need to be educated in the background of the quality movement and the fundamentals of a quality improvement process. . . .

5. Identify Roles and Establish Performance Requirements.

Employees need an opportunity to identify their role in the process so that they can immediately begin to implement quality in their day to day work. . . .

6. Implement a Quality Communication System. . . .

7. Measure and Set Goals.

Quality theorists offer a variety of approaches to measurement, but all agree that continuous measurement is essential. Goals should be set, based on measurement. . . .

8. Identify and Eliminate Problems.

For the improvement process to work, obstacles to getting the job done right the first time must be removed. . . .

9. Research and Develop New Initiatives.

Research is the foundation for planning and prevention. . . .

10. Create a Structure for Employee Involvement.

An opportunity for every employee to participate in the quality improvement process must be provided. A primary strategy to achieve participation is the establishment of teams.

11. Establish Accountability. . . .

Valid requirements that have been agreed upon and articulated must be met every time. Personal and process accountability procedures need to be developed and strictly adhered to.

12. Launch a Customer Revolution.

Every successful quality improvement process has at its heart an obsession with customer satisfaction. The efforts of every employee must be ultimately targeted at establishing, meeting, or exceeding customer requirements.

13. Recognize, Reward and Celebrate. . . .

14. Conduct Quality Audits.

An independent audit of the process is essential. Internal measures will provide information on the success of the process. An external audit will provide an additional, crucial perspective.

15. Link to the Community.

A quality process, developed and implemented with the understanding and support of local business, industry, education, and government, has a greatly increased chance of succeeding. . . .

16. Strive for Continuous Improvement. (Spanbauer, 1992, pp. 163-165)

As can be seen, FVTC's approach is very top down and goal oriented because of the influence of Crosby. Crosby's approach might work better in a community college environment than at a four year university, although no one has researched this. The reason that one approach might work better than another is because generally you have a different type of faculty member teaching at two year colleges than you do at universities where research is also important.

Samford University. Another institution that has been closely associated with the quality movement is Samford University in Birmingham, Alabama. Samford's program was also significantly influenced by Deming, according to Hull (1992). Samford started its quality improvement process in 1989 and spent the first year focusing on what is known as M-C-P-V-V which stands for mission, customers, critical processes, values and vision. Holmes (1992) noted that the University of Michigan took an almost identical approach.

Samford's approach required that it first clarify the mission of the university and who its customers were. According to Hull (1992), this took over six months and required considerable debate among the faculty members and administrators. The critical processes of the university were then determined, and these became the starting point for the actual improvement process. As part of the improvement process, each team needed to identify its purposes or goals.

Harris (1992) wrote that once the university went through this lengthy process, the university then focused on improving each process within the university utilizing the Shewhart-Deming improvement cycle referred to as PDCA or plan, do, check, act. Harris (1992) wrote that "ideally this Shewhart-Deming improvement cycle rolls continuously in every process throughout the institution, reflecting constancy of purpose toward improvement of every service and product" (p. 11). The actual effort should be done within the context of teams.

Harris felt that, without any doubt, the university had benefited from TQM. He noted that the effort not only saved the university money and led to greater customer satisfaction, but was also consistent with the Christian heritage of his school (personal communication, January 18, 1992).

Summary. These schools used four different approaches, yet each felt that its program was successful. At OSU, FVTC, and Samford, the presidents of the universities were all involved from the start. This made the processes much easier, as the presidents were willing to commit the time and resources needed for the plan to succeed. At the University of Chicago Graduate School of Business, the effort was actually started by some faculty members who later convinced the Dean of its importance.

Two of the universities used Deming as a model, while FVTC used Crosby as a consultant. All of the colleges and universities did have a quality coordinator though. While there were a variety of similarities and differences, all of the institutions felt that they were successful. What can be gleaned, is that so long as the basic core principles are present, TQM can work in a university setting.

## TQM and Leadership

A key component of successful TQM companies has been the commitment of the chief executive. Robert Galvin of Motorola, Edwin Artzt of Procter and Gamble, and James Robinson of American Express, to name just a few, have all been closely identified with the TQM efforts of their companies.

Most authors have insisted that without the active commitment and backing of top managers an organization cannot successfully implement TQM (Barker, 1992; Barrow, 1993; Chaffee and Sherr, 1992; Crosby, 1979; Deming, 1986; Dew, 1993; Dibiaggio, 1989; Fendt & Vavrek, 1993;

Halverson, 1993; Harris, 1992; Holmes, 1992; Hull, 1992; Johnson, 1992a; Senge, 1990a; Seymour, 1992; Spanbauer, 1992; Walton, 1986; and Williamson, 1993). These authors felt that since TQM required a complete philosophical shift, top managers must be committed.

While every quality expert claims that quality does not cost money in the long run, the organization must commit a great deal of up-front time and money towards implementing a TQM process. This is one of the primary reasons why the organization's executives must be committed to the process.

Rost (1992) defined leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p. 102). There are several common threads between TQM and leadership which will be briefly discussed. For a detailed review, the reader should see Barker (1992), who integrated the leadership views of Burns (1978), Rost (1991), and Foster (1989) with the quality movement.

There are several ways in which TQM and leadership are similar. Both are based upon multidirectional influence relationships. Leadership and TQM both tend to be critical of the status quo and encourage individuals to question why they are doing what they are doing. Both require that leaders be educative and empowering. Symbolism and creating a new culture with new values are also important, while politics and conflicts are viewed as having the potential to be beneficial rather than negative forces. Both TQM and leadership encourage leaders and followers to focus on their mutual purposes and both involve a pursuit or practice as MacIntyre defined the word.

Both practicing leadership and incorporating TQM vary from setting to setting. As Henrickson (1992) wrote: "while the universal properties of leadership can be identified, the form leadership takes in each culture will vary" (p. 6).

Henrickson wrote:

> As a cultural expression leadership is a dynamic, ethical process by which leaders and followers form collective relationships, which create socially meaningful structures to meet human needs by utilizing social, political, linguistic, symbolic and generative resources. I believe the lengthier definition is needed in order to identify the parts or components of leadership which I delineate below, but I also use a more simplified or operational definition: Leadership is purposeful change to meet human needs. (pp. 6-7)

While none of the proponents of TQM have defined TQM as "purposeful change to meet human needs," it is doubtful that anyone would argue with that as a working definition. Very little research has been done comparing what goes on in TQM teams with Rost's (1992) definition of leadership. Most of the focus has been on what the "leader" or manager must do, rather than on the relationship between the people involved in the change effort. It is my belief that what some people call "team work" and what others call "leadership" might be, in fact, the same phenomenon.

Despite the fact that most of his work has dealt with systems thinking and building learning organizations, Peter Senge has become closely associated with the TQM movement. Deming and Senge have done a great deal of work together because both have felt that in order for an organization to be successful at TQM, it must be what Senge calls a "learning organization." Other authors have written about the close link between organizational learning and TQM (Barrow, 1993; Deming, 1986; Joiner, 1990; Nadler, 1989 & Stata, 1989).

Senge (1990a) wrote that the role of leaders is to build learning organizations. Leaders must play new roles in order to accomplish this transformation. "Leadership is intertwined with culture formation. Building an organization's culture and shaping its evolution is the unique and essential function of leadership" (p. 10). The critical role of leaders is in helping to design the organization or shape its culture, teaching, and finally serving the members of the organization. As a designer, the leader should help followers build a shared vision.

"Leadership in a learning organization starts with the principle of creative tension. Creative tension comes from seeing clearly where we want to be, our vision, and telling the truth about where we are, our current reality. The gap between the two generates a natural tension" (Senge, 1990a, p. 9). One of the most important roles of a leader is to build shared vision. This shared vision represents the governing ideas of the enterprise including its mission and core values.

Senge also wrote about the importance of leaders serving as teachers. "Leaders as teachers help people restructure their views of reality to see beyond the superficial conditions and events into the underlying causes of the problems -- and therefore to see new possibilities for shaping the future" (Senge, 1990a, p. 12). Leaders must encourage other members of the organization to quit focusing on quick fixes and instead focus on the core processes or issues in an organization. One of the primary impediments in implementing TQM is an organization's often unconscious refusal to focus on the long-term consequences of its actions.

The role of a leader is also to serve as steward, according to Senge. "Leaders' sense of stewardship operates on two levels: stewardship for the people they lead and stewardship for the larger purpose or mission that underlies the enterprise" (Senge 1990a, p. 12). One of the primary benefits of TQM is making employees feel better about themselves and their jobs, as well as actually providing better quality products and services to society.

> Leaders engaged in building learning organizations naturally feel a part of a larger purpose that goes beyond their organization. They are part of changing the way businesses operate, not from a vague philanthropic urge, but from a conviction that their efforts will produce more productive organizations, capable of achieving higher levels of organizational success and personal satisfaction than more traditional organizations. (Senge 1990a, p. 13)

Some people question whether what Senge described represents an unrealistic ideal or something actually attainable in an organization. William Hull, the Provost of Samford University, has been able to take Senge's and Deming's philosophies to heart and transform Samford University. His university has been extremely successful. The following excerpts from a speech he presented at his university should give the reader a flavor of his views:

> It is important to grasp the implications of the Deming method for an understanding of leadership and followership. On the one hand, it makes leaders absolutely crucial as keepers of the dream, definers and renewers of an enduring sense of purpose, and provides of the resources for its achievement. . . .
>
> If the leadership role is primarily that of a change agent, then a key function of the leader is to define purpose in such a way that priorities may be determined. Without a clear sense of intentionality, institutions and individuals alike are pulled in every direction and immobilized by competing claims. The leader helps followers

> understand who they are as the basis for deciding what to do. . . . People want to "become what they are" but need someone who can point them to their fullest potentialities. The leader not only articulates this vision but provides practical guidance for translating dreams into action, ideals into reality, purposes into plans. . . .
>
> Nothing so unites a diverse group as a clear sense of mission and direction. Followers who differ widely with each other and with their leader may nevertheless be forged into a unified force by a shared purpose. The form which the organization takes may be that of a hospital or a school or a church, but its content is always that of a social entity that knows (1) who it is, (2) where it is going, (3) how it will get there, and (4) why it will be worth the effort. Leadership takes place whenever that kind of followership results. (Hull, 1990, pp. 3-4)

## Conclusion

Most researchers believe that a cultural transformation is necessary for the successful implementation of TQM, but there has been very little research on how this might be achieved. One of the purposes of this case study is to document what factors both enhance and / or inhibit a cultural transformation directed towards TQM within the College.

Deming wrote about the importance of driving out fear and making people feel secure in their positions, yet there has been little written on how this fear manifests itself in the work place. The university, under study has been forced to lay off a significant number of employees over the last several years due to budgetary cuts and a declining enrollment. Many of the staff people, and a few faculty members, who survived the first few rounds of cuts remain fearful of losing their jobs. This study will examine whether this "fear" influences the successful or unsuccessful efforts of the teams, and the College in general.

The research has indicated that the role of the leader is critically important. Some of the studies have suggested that TQM can only succeed if leaders hold Theory Y assumptions. As part of this study, this researcher will look to see if this pattern holds true. This researcher attends to observe the Dean and others in authority positions in an attempt to see how their actions affect the process. What should be interesting is not only what the Dean says and does, but also how these words and actions are perceived by others, since perceptions are reality.

Very little has actually been written on what make TQM teams work. As part of this case study, the researcher seeks to document what factors actually contribute to both the successes and/or failures of the initial TQM teams. By documenting the process both as a participant observer and by interviewing the participants at the end of the process, the researcher believes that this research will aid future teams set up within the College, as well as at other institutions of higher education.

As is evident, a great deal has been written about TQM in general, but very few authors have documented what happens as a college embarks on its TQM journey. While there have been several historical accounts of what has happened at various universities, no one has actually started out a-priori to describe and analyze what happens when a college implements TQM. Further, while other researchers have focused on which TQM steps and tools appear to be the most effective, little research has focused on the human elements involved in the journey. These elements include how influence patterns develop and why team members act and feel as they do.

This researcher intends to document the process from the participants perspective, to determine what aspects they felt were worthwhile and what aspects they would change. Rather than look at the process after the fact and from a distance, this research wil! document what goes on inside the College as it unfolds. The research should help fill a void in the literature.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## Qualitative Research

The research methodology used was a descriptive case study which is a form of qualitative research. There are two general research approaches.

> Philosophers of science and methodologists have been engaged in a long standing epistemological debate about how best to conduct research. This debate has centered on the relative value of two fundamentally different and competing inquiry paradigms: (1) logical-positivism, which uses quantitative and experimental methods to test hypothetical-deductive generalizations; versus, (2) phenomenological inquiry, using qualitative and naturalistic approaches to inductively and holistically understand human experience in context-specific settings. (Patton, 1990, p. 37)

Qualitative and quantitative research are based upon different assumptions according to Guba & Lincoln (1981), Merriam (1988), Patton (1990), and Strauss & Corbin (1990). Merriam (1988) explained that traditional research, or what is known as quantitative analysis

> is based on the assumption that there is a single, objective reality--the world out there--that we can observe, know, and measure. . . . From a research perspective, this world view holds the nature of reality to be constant. Confirmation of what is out there is desired; research is focused on outcomes; reliability of measurement is stressed.

> In contrast, qualitative research assumes that there are multiple realities -- that the world is not an objective thing out there but a function of personal interaction and perception. It is a highly subjective phenomenon in need of interpreting rather than measuring. Beliefs rather than facts form the basis of perception. Research is exploratory, inductive, and emphasizes processes rather than ends. . . . One does not manipulate variables or administer a treatment. What one *does* do is observe, intuit, sense what is occurring in a natural setting--hence the term naturalistic inquiry. (p. 17)

Marshall and Rossman (1989) viewed qualitative research as a process "that entails immersion in the everyday life of the setting chosen for study, that values participants' perspectives of their worlds and seeks to discover those perspectives, that views inquiry as an interactive process between the researcher and the participants, and that is primarily descriptive and relies on people's words as primary data" (p. 19).

Patton (1990) stressed that qualitative research emphasizes and builds on ten interconnected themes.

> 1. Naturalistic inquiry: Studying real-world situations as they unfold naturally; nonmanipulative, unobtrusive, and non-controlling; openness to whatever emerges--lack of predetermined constraints on outcomes.
>
> 2. Inductive analysis: Immersion in the details and specifics of the data to discover important categories, dimensions, and interrelationships; begin by exploring genuinely open questions rather than testing theoretically derived (deductive) hypotheses.

3. Holistic perspective: The *whole* phenomenon under study is understood as a complex system that is more than the sum of its parts. . . .

4. Qualitative data: Detailed, thick description; inquiry in depth; direct quotations capturing people's personal perspectives and experiences.

5. Personal contact and insight: The researcher has direct contact with and gets close to the people, situation, and phenomenon under study; the researcher's personal experiences and insights are an important part of the inquiry and critical to understanding the phenomenon.

6. Dynamic systems: Attention to process; assumes change is constant and ongoing . . . .

7. Unique case orientation: Assumes each case is special and unique. . . .

8. Context sensitivity: Places findings in a social, historical and temporal context. . . .

9. Empathetic neutrality: Complete objectivity is impossible; pure subjectivity undermines credibility; the researcher's passion is understanding the world in all its complexity--not proving something, not advocating, not advancing personal agendas, but understanding; the researcher includes personal experience and empathic insight as part of the relevant data, while taking a neutral non judgmental stance toward whatever content may emerge.

10. Design flexibility: Open to adapting inquiry as understanding deepens and/or situations change; avoids getting locked into rigid

designs that eliminates responsiveness; pursues new paths of discovery as they emerge. (pp. 40 -41)

The research conducted herein is a form of qualitative research and is consistent with these characteristics. This effort has utilized naturalistic inquiry and inductive analysis, as I took a holistic perspective in examining a dynamic and unique situation.

Case Study Research

This dissertation is a descriptive case study. According to Merriam (1988) "though the *case study* is familiar to most people, there is little agreement on just what constitutes case study research" (p. 1). Yin (1984) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used" (p. 22). Wilson (1979) wrote that the case study is a process "which tries to describe and analyze some entity in qualitative, complex, and comprehensive terms not infrequently as it unfolds over a period of time" (p. 448). Similar to this view, Jorgensen (1989) wrote that "case studies stress the holistic examination of a phenomenon, and they seek the separation of components from the larger context to which matters may be related. The case study may focus on a culture, society, community, subculture, organization, group, or phenomenon such as beliefs, practices, or interactions, as well as almost any other aspect of human existence" (p. 19).

Becker (1968) wrote that the purpose of a case study is "to arrive at a comprehensive understanding of the groups under study. . . and to develop general theoretical statements about irregularities in social structure and process" (p. 233). Patton (1990) wrote that qualitative methods such as case studies "are particularly oriented toward exploration, discovery, and inductive logic. . . . An approach is inductive to the extent that the researcher attempts to make sense of the situation without imposing preexisting expectations on the phenomenon or setting under study" (p. 44).

In this dissertation, I have utilized Merriam's (1988) definition of a case study. She wrote, "the qualitative case study can be defined as an intensive, holistic description and analysis of a single entity, phenomenon, or social unit. Case studies are particularistic, descriptive, and heuristic, and rely heavily on inductive reasoning in handling multiple data sources " (p. 16). Merriam added that:

> *Particularistic* means that case studies focus on a particular situation, event, program, or phenomenon. The case itself is important for what it reveals about the phenomenon and for what it might represent. (p. 11)
>
> *Descriptive* means that the end product of a case study is a rich, thick description of the phenomenon under study. *Thick description* is a term from anthropology and means the complete, literal description of the incident or entity being investigated. . . . Case studies include as many variables as possible and portray their interaction, often over a period of time. Case studies can thus be longitudinal. They have also been labeled holistic, lifelike, grounded and exploratory. (p. 13)
>
> *Heuristic* means that case studies illuminate the reader's understanding of the phenomenon under study. They can bring about the discovery of new meaning, extend the reader's experience or confirm what is known. (p. 13)

> *Inductive* means that, for the most part, case studies rely on inductive reasoning. Generalizations, concepts, or hypotheses emerge from an examination of data--grounded in the context itself. Occasionally one may have tentative working hypotheses at the outset of a case study, but these expectations are subject to reformulation as the study proceeds. Discovery of new relationships, concepts, and understanding, rather than verification or predetermined hypotheses, characterizes qualitative case studies. (Merriam, 1988, p. 13)

A number of authors share these views. With respect to case studies being particularistic, Shaw (1978) wrote that "case studies should concentrate attention on the way particular groups of people confront specific problems, taking a holistic view of the situation" (p. 2).

Stake (1981) concurred about the importance of having rich description.

> Most case studies feature descriptions that are complex, holistic, and involving a myriad of highly isolated variables; data that are likely to be gathered at least partly by personalistic observation; and a writing style that is informal, perhaps narrative, possibly with verbatim quotation, illustration, and even allusion and metaphor. (p. 75)

With respect to the importance of inductive reasoning, Stake (1981) wrote that it is often very beneficial not to have any preconceived notions or theories because often "previously unknown relationships and variables can be expected to emerge from case studies leading to a rethinking of the phenomenon being studied. Also, insights into how things get to be the way they are can be expected to result from case studies" (p. 13).

For the most part case studies are inductive rather than deductive. Goetz and LeCompte (1984) explained the difference: "Purely inductive research begins with the collection of data--and builds theoretical categories and propositions from relationships discovered among data. In contrast to deductive researchers who hope to find data to match theory, inductive researchers hope to find a theory that explains their data" (p. 4)

Yin (1984) believed that an exemplary case study had five general characteristics. First, the case study should be significant and important to not only the researcher, but others as well. Second, the case study should be complete. The "complete case is one in which the boundaries of the case--that is, the distinction between the phenomenon being studied and its context--are given explicit attention" (p. 147). Also, a complete case study should "demonstrate convincingly that the investigator expended exhaustive effort in collecting the relevant evidence" (pp. 147-148). Third, an exemplary case study must consider alternative perspectives and rival propositions. Fourth, the case study must display sufficient evidence so that "a reader can reach an independent judgment regarding the merits of the analysis" (p. 149). Finally, according to Yin, the case study must be composed in an engaging manner. "To produce such a case study requires an investigator to be enthusiastic about the investigation and to want to communicate the results widely" (Yin, 1984, p. 151).

Why the Case Study Format?

Yin wrote that the case study is the preferred research strategy when "a 'how' or 'why' question is being asked about a contemporary set of events over which the investigator has little or no control" (p. 20). This study examined a process that unfolded over time. While the facilitator had some input over what occurred during the study, most of what evolved could not be manipulated or controlled from a true experimental design point of view. As Yin (1984) pointed out:

> The case study is preferred in examining contemporary events, but when the relevant behaviors cannot be manipulated. Thus the case study relies on many of the same techniques as a history, but it adds two sources of evidence not usually included in the historian's repertoire: direct observation and systematic interviewing. (p. 19)

The study contained a great many variables and unknowns due to the complexity and newness of what the Dean was trying to accomplish in his change effort, and also because the TQM process was not the only change occurring in the College of Business. Jackson and Morgan (1978) believed that the case study is generally the best approach for studying organizational processes and change when there are several uncontrollable variables.

Throughout the TQM process, one of the primary goals of the researcher has been to provide data to the Dean so that future quality improvement efforts could be more efficient. Merriam (1988) indicated that the qualitative case study is a particularly suitable method for dealing with critical problems of practice and extending the knowledge base of various aspects of education. . . . A case study approach is often the best methodology for addressing these problems in which understanding is sought in order to improve practice" (p. xiii).

## Site Selection

For the last ten years, the researcher has had an informal working relationship with Richard Brady, the Dean of the College of Business at West Coast University. (The names of the university and all the participants have been changed because of the sensitive nature of this study). In addition to serving as Dean of the College, Brady is involved in the American Assembly of Collegiate Schools of Business (AACSB) which is the primary accreditation body for business schools in the United States. Within the past six months, the AACSB has radically changed its standards to focus more on quality. Because of this new focus by the accreditation body, Brady has become very interested in the total quality movement, especially as it relates to colleges and universities.

In October, 1992, Brady decided to formally establish a student services task force. At about the same time, the researcher approached him about possible dissertation topics related to total quality management in the WCU College of Business. It was agreed that an interesting study would be to look at the implementation of a continuous improvement process in the area of student services. Brady indicated that areas needing improvement included the admissions process, the multitude of advising processes, career counseling and placement, and class scheduling. At that time, Brady asked the researcher to act as facilitator as well because of the researcher's training and background.

At the same meeting, the Dean also presented his vision for the College which included a focus on continuous quality improvement and an environment where students are truly treated as customers. He encouraged the researcher, in his role as facilitator, to challenge the status quo and do whatever was necessary to improve the services provided to students. Also, the Dean stated that he fully understood that one of the key elements in a TQM process is empowering employees. He stated that as part of this process, he actively was seeking the input of the team members and that he would go along with any recommendations that the teams presented, assuming they were well-documented and thought out and that the College had the personnel or funding for any changes requiring additional resources.

Data Gathering Techniques

Case studies require that the researcher utilize a wide variety of data collection means including personal observation, interviewing, and reviewing written documents including surveys and questionnaires, as well as correspondence between individuals.

The researcher gathered data from attending all but a few team meetings. At each of these meetings, notes were taken on what transpired. After each meeting, these notes were expanded since the researcher was unable to adequately record everything that actually transpired during the meeting. These notes included such things as how much each person contributed, the significant comments made, the actions taken, as well as personal impressions about what had transpired.

The researcher reviewed all written documents prepared by the task force and teams. These documents include such things as agendas, meeting notes, flow charts, Pareto diagrams, cause and effect diagrams, surveys, as well as personal correspondence in the form of letters and E-mail.

Throughout the process, the researcher interviewed, both formally and informally, many of the participants in order to get their views and feelings on the process. At the end of the process, the researcher formally interviewed each of the key participants regarding his or her perceptions of the process, what he or she learned from it, what he or she would have done differently, what he or she would change if the person would participate on other teams, his or her feelings about the training (or lack of training), as well as other questions which addressed my research questions. Also, each interviewee was encouraged to add anything about the process that he or she felt was of interest or relevant to not only this study, but also to the College. Further, each interviewee was asked about what more could have been done and what he or she would like to see happen and be accomplished in the future.

The following list represents all the sources of data utilized by the researcher:

1. Personal observation.
2. Informal conversations with all team members.
3. Structured interviews with all team members.
4. Cause and effect diagrams.
5. Surveys.
6. Flowcharts.
7. Written correspondence from the team members to the researcher.
8. Written correspondence between some of the participants.
9. Memorandum written by the Dean to faculty members and staff.
10. Interviews with faculty members and staff not on the teams.
11. Drafts of the final three chapters were given to several of the participants who were asked to critique them and provide additional information. Their feedback provided additional data.
12. Reports generated in the Electronic Board Room.
13. Written material prepared by team members.
14. Material prepared by the teams including mission statements, training manuals, and so on.

## Human Instrument

In qualitative inquiry, the researcher is the primary instrument. For this reason, a great deal of the validity of any qualitative research depends upon the person doing the study. The use of a human being as a research instrument is actually seen as an advantage by many authors (Guba and

Lincoln, 1981; Merriam, 1988; Patton, 1990; Strauss and Corbin, 1990; Yin, 1984). Guba and Lincoln (1981) commented that since the

> inquirer is himself the instrument, changes resulting from fatigue, shifts in knowledge, and co-optation, as well as variations resulting in differences in training, skill, and experience among different "instruments", easily occur. But this loss in rigor is more than offset by the flexibility, insight, and ability to build on tacit knowledge that is the peculiar province of the human instrument. (p. 113)

Merriam (1988) also stressed the importance of using humans as instruments in qualitative research or what she referred to as naturalistic inquiry.

> Naturalistic inquiry, which focuses on meaning in context, requires a data collection instrument sensitive to underlying meaning when gathering and interpreting data. Humans are best suited for this task--and best when using methods that make use of human sensibilities such as interviewing, observing, and analyzing. (p. 3)

## Participant Observation

### Action Science and the Praxis of Leadership

In this study I was both the researcher and a key participant in the change process. One of the primary reasons for this situation was that I deliberately narrowed my choice of research projects to those which both served a useful purpose and improved some aspect of society. Since I knew I would be devoting thousands of hours over several years to this project I only wanted to do something meaningful to both the College of Business and myself. The opportunity to improve the quality of life for students at the university was thus a perfect choice for this dissertation.

While the case study approach was utilized, I did what Argyris, Putnam, and Smith (1985) referred to as "action science". Action science blends theory with practice in an attempt to improve the social condition of some part of society. Argyris, Putnam, and Smith (1985) explained that:

> Action science is an outgrowth of the traditions of John Dewey and Kurt Lewin. Dewey (1929, 1938) was eloquent in his criticisms of the traditional separation of knowledge and action, and he articulated a theory of inquiry that was a model both for scientific method and for social practice. He hoped that the extension of experimental inquiry to social practice would lead to an integration of science and practice. . . .
>
> Lewin was committed to the kind of science that would improve social practice. His early concepts of action research, an activity that involves studying social systems by changing them, were the seeds of action science. (pp. 6-7)

My intent when I started this project was to not only determine whether or not total quality management (TQM) would actually work in the College of Business at WCU, but to actually work with the Dean and others to improve the College.

According to Argyris, Putnam, & Smith (1985):

> 1. Action research involves change experiments on real problems in social systems. It focuses on a particular problem and seeks to provide assistance to the client system.
>
> 2. Action research, like social management more generally, involves iterative cycles of identifying a problem, planning, acting, and evaluating.

3. The intended change typically involves *reeducation*, a term that refers to changing patterns of thinking and acting that are presently well established in individuals and groups. The intended change is typically at the level of norms and values expressed in action. Effective reeducation depends on participation by clients in diagnosis and fact finding and on free choice to engage in new kinds of action.

4. Action research challenges the status quo from a perspective of democratic values. This value orientation is congruent with the requirements of effective reeducation (participation and free choice).

5. Action research is intended to contribute simultaneously to basic knowledge in social science and to social action in everyday life. High standards for developing theory and empirically testing propositions organized by theory are not to be sacrificed, nor is the relation to practice to be lost. (pp. 8-9)

Patton (1990) wrote that the purpose of action science "is to inform action, enhance decision making, and apply knowledge to solve human and societal problems" (p. 12). Action research or what he referred to as "applied research" should be "judged by its usefulness in making human actions and interventions more effective and by its practical utility to decision makers, policy makers and others who have a stake in efforts to improve the world" (p. 12). It should be noted that the principles of action science and TQM are very closely related. In fact, Senge (1990a) commented that the principles of "plan, do, check, act" that Shewhart (1931), and later Deming (1982) stressed, actually evolved from John Dewey. Also, the principles of reeducation, challenging the status quo, managing with data, and improving the social condition are consistent themes in both action science and TQM.

Praxis of Leadership

Related to the notion of action science, the researcher has attempted to incorporate Foster's (1986) philosophy of leadership. He called for the "praxis of leadership. . . . Praxis is the recognition that theory must eventually be located in sensuous human activity. The test of theory is its eventual relevance to improving the human condition" (p.18). Hodgkinson (1983) explained the concept of praxis as follows:

> Aristotle intended the term to mean ethical action in a political context or, simply purposeful human conduct which would be an amalgam of theory (rationality, science) and values (morals, emotions, ethics). Praxis was thus a complex and subtle but none the less essential concept. (p. 54)

Foster felt that leadership should be critically reflective and lead to the creation of a just community. With respect to this dissertation, one of my primary goals has been to challenge the status quo and to attempt to make the College of Business a much more student-oriented institution. In an attempt to both write this dissertation and to practice leadership, I have taken Foster's words to heart and have tried to enact change by working with others. Foster (1986) explained:

> Praxis, in this respect, stands for the ability of all persons to engage in acts of leadership which helps in the transformation of a way of life which incorporates participative principles; leadership, in this regard, is both critical and shared leadership. It is shared because no one individual has the right way; rather leadership is a communal endeavor wherein the direction of the society is discussed and debated. Leadership, in this respect, resides in actions and acts, not in persons or positions. (p. 18)

Leadership must be critically reflective and based on the idea of emancipatory leadership. Foster made the following propositions: "Firstly, leadership involves the demystification (penetration) of structure. . . . Secondly, leadership involves being politically critical and critically educative. . . . Thirdly, leadership is conditioned on language" (pp. 19-22).

With respect to the need to demystify our structures, Foster emphasized the view that over the years we have constructed institutions, organizations, rules and regulations which we now assume to be objective, fair, and real. We assume that what we have created is right/just/correct and, therefore, unchangeable or unchallengeable. As I embarked on this project, I made the assumption that anything was possible with respect to the College. This is consistent with the directives received from Dean Richard Brady.

Foster also emphasized that we, as citizens, have the responsibility to right the wrongs of civilization. Leadership entails questioning the status quo and asking who benefits and who suffers in our society. Leadership entails being critically educative as well. Foster wrote: "The educative use of power is realized in the empowerment of followers, an empowerment which provides the actors themselves the insight and reflection into the conditions of their existence and into the possibilities for change" (p. 21). Throughout the process, in my role as facilitator, I encouraged those involved in the process, especially the women working in the College of Business student services office, to speak out and challenge those in authority when they felt they were being wronged. The researcher continually encouraged team members to challenge the status quo.

In another piece, Foster (1989) presented a similar theme, but said that there "must be at least four criteria for the definition and practice of leadership: (1) leadership must be critical: (2) leadership must be transformative; (3) leadership must be educative; (4) leadership must be ethical" (p. 50). With respect to leadership being transformative, Foster wrote that

> The critical spirit of leadership leads naturally to the notion of transformation. Leadership is and must be oriented toward social change, change which is transformative in degree. . . . Perhaps the most crucial and critical role of leadership [is] to show how new social structures continue, in a sense, the basic mission, goals and objectives of traditional human intercourse, while still maintaining a vision of the future and what it offers. (p. 52)

Again, throughout the process, I attempted to practice leadership, while at the same time do meaningful research.

The Role of the Researcher as Participant Observer

As indicated, I was a participant observer throughout the process. Over time, I facilitated and participated less because the team members took more active roles. The primary reason for this was that the team members were also full-time employees of the College and thus, they had primary responsibility for improving the areas addressed. On the class scheduling team, I did very little facilitating, as the Dean set the direction for the team. On the College advising team, together with Dr. Suzanne Johnson, I facilitated the process. Johnson, a faculty member, has many years experience as facilitator and crisis counselor. Her areas of expertise include organizational development, and social psychology. Johnson also served as leader of the University-wide advising team. As leader, she set the direction for the team and was responsible for much of what occurred.

In that group, I was primarily a observer and did very little facilitating due to the nature of that group.

As facilitator and trainer I played several roles. Dyer (1972) summarized these roles as follows:

> 1. Initiator of diagnostic training concepts. The trainer is responsible for helping the group see its own processes and problems and provide much of the curriculum for the learning experience. . . .
>
> 2. Diagnostic observer at appropriate time and level. One goal of all laboratory trainers should be to advance the skill of learning how to learn so the group members become their own diagnosticians. . . .
>
> 3. Innovator of learning experiences. As a group progresses, the trainer can, and should, use his training resources in a number of ways. . . .
>
> 4. Arbiter of group standards. A group will usually develop its own standards. The trainer will find others related to establishing a learning climate, forestalling behavior which may really "hurt" another, and developing methods appropriate to the training objective. These may not be necessary. Nevertheless, at times the trainer may want to suggest standards to govern the level of diagnosis or of personal attack; at other times he may want to protect (in a sense) the group or the individual from unproductive self punishment, especially if he sees some long range consequences of such an attack. (pp. 61-62)

My role and the roles of the other team members will be described in great detail in Chapter Four. The history of the teams provided in that chapter will allow the reader to visualize what transpired and understand my role as researcher.

Strengths and Weaknesses of Participant Observation

"Case studies conducted by way of participant observation attempt to describe comprehensively and exhaustively a phenomenon in terms of a research problem" (Jorgensen, 1989, p. 20). Becker and Geer (1970) argued that participant observation is the most comprehensive of all types of research strategies. As part of this study, I was present and to a certain extent involved, in almost all of the team meetings. It was important to be present as an observer because it would have been difficult to obtain as much data by just interviewing people or by reading survey responses or other written materials after the fact. As Patton (1990) pointed out:

> What people say is a major source of qualitative data, whether what they say is obtained verbally or through an interview or in written form through document analysis or survey responses. There are limitations, however, to how much can be learned from what people say. To understand fully the complexities of many situations, direct participation in and observation of the phenomenon of interest may be the best research method. (p. 25)

Throughout the research one of my concerns was that some of the participants would not be open and honest. Thus, it was very important to have several points of reference and to triangulate anything that might have been said, or in certain instances, not said. (More on this topic will be discussed in the section on validity and reliability).

It was obviously important that as a researcher, I try to be totally objective. Further, it was also important that the people I interviewed and came into contact with did not lie or try to deceive the researcher.

Jorgensen (1989) stressed that "lies, exaggerations, intentional and unintentional deceptions (including self-deception), . . . lack of or severely limited knowledge, misunderstandings, and the like all present serious problems to the collection of accurate and dependable information" (p. 69). He added that the quality of one's data is substantially improved when the participant observer is able to establish and sustain trusting and cooperative relationships with the people in the field. Throughout the process, this was of primary importance to me. Jorgensen also stressed that it was important to not always accept at face value what someone said and that often people do knowingly try to deceive the participant observer. He explained:

> Knowledge of a person's social identity . . .provides grounds for developing trust and cooperation, as well as for evaluating the information they [the people in the field] furnish. In judging the truthfulness of what people tell you, it is important to ask: How do they know this? Do they have an interest in the information? Is the account consistent with their experience? Is the information otherwise believable? Can the data be confirmed or disconfirmed by other people? (p. 69)

These issues were of concern to me because some of the participants, including myself, had a vested interest in the findings of this research. Further, I had the sense that some of the participants early in the process were guarded in what they said to me because they believed that I was a "spy" of the Dean and that whatever they said or did would be reported to him. By the end of the research project, I believe that I had built a high enough level of trust with the team members, that when I interviewed the participants, I received honest and open feedback and answers.

While being a participant observer has many advantages, it also involves many problems including the possibility that personal beliefs and values might bias the results. Yin (1984) wrote:

> The major problems related to participant-observation have to do with potential biases produced. First, the investigator has less ability to work as an external observer and may, at times, have to assume positions of advocacy roles contrary to the interests of good scientific practices. Second, the participant-observer is likely to follow a commonly known phenomenon and become a supporter of the organization or group being studied, if such support did not already exist. (p. 63)

This was definitely of concern to me, and it is my belief that I dealt with these issues in a professional manner. This topic will be addressed in a later section dealing with validity and reliability.

## Preparing the Case Study Report

### Data Analysis

Data collection and data analysis occur simultaneously in qualitative research (Glaser & Strauss, 1967; Guba and Lincoln, 1981, Lincoln and Guba, 1985; Merriam, 1988; Yin, 1984). Merriam stressed that:

> Data collection and analysis is a simultaneous activity in qualitative research. Analysis begins with the first interview, the first observation, the first document read. Emerging insights, hunches, and tentative hypotheses direct the next phase of data collection, which in turn leads to refinement or reformulation of one's questions, and so on. (p. 119)

It was important to have a general analytical strategy when beginning this case study. One approach to data analysis is "develop a descriptive framework for organizing the case" (Yin, 1984, p.107). In order to derive meaning from the data, I constructed a matrix of categories and placed all the relevant evidence within such categories. These major categories corresponded with each of the research questions spelled out in an earlier section. Once all the information was placed into the various arrays, I looked for units of relevant meaning which allowed me to interpret the data. From there, I provided explanations or answers which seemed plausible based upon the data. As part of this process, I looked for rival propositions and then analyzed the evidence in terms of these rival propositions. As part of this process, I presented possible hypotheses to several of the participants, as well as other people, who, in turn, provided feedback. The participants were also asked to provide rival hypotheses.

Patton (1990) stressed that while a part of qualitative analysis requires that the researcher be very creative, there is also a technical side to analysis "that is analytically rigorous, mentally replicable, and explicitly systematic" (p. 462). To ensure the integrity of the research, it was incumbent upon me to, at a minimum, test for rival explanations, look for negative cases, and triangulate.

> There are basically four kinds of triangulation that contribute to verification and validation of qualitative analysis: (1) checking out the consistency of findings generated by different data--collection methods, that is methods triangulation; (2) checking out the consistency of different data sources within the same method, that is triangulation of sources; (3) using multiple analysts to review findings, that is analyst triangulation; and (4) using multiple perspectives or theories to interpret the data, that is, theory/perspective triangulation. (Patton, 1990, p. 464)

I continually sought rival explanations, looked for negative cases, and triangulated all sources of data. Having several of the team members read the final three chapters and provide comments proved extremely helpful, as there was a general consensus that the theories and conclusions presented were accurate.

With respect to triangulating my results, I used a multitude of data collection methods including personal observation, surveys, and interviewing. From there, I compared and cross checked the consistency of information and my conclusions at different times and by different means. It meant "(1) comparing observational data with interview data; (2) comparing what people said in public with what they said in private; (3) checking for the consistency of what people said over time; and (4) comparing the perspectives of people from different points of view" (Patton, 1990, p. 467).

Developing Theory

According to Merriam (1988) "thinking about one's data--theorizing is a step toward developing a theory that explains some aspect of educational practice and allows one to draw inferences about future activity." (pp. 140-141). Theorizing is defined as "the cognitive process of discovering or manipulating abstract categories and the relationships among those categories" (Goetz & LeCompte, 1984, p. 167). Merriam wrote that speculation is the key to developing theory in a qualitative study. "Speculation involves playing with ideas probabilistically. It permits the investigator to go beyond the data and make guesses about what will happen in the future, based upon what has been learned in the past about constructs and linkages among them and on comparisons between the knowledge and what is presently known about the same phenomena" (p. 141).

"Concepts are conceptual labels placed on discrete happenings, events, and other instances of phenomena. . . Concepts are the basic unit of analysis in the grounded theory method. One can count raw data, but one can't relate or talk about them easily. Therefore, conceptualizing our data becomes the first step in analysis". (Strauss and Corbin, 1991, p. 63.) Throughout the process, I continually compared incident with incident, event with event, idea with idea, etc. in order that similar phenomena were all grouped under the same category. A "category is a classification of concepts. This classification is discovered when concepts are compared one against another and appear to pertain to similar phenomenon" Strauss and Corbin, 1991, p. 63).

From these categories, I then looked for "properties" which described each category. For example, one of the categories which arose was "Theory X Management style." It was defined by the properties of the team members "not feeling trusted", "not being given responsibility", "not being listened to", "not feeling empowered", and so on.

"Hypotheses are the suggested links between categories and properties" (Merriam, 1988, p. 142). After sorting the data into categories and creating properties which described the data, I formed working hypotheses which were later tested in order to derive a theory. "Deriving a theory from the data involves both the integration and the refinement of categories, properties, and hypotheses. As the theory solidifies, major modifications become fewer and fewer as the analyst compares the next incidents of a category to its properties" (p. 144).

As an example of what was done, I proposed that because the staff employed in the student services office had been managed under a Theory X style for so long, they would refuse to believe that their efforts as part of the team would make any difference. From there, I constructed a theory that, unless these workers perceived a new managerial style, they would never buy into TQM.

Composing the Case Study Report

There are a variety of forms that a case study report may take (Yin, 1988; Merriam, 1988). Yin (1988) emphasized that "the presumed preferences of the potential audience should dictate the form of a case study report. . . and the report itself should reflect emphases, detail, compositional forms, and even length suitable to the needs of the potential audience" (pp. 131-132). The audience for this report is both my dissertation committee and interested people at West Coast University. Yin (1988) warned:

> Whatever the audience, the greatest error an investigator can make is to compose a report from an egocentric perspective. The error will occur if a report is completed without identifying a specific audience or without understanding the specific needs of such an audience. (p. 132)

With that advice in mind, I chose a format which demonstrated academic rigor, but was concise and readable enough so that interested parties at WCU would want to read and learn from this report. The first three chapters have been primarily geared with the audience of my dissertation committee in mind. The last three chapters, while consistent with formal dissertation requirements, have been written more in a style desired by those at WCU.

As noted, there are a number of structures which could be utilized to compose a report including the linear analytical, comparative, chronological, theory building, suspense, and unsequenced structures (Yin, 1989). I have chosen to utilize the chronological structure for Chapter Four, which is the history of what happened, and the linear analytical structure for Chapter Five, which answers the research questions set out in Chapter One. Yin (1984) described both formats.

> Chronological Structures:
>
> Because case studies generally cover events over time, a third type of approach is to present the case study evidence in chronological order. Here, the sequence . . . might follow the early, middle, and late phases of a case history. This approach can serve an important purpose in doing explanatory case studies, because causal sequences must occur linearly over time. If a presumed cause of an event occurs after the event has occurred, one would have reason to question the initial causal proposition. (p. 139)
>
> Linear Analytic Structures:
>
> This is a standard approach for composing research reports. The sequence of subtopics involves the issue or problem being studied, the methods used, the findings from the data collected and analyzed, and the conclusions and implications from the findings.
>
> Most journal articles in experimental science reflect this type of structure, as do many case studies. The structure is comfortable to most investigators and probably is advantageous when research colleagues or a thesis or dissertation committee comprises the main audience for a case study. Note that the structure is applicable to explanatory, descriptive, or exploratory case studies. (p. 138)

<u>Validity and Reliability</u>

Of course, credibility in any type of research is extremely important. Patton (1990) wrote that:

> The credibility issue for qualitative inquiry depends on three distinct but related inquiry elements:
>
> 1) rigorous techniques and methods for gathering high-quality data that is carefully analyzed, with attention to issues of validity, reliability, and triangulation;
>
> 2) the credibility of the researcher, which is dependent on training, experience, track record, status, and presentation of self; and
>
> 3) philosophical belief in the phenomenological paradigm, that is, a fundamental appreciation of naturalistic inquiry, qualitative methods, inductive analysis, and holistic thinking. (p. 462)

Because qualitative research is based on different assumptions about the nature of reality than quantitative research, most writers claim that researchers should have different conceptualizations of what the terms validity and reliability mean (Lincoln & Guba, 1985; Merriam, 1988, Patton, 1990; Strauss & Corbin, 1991; Yin, 1984). Lincoln and Guba (1985) proposed the terms truth value for internal validity, transferability for external validity, and consistency for reliability.

Merriam (1988) stressed that it is was important that "researchers and others be able to trust the results of research--to feel confident that the study is valid and reliable. It is hard, however, to assess the validity and reliability of a study without examining its components" (p. 164). Guba and Lincoln (1981) believed that:

> It is difficult to talk about the validity or reliability of an experiment as a whole, but one can talk about the validity and reliability of the instrumentation, the appropriateness of the data analysis techniques, the degree of relationship between the conclusions drawn and the data upon which they presumably rest, and so on. In just this way

> one can discuss the processes and procedures that undergird the case study--were the interviews reliably and validly constructed; was the content of the documents properly analyzed; do the conclusions of the case study rest upon data? The case study, is, in regard to demonstrating rigor, not a whit different from any other technique. (p. 378)

Merriam (1988) stressed that there are six basic strategies to ensure internal validity:

> 1. Triangulation--using multiple investigators, multiple sources of data, or multiple methods to confirm the emerging findings. . . .
>
> 2. Member checks--taking data and interpretations back to the people from whom they were derived and asking if the results are plausible. . . .
>
> 3. Long term observation at the research site or repeated observations of the same phenomena--gathering data over a period of time in order to increase the validity of the findings. . . .
>
> 4. Peer examination--asking colleagues to comment on the findings as they emerge.
>
> 5. Participatory modes of research--involving participants in all phases of research from conceptualizing the study to writing up the findings.
>
> 6. Research biases--clarifying the researcher's assumptions, world view, and theoretical orientation at the outset of the study. (pp. 169 - 170)

All of these strategies were utilized throughout the process. As noted in other sections, triangulation and member checks were used a great deal. Over fifteen months was spent on this research project and I involved the participants a great deal in all phases of the research, especially Richard Brady and Suzanne Johnson. Peer examination occurred with many of the participants who were also trained researchers, as well as with the members of my dissertation committee. Several of the participants also read drafts of the final three chapters and critiqued them. Doing this helped insure the validity of the final document.

Also, at the end of the process I conducted extensive interviews with two faculty members in the College who not only knew all the participants and understood the dynamics within the College, but were also considered experts in the field of total quality management. Both of these faculty members have led seminars, done extensive consulting, and conducted research in the area of TQM. In these interviews I presented my hypotheses and conclusions. Several hours were spent with both faculty members. They both agreed with my conclusions, and also provided additional insights which were incorporated into the final product.

I was also well aware of my own biases, including the obvious fact that I wanted the effort to succeed. I also strongly believe that students are the primary customers of a university, and that one goal of a university should be to treat these individuals accordingly.

Research utilizing participant-observation presents several challenges to all researchers. With respect to reliability and validity, Jorgensen wrote:

> Defined conventionally, reliability refers to the extent to which a procedure, especially measurement, produces the same result with repeated usage. . . . Approaches, like participant observation, that stress concept validity generally anticipate a corresponding decrease in reliability. . . .

> In principle, procedures used in participant observation can be expected to result consistently in the same findings. Yet these methods tend to be uniquely adapted to a particular settings and questions. In practice, consequently it is exceptionally difficult to establish reliability by the conventional process of repeated usage of the technique (as the standard test of reliability of procedures like measurement). . . .
>
> The methodology of participant observation is very much concerned, however, with dependable and trustworthy findings. Viewed in this way, reliability is very much interrelated with validity. (p. 36)

With respect to validity in participant-observation research, Jorgensen (1989) commented that: "questions regarding concept validity in participant observation revolve around whether or not the researcher has been able to gain direct access to the insiders' world of meaning and action. Participant observation, furthermore, requires the researcher to collect multiple indicators (or forms of evidence) regarding key concepts" (p. 37).

In order to help validate the case study, I interviewed most of the participants at the end of the process. During these interviews, I would often say to the person being interviewed: "one team member said this or believes this to be true, do you agree with this?" By doing this, I was able to get a consensus, or at least to understand which people held different opinions.

In order to insure internal validity it was important to review the results with the participants of the study (Lincoln & Guba, 1985; Merriam, 1988; and Yin, 1984). Several of the comments made by the readers were then incorporated into the final document. As Yin (1984) pointed out:

> Such review is more than a matter of professional courtesy. The procedure has correctly been identified--but only rarely--as a way of corroborating the essential facts and evidence presented in the case report. The informants and participants may still disagree with the investigator's conclusions and interpretations, but these reviews should not disagree over the actual facts of the case. If such disagreement emerges during the review process, an investigator knows that the case must be settled through a search for further evidence. Often, the opportunity to review the draft also produces further evidence, as the informants and participants may remember new materials that they had forgotten during the initial data collection period. (p. 144)

External validity refers to the extent to which the findings of one study can be applied to other situations. Concerning external validity, Lincoln and Guba stated that "the naturalist cannot specify the external validity of an inquiry; he or she can provide only the thick description necessary to enable someone interested in making the transfer to reach a conclusion about whether the transfer can be contemplated as a possibility" (p. 316). This research effort was primarily concerned with the implementation of TQM at the College of Business at WCU. Since each college is unique, I do not feel that this single site case study can be generalizable to other institutions in any comprehensive way. As Merriam (1988) pointed out "generalizing from a single case selected in a purposeful rather than random manner makes no sense at all. One selects a case study approach because one wishes to understand the particular in depth, not because one wants to know what is generally true of the many" (p. 173).

In order to attempt to generalize from these findings, I believe that multiple case studies will need to be undertaken at a range of schools to try to determine any patterns that might emerge. In Chapters Four and Five, I have provided as rich a description as possible, and detailed the process as completely as possible so that another researcher or reader could make comparisons with his/her own situation. This is consistent with the writings of Goetz and LeCompte (1984); Lincoln and Guba (1985); Merriam (1988) and Yin, (1984).

Reliability refers to the extent to which findings could be replicated if a study was repeated by someone else. "Reliability is problematic in the social sciences as a whole simply because human behavior is never static" ( Merriam, 1988, p. 170). Rather than use the term reliability, Lincoln and Guba (1985) suggested instead thinking about the dependability or consistency of the results obtained from the data. Merriam (1988) concurred, and stated that "rather than demanding outsiders get the same results, one wishes outsiders to concur that, given the data collected, the results make sense--they are consistent and dependable" (p. 172).

It is unrealistic to think that another person could start this research anew and come up with the exact same results, due to the fact that living systems do not remain static. What I do strongly believe is that another researcher could take the data collected and come up with similar explanations and conclusions. In other words, given what happened at WCU, it is my belief that another independent researcher would be able to reach the same conclusions.

Merriam (1988) provided several techniques to ensure that the research results are dependable including the use of triangulation and providing a clear audit trail so that other researchers "could use the original report as an operating manual by which to replicate the study" (p. 173). For this reason, Chapter Four presents the history of precisely what transpired.

Possible Research Weaknesses

In this study, I was both the facilitator and the primary research instrument. From a research point of view, it would have been much better if I was an outsider observer. While I considered hiring an independent observer to collect some data and do some interviews, I believed that many of the participants would have resented this procedure. Further, I believe that the participants would not have been as open with an "outsider" as they were with me. Also, it is my belief that, because I was part of the process, I was better able to conduct the interviews.

I do not believe that the participants lied or held back much information during the final interviews. In fact, I was actually surprised at how open and frank the participants were. Several people whom I felt might be unwilling to express their feelings were, in fact, extremely open. However, this led to another research weakness: some of what I was told, I was told in confidence, and thus could not report. Overall, this did not make a significant difference with respect to the results, but it did prevent me from providing as much of a "rich description" as I would have preferred.

As a human being, I have personal interests and values which potentially could have biased the research. Throughout the process, I have attempted to remain as objective as possible and have continually asked myself how my personal values might have influenced the research. As Jorgensen (1989) wrote "Personal interests hold potential for new insights and creativity inspired by emotional and intellectual identification with the topic of study. . . . Rather than denying personal interests and values, the methodology of participant observer requires an awareness of how these thoughts and feelings value research" (p. 27). Jorgensen added: "there is no necessary conflict between personal, subjective interests or values and the scientific goal of truth" (p. 27).

Early on in the study, I often had great difficulty keeping my researcher and facilitator roles separate, but as I gained more experience I was able to separate the two quite well. This was done through extensive triangulation as well as coaching by my dissertation committee. As part of this process, after each meeting, I spent over an hour expanding on the notes prepared during the team meetings and adding additional comments. It was at this time, that I tried to make sense of what was happening.

I also had a personal and professional involvement with many of the people in the College, as well as my professional reputation at stake throughout the process. I was fully aware of these potential conflicts, but I do not feel that it biased the study.

Another possible problem with this research is that during the time the study was taking place, there were major changes happening in the College with respect to how the College was organized and who reported to whom. This, of course, affected the dynamics of what transpired.

## Ethical Considerations

The Dean of the College of Business initiated the task force and he attended many of the meetings. The meetings that Brady did not attend were presided over by another task force member designated by the Dean. Each of the team members volunteered for the TQM teams and each was aware of my role as both facilitator and researcher.

Nonetheless, I was given information that was either confidential or which, if published, could be damaging to an individual within the University. When writing up the results of this research, I was very sensitive to these two issues. I did not report anything that could in anyway jeopardize the job of any participant, as it was assumed that each of the team members might read the dissertation, and therefore I did not disclose anything that was overly sensitive to anyone involved. I do not feel that this is any way detracted from the thoroughness or quality of the final report. In writing this report, I have not disclosed the name of the University involved and have used pseudonyms for all the participants.

A summary of the proposal and methodology were reviewed and approved by the University of San Diego's Committee for the Protection of Human Subjects. (See Appendix A). Each of the interviewees signed an informed consent form prior to the interview in conformity to the requirements of the University of San Diego's Committee for the Protection of Human Subjects. (See Appendix B).

## Conclusion

To summarize, the case study methodology was used for this research. As participant observer, I was able to document what transpired. Chapter Four will present a detailed description of what actually happened. It is intended to be purely descriptive in nature. Chapter Five will answer the research questions outlined in the Chapter One and Chapter Six will present the significance of the findings.

# CHAPTER FOUR

# DESCRIPTIVE PRESENTATION OF THE WORK OF THE TEAMS

## Introduction

The goal of Chapter Four is to provide a rich description of what actually occurred at the College so that others will be able to understand what actually transpired. Since this is a single case study, it will allow other researchers and interested parties to compare the situation at West Coast University to their own situations.

The chapter will be divided into sections which will examine the activities of the various teams. There were a total of five different teams at one time or another. There was one team called the "Master Student Services Team" which met three times. This team dissolved and broke into three sub-teams. Originally the three sub-teams were suppose to look at the following areas: the class scheduling process, the advising processes in the University, and the admissions process in the College of Business.

Shortly, after the admissions team started meeting, the team determined that the admissions process in the College was not the most important issue which needed addressing. Part of the reason, was that one person did most of the work. Instead, the team decided that it should look at the interactions of the people and the processes in the College's advising office. Therefore, the admissions team dissolved and the College advising team was formed. That team was composed of all the people working in the College's undergraduate advising office, plus a faculty member and myself.

## Background Information

In October of 1992 I met with Dean Richard Brady about possible dissertation topics relating to the implementation of TQM in the College of Business. At that meeting, I told him that I was interested in the implementation of TQM in academic settings. He told me about his strategic plan for the College for the next two years. He indicated to me that three major areas needed addressing and that he would be forming committees dealing with each of the three areas. The three areas were broken down as follows:

1. The overall mission statement of the college.
2. Curriculum and teaching.
3. Student services.

He told me that the only area that would be appropriate for me to get involved with would be the student services area as the other areas needed to be addressed by the faculty. He then showed me a sheet of paper which outlined what he had in mind for the student services task force. The undated outline read:

> Student Services Task Force:
>
> Charge for Committee: To review the systems in place to serve students -- consistent with the new accreditation standards and an emphasis on quality and the continuous improvement of student services.
>
> Composition of Committee: Faculty, college staff, university staff, departmental staff, undergraduate and graduate students.
>
> 1992-92 Academic Year
>
> Development of a description of the systems that deliver services to students that are provided by the College and University including:

admission, advising, placement, departmental, and other student related services.

1993-93 Academic Year

Analyze current student systems and develop proposals as appropriate to improve student systems including both academic and administrative procedures.

He asked me to provide him with a brief proposal of how to get started. A short time later, I presented Brady with a written outline of what steps should be taken to begin the TQM journey. I also provided him with a few short articles about the TQM efforts at other campuses.

## Master Student Services Team

I met with Brady on November 16, 1992 and he advised me that we should go forward with my plan at the earliest time possible. The formation of the team came about in three ways. Brady asked the Director of University Admissions and Records, the Dean of Undergraduate Studies for the University and the Director of Career Services to participate. He also sent out an invitation to all faculty and staff in the College asking them to volunteer. Finally, he asked two staff members who worked in the college's student services area to participate. Each of the university administrators agreed to participate, three faculty members and one staff member volunteered, and the two staff members asked to participate did so. Two students were asked by one of the staff members to also participate. (All the names of the participants have been changed).

Brady mailed out the meeting notices and coordinated the first meeting. The student services task force met for the first time on December 7, 1992. There were thirteen people in attendance including the Dean, the Director of University Admissions and Records, the Dean of Undergraduate Studies at the university, three faculty members from different departments, a staff person from the School of Accountancy, two students, the College's Undergraduate Admission Coordinator, and the College's Undergraduate Advising Coordinator, and myself. The Director of Career Services was unable to attend the first meeting. It should be noted that once sub-teams were formed, the students were no longer involved. The primary reason that the students quit participating was that it was difficult to get in touch with them to set up meetings. In retrospect, it was probably better that they did not become members of the teams due to the sensitive and confidential nature of what occurred.

At the first meeting, Brady stated that the new accreditation standards dictated placing more emphasis on looking at all processes within colleges of businesses and that this was an area which he felt deserved greater attention in the college. He briefly described his vision for the College and indicated what he would like to accomplish over the next few years. "The goal is to look at students when they enter the university, as they go through, and then when they are put out at the other end. . . . Our goal should be to add value each step of the way."

He spoke about the importance of examining each process and that we needed to measure what we were doing so that we would be able to determine if the college was actually improving. From his comments it was apparent that he understood the general framework of TQM. He also stressed that what we were attempting to do "was less than optimal" since we were only dealing with only business students and not the university-wide population. However, "if our experiment worked, the university might see the college as a leader and might try to implement quality improvements in other parts of the campus."

He emphasized that business schools in general needed to be much more competitive and service oriented in order to maintain the enrollment levels that colleges had experienced in the past. He added that the number of incoming freshman was down across the country and that the budget crisis at WCU had had an enormous impact on FTEs (full time equivalent students) not only at the freshman level but also on the number of students declaring a business major at the upper division level.

In conclusion, Brady added that he hoped to be able to start the process immediately so that by the end of the spring semester

> we can make some progress on some of the student service issues that students face beginning with when they apply and ending with when they have a job. . . . The whole idea of this is to try to get in place an attitude related to our services that put us in a continuous improvement mode so that we can continually look at how we are providing services to our students in hopes of eliminating those things that do not add value; while adding those things that dc add value to the quality of the experience the students are receiving while they are here.

Brady then introduced the various participants described above. Each person had been pre-selected by the Dean based upon his or her role in the College or University; however, all of the faculty members volunteered to participate. As he went around the table to introduce the people, he briefly indicated what each person's role was relative to student services and how each participant fit into the big picture.

Brady then advised the group that I would be serving the dual role of facilitator and researcher. He said that while "this experiment is going to help Jeff fulfill the requirements for his degree, that its primary purpose is to seek meaningful change in the College." Brady gave the group further background information on me and then turned the program over to me.

I started by asking each of the participants how much they knew about TQM. The responses ranged from none to a little, with the exception of the Dean who indicated that he had a good working knowledge of TQM.

I then spoke for about thirty minutes and provided a short overview of TQM and what other colleges and universities were doing in this area. I also outlined for the group what we should attempt to accomplish over the next year.

The following items and points were discussed:

1. Which universities were involved in TQM.

2. What these universities were doing.

3. TQM is a process not a program.

4. Need the participants to "enroll" in the change effort rather than be forced to participant.

5. There is no cook book approach to TQM. The team members must figure it out for themselves.

6. TQM is not just a set of tools, but rather a philosophy.

7. The basic philosophy includes being customer focused and striving for perfection.

8. Organizations have both internal and external customers.

9. TQM makes the following assumptions: The people doing the work know more than anybody else how to do the job. People work better in teams. People can be trusted. People want to be empowered.

10. The importance of working in teams.

11. The importance of not placing blame when trying to improve a process.

12. TQM takes time. Do not expect "quick fixes."

People seemed mildly enthusiastic and willing to embark on the journey. I indicated that the next meeting should take place in the Electronic Board Room. At the end of the meeting, I also distributed a survey form "assessing the organization climate" which I asked the participants to complete for the next meeting.

The next meeting was held on December 14, 1992 for an hour and a half. The meeting notice stated that "the goal of the second meeting is to develop a list of the services that are provided to business students as they process through the University." The members also received an article by Edwin Coate describing how TQM was implemented at Oregon State University.

At this meeting the Director of Career Services was able to attend, but two of the faculty members were absent due to other commitments. A facilitator of the electronic board room began the meeting explaining the capabilities of the technology. This session was done in the board room because of the efficiency and speed with which the group was able to generate the list and because of the anonymity factor. In fact, one of the participants did specifically ask if the inputs were anonymous because this person did not want it known whose areas she was critical of.

The group spent approximately thirty minutes identifying all the student services which are provided or should be provided to students on this campus. Over 120 different entries were inputted by the participants. Following that brainstorming activity, the group spent thirty minutes answering the following question: "Which student services are most in need of improvement and why?" In less than thirty minutes over 130 comments were generated.

The range of services needing improvement stretched across the campus. Those in attendance were very critical of the quality of services provided to the students. In fact, when the question was presented to the group a couple of participants joked "How long do we have?" indicating that they felt that the problems were endless. At the end of the meeting the group agreed that at the next session we would prioritize which areas needed improvement the most so we could move forward and start addressing the most important areas.

The next meeting was held on January 11, 1993 and lasted nearly two hours. The meeting notice indicated that "at this meeting the team will be working on developing a priority list of a few critical processes for further analysis." The agenda which I prepared read:

1. Review the list of **processes** that we identified as needing improvement.
2. Prioritize these **processes** and decide on which few we are going to try to improve at this point. We should try to select **critical processes** which are not overly ambitious. A critical process is defined as one that the university could not live without.
   The reason we should restrain ourselves is that there is a learning curve involved here and further, we need to get our "feet wet" and have some early successes.
3. Review the processes we have selected and develop goals for the teams. For example, some teams may have a goal of saving money, some may be trying to shorten the time needed to do a process, some may be trying to improve the quality of what is provided, or some may try to do all of the above or something else.

> Final note to remember. We are going to determine what processes we are going to work on. The **customer** will advise us what the **problems** are.

When the meeting began, I suggested that the group try to prioritize some critical processes that it would then tackle. Brady suggested that instead the group should develop broader areas and then form teams which would then decide which processes would be addressed. After some general discussion, the group indicated that this approach seemed acceptable. A general list of macro areas was then identified. After reviewing the list of services and some discussion, it was agreed that student services fell under four broad areas: advising, admissions, class scheduling, and career counseling.

The Dean proposed that four teams be set up. The Director of Career Services said that she was uncomfortable with having a separate team for her area because her area had undergone severe staffing reductions and did not have the time or resources to commit to a team devoted to College of Business concerns. She indicated that she would be willing to be part of the advising team since career services fit under that major umbrella. The group concurred which was the only response that made sense given her authority as director of this separate university area.

The team then spent the next twenty-five minutes trying to determine what the goals of the three teams should be. The specific questions brainstormed were: "What is the goal of the class schedule process? What is the mission of student advising? What is the mission of the admissions process?"

At the end of the meeting the participants volunteered for each of the three committees; although Brady did exert some influence with some of the participants as to which teams they should serve on. I recommended that the first thing the teams should do is map out each of the critical processes in each of the student services areas in order to determine where "we were at." This would also allow each of the team members to learn more about various processes as each person was only a part of the "big picture."

People seemed fairly enthusiastic about the meeting. Later, in interviews, some people indicated to me that they were skeptical at this point whether anything would really be accomplished.

## The Class Scheduling Team

The Dean, two faculty members, one staff person from the department of accountancy, the Associate Dean of Academic Affairs and Graduate Studies, and myself comprised the committee. The first meeting of the class scheduling team was held on February 1, 1993 and each team member was present.

I provided the group an educational handout explaining the various roles that team members would be expected to play. These roles included leader, facilitator, member, recorder and time keeper. Also, I provided a handout clarifying how to do flow charting.

When we discussed who would be leader, no one volunteered. The Dean then turned to one faculty member and said; "Why don't you be it?" It appeared that the faculty member reluctantly agreed, although that person told me later that he had no recollection of either being asked, or agreeing to be the leader.

At the meeting, the team mapped out how the various departments performed the class scheduling process. The team determined that there was a great deal of inconsistency between the way each department planned for the upcoming semester(s). It was also noted that the current system was very status quo oriented as the previous class schedule dictated to a great extent future schedules.

We then looked at what constraints existed and what information we would need to improve the process. With respect to the constraints, one team member noted that all the constraints on improving the class scheduling process were internal and thus we should be able to follow through on any changes that the committee recommended.

Then people started talking about what was wrong with the scheduling procedure which was not really the focus or goal of this particular meeting. The group jumped from topic to topic. Some of the comments made included the following: "None of the departments seek customer (student) input when designing the course schedule." "There is no coordination between departments concerning when core courses are offered." "Two classes our majors need to graduate are only offered once a semester and are scheduled at the same time." "Some classes are only offered once a year and it would be nice if students were able to plan out a year or two at a time so it would not take them eight years to graduate." The schedule is status quo oriented -- generally what was offered in the past will be offered in the future unless someone makes a big effort to change it. Further, we have no idea whether the schedule which has been carried over from year to year makes any sense in the first place."

I tried to get the team back on task on several occasions, but the Dean and some of the faculty members controlled the flow of what transpired. I also emphasized that rather than jump to conclusions about what was wrong, we needed to survey the customers (students) and learn from them.

As we were running out of time, I suggested that one of the first things that should be done is to survey students about the current class schedule to get their feedback and input. The team agreed that we should go forward on that idea in the near future.

At the end of the meeting, assignments were made for next meeting. Two people volunteered to talk to the department heads not represented at the meeting to ascertain their procedures. Brady agreed to flow chart what we had diagrammed on a software program which he would "play with and learn." A meeting was set up for the following week, and the people seemed pretty optimistic about the prospects of the team.

The next team meeting was held on February 8, 1993. The team members who were asked to survey other academic departments about how these departments scheduled classes reported that these other departments used similar procedures. The Dean had not had the time to do the flow charts on his computer.

The proposed agenda called for doing a detailed mapping (flow charting) of the various ways that the class schedules were developed. Prior to beginning, the Dean questioned whether it was worth the time to fine tune the flow charts. The group agreed that the real issue was not the time or efficiency involved in doing the actual class-scheduling process, but rather in the decision-making processes and priorities used by the various departments to create the schedules.

Brady asked the group: "What is the goal of the class schedule? In other words, how would we define what the perfect class scheduling process is? . . . What indicators should be used?"

This led to a discussion about what the goal of the class-scheduling process should be. Brady said "that the goal of the class schedule was to deliver the academic programs of the College." A discussion followed, but people generally concurred with the view.

Brady went to the blackboard and wrote the following:

"Indicator Goal"

He said that we would should be able to set objectives or goals and then measure the extent to which the college is meeting these goals based upon certain indicators or criteria. The terms <u>indicator</u> and <u>goal</u> were somewhat confusing to the group. Brady explained the difference: "An indicator might be the number of students satisfied with their progress in meeting the graduation requirements. The goal would be to have some percentage, say, 90% satisfied that they were making sufficient progress towards graduation based upon their particular life situation and objectives. . . . We could do a survey and measure this and see how we were doing."

After further clarification another team member said that "not only should the objective of the class-scheduling process be to deliver the academic programs of the college, but also the facility or room allocation should align with the instructional pedagogy. . . . Each course should be taught in a class room with the technology and seating requirements consistent with the objectives of the department or professor in mind." The question remained how this objective could be measured.

The following indicators or objectives were also suggested:

1. A student's progress towards his or her degree.
2. The student's progress relative to the student's time horizon.
3. The ability of a full-time student, who was both flexible and motivated, to graduate in 4 or 5 years.
4. The percentage of student responses that score above a certain targeted score on a customer satisfaction survey.

5. A 100% matching of rooms, faculty, and class size given the particular class. It was noted that some teaching approaches require chairs that can be moved, etc.

The Dean summarized the discussion and said that it was basically an issue of "what, where, and when." I added that before we tried to set goals for these indicators, it was important to determine "who is the customer and what does the customer expect from the class schedule?" A faculty member added "that many professors feel that the class schedule should fit his/her personal satisfaction rather than the student's schedule." This led to some discussion about the truth of that statement. The general consensus was that each faculty member certainly had preferences when he or she liked to teach, and it required a lot of arm twisting by the department chairs to get him or her to switch. This tied back to the status-quo nature of the class schedule which changed very little from semester to semester, primarily because faculty members get used to their schedules.

Again, I suggested that the team needed to survey the students. I emphasized that TQM required us to manage with data and that the information we required to make decisions needed to come directly from students. I was asked by the Dean to prepare a survey which we planned to pass out to students in some classes to get a rough feel of the attitude of students on the class schedule.

More general discussion followed about how we could best match the needs of the students with the class schedule. I suggested that we could use "Reg-Line" (the computerized registration system) to get some very accurate information if we could get students to call in and tell us what they wanted and when. Again, I stressed that if we could determine the needs and preferences of students, we could design a better class schedule.

Brady then called the head of university admissions who commented that it sounded like an excellent idea and maybe the other colleges would like to do it as well. She was going to check with her programmers to see if it was possible.

At the end of the meeting people seemed very enthused that we could really accomplish some needed changes and make a difference. The next meeting was held on February 13, 1993.

The agenda for the next meeting was set by me and read as follows:

Review of minutes.

Richard will report if he heard from Nancy Rogers on using the Reg-Line.

Jeff will present the student survey. We will revise it and then plan on who we should give it to.

Group discussion - where should we go from here?

General question: assuming we get some good hard data will the departments use it?

General question: why are there no classes on Saturday morning. Has it ever been considered - - it might be a better alternative for some students and faculty members than a night class.

The Dean and Associate Dean were unable to attend as the Dean was involved in university budget meetings and the Associate Dean was out of town. The two faculty members, one staff member and myself went over the survey instrument. Many suggestions were made which I later incorporated into the survey instrument. The group also agreed that we should design a separate survey for faculty members. This was never done though because the team dissolved before it could get to this task.

The members of the team seemed interested in leaving early and since the Dean was not present, the meeting ended after about fifty minutes. It appeared to me that without the Dean present, the dynamics of the group were much different. It seemed as though the group's interest and motivation level "was just not there." At the end of the meeting, I suggested that for the next meeting we should plan to discuss the feasibility of using Reg-Line or some other sort of system such as using scantrons in order to determine the actual demand for classes. The team members felt the idea deserved merit, but seemed to question whether it could be feasibly done.

On February 22, 1993 the team met again. Extensive changes were made to the already revised survey instrument based upon the new input of Brady and the Associate Dean. The team agreed that the survey would be given to all Management 405 students as this class would have majors from all departments and would be composed of all seniors. The meeting was fairly short. Rather than set up a future meeting time at this meeting, it was decided that we would not meet again until after the surveys were completed.

Within a week, I gave the surveys to the department chair of the management department who distributed them to the faculty members teaching these classes. Approximately ten days after that (March 15,) I had all the surveys back and ready to score. At the time, I was quite busy with my own teaching and business schedule as well as with the other two teams who were also quite busy.

Nothing happened for several weeks. I tried to set up a meeting for Monday, March 29, but not enough of the team members were able to make it so that meeting was not held. Spring break was the following week.

On April 12, the first day back from spring break, I gave Brady the results of the survey. (A copy of the survey and the summarized results can be found in Appendix C). I understood that he was going to review the results and then schedule a meeting to discuss them. Even after a couple of calls urging him to schedule a meeting, nothing happened. The team never met again. Brady did send the survey results to the department chairs for their information, but not to the other team members.

On March 19, 1993 Brady **totally** reorganized the administrative structure of the College of Business. The reorganization included combining departments, reassigning personnel, and physically moving people around. The roles and responsibilities of the Dean, Associate Dean, and one of the team members were also radically altered. The Dean was forced to focus a considerable amount of time and attention to the reorganization and his new responsibilities. Brady's interest in TQM remained, but he was no longer able to devote the time to this project and no other person who took the initiative to call another meeting or carry the team forward. In retrospect, I, as facilitator, should have pushed harder for another meeting.

After the demise of the team I interviewed most of the team members. The findings from those interviews are discussed in Chapter Five.

## The Admissions Team

The admissions team was composed of the Director of University Admissions, the Advising Coordinator and Admissions Coordinator of the College, and myself. The committee met for the first time during the first week of February and everyone was present. We briefly discussed what our game plan would be and I explained the importance of first understanding the present admissions processes. Everyone agreed that we should flow chart the various processes that existed in the office. Lisa Miller first explained what she did and began to flow chart the various processes. After some time, it became clear that the processes she was outlining were done solely by her and thus it was not important to take up the time of the whole group to describe what she did. The team decided she would flow chart the various processes as a homework assignment and then present them the following week.

The three participants and myself met again the following week. At this time, Miller presented in some detail what she did. Deborah Lewis then presented an outline of her job functions and began to outline the process. As with Lewis, the processes she described were also done solely by her. In other words, each of the processes which I expected to involve different people and a variety of steps along the way were done from start to finish by one individual. The Director of University Admissions advised that we could save a lot of time on what she did because the processes in her office had already been flow charted by someone in her office. She then handed us three legal size sheets of paper taped together which mapped out every process in her office. The group decided that rather than take the time to study it then, we would review it individually during the week and then discuss it the following week.

Things seemed to be going fairly well and the team members seemed to be willing to try to make the TQM effort work. The Director of University Admissions indicated that she would not have a great deal of time to devote to the team though, since she had many other things going on in her office and with other colleges.

On February 22, 1993 another meeting was held. At the last minute, the Director of University Admissions called and said she could not attend the meeting. The agenda for the meeting called for her to explain what university admissions did. I had expected her to facilitate the group's discussion and since she didn't show it left a void in the meeting.

I said to the two members: "Well, what should we do now?" One of them answered that "we might as well adjourn because everything we are doing is just 'B. S.' as the Dean really does not care what goes on over here." The conversation then turned into a gripe session as the members proceeded to criticize the Dean, Assistant Dean, and some of the other people in the office.

I said that the purpose of TQM was to improve a process and not to point blame at someone. I indicated that we should try to focus on how we can improve the situation, rather than just complain about it.

The participants then clarified for me what each person in the office was responsible for and how they were suppose to interact. I asked for more clarification and they both indicated that each person in the office "did his or her own thing." They also stated that there was not very good communication within the office and between their office and other departments within the College.

Again, I said that the purpose of TQM was to improve. One person seemed frustrated and said: "The Dean doesn't care anything about us over here. All he cares about is that he does not hear any complaints. As long as he doesn't hear any complaints, he could care less." One of the participants added "that I used to like it here, but not anymore. If I could quit, I would -- I hate it here."

They also added that the Dean should clarify the roles people were supposed to play. For example, they said that one person who was supposed to see students, would not see them, because she didn't like to. I then asked "How long has it been since all of you [meaning the people working in the office] met together?" I was expecting them to answer two or three weeks or maybe a month or two because when I had first met with the Dean he had indicated to me that the personnel in the student services worked together very closely. The members thought for a while and said: "We're not sure, but it has probably been at least a couple of years."

I asked them if they ever discussed these matters with the Dean or their superior and one said "No, it wouldn't do any good and besides they don't want to hear it." In fact, one indicated that their boss was actually the source of most of the problems. I advised them that when I had spoken with the Dean, he had indicated to me that he really appreciated the people in the office and thought that they did a good job, although there was certainly room for improvement.

Since they had indicated that Brady should clarify the roles people played in the office, I asked them if I could go to Brady and advise him of some of their concerns. I indicated that I would tone down their comments, but let him know unequivocally that the staff was not happy with the way things were going. One said "it couldn't get any worse."

On March 1, I met with Brady for about five minutes between other meetings he was having. I told him some of what the people had said and that there were quite a few problems in the office, as well as political issues which needed to be addressed. Also, I indicated there were all sorts of communication problems in the office and that if any changes were going to occur, then everyone in the office would have to be involved. He said "Go ahead and call the other two people and get everyone involved."

I also advised him that the staff members to whom I had spoken were really upset and unhappy and that if he was going to have any credibility with them that he needed to support any suggestions that came out of the team's efforts. I said "Do you really mean it about empowering them because if you are just saying this and don't mean it then you will lose them forever." He said" I'm serious, I'm serious . . . . The problem with them over there is that they don't trust each other and won't work together." He also gave me a brief history of how the office evolved and why things were the way they were. He said that when the previous Associate Dean left, the office was totally reorganized and that some of these people who had been hired originally as clerical workers were given the additional responsibilities they now have. "Since that time each of them hasn't wanted to give up anything they do or share what they do with anyone else because of their need for job security and because of their fear that if someone else learned how to do their job that they would lose it." I asked him if their fears were well founded and he replied; "There is so much work over there that they don't have anything to worry about."

As indicated, he told me to involve the other two people in the office. I asked him if he would call and invite them to join the effort, but he told me to do it. I was reluctant to do it myself because one of the participants was an Assistant Dean and I felt it would have been better if her superior encouraged her to participate, rather than an outsider.

On March 2, I phoned the Assistant Dean and told her about the team and she said that she wished to be involved. I asked her if she thought there were any communication problems in the office and she indicated "that she did not think there were many." I then phoned one of the team members and told her about the willingness of the Assistant Dean to participate. She indicated to me that I should meet with her in private because she did not think she would open up in public. I advised the team member that we needed to have a meeting with all the parties and brainstorm every thing that people did in the office and go from there. The team meeting was set for March 5.

**The College of Business Advising Team**

Once it appeared that the "admissions team" would not be very productive since one person did everything related to admissions, that team no longer existed in its present form. The head of university admissions dropped out of the team and never participated again, but the other two people working in the college's advising office who were not already on the team were added. The admissions team essentially evolved into the College of Business Advising Team because it was determined by the first team that the real student service problems that needed to be addressed were communications and the flow of work within the College's student services office. The team that evolved included the four people who actually worked in the College's advising office plus Suzanne Johnson, a faculty member, and myself.

Johnson's involvement on the team was actually somewhat of a fluke. The two new members who were invited on to the team came early to the campus wide advising team meeting which Johnson was the leader of as there had been a misunderstanding on what time the meeting they were invited to was supposed to start. The two members stayed for the first meeting though since it was related to student advising. After the first meeting, Johnson volunteered to stay for the second meeting since she was already there and she felt there was a natural connection between the two teams.

At that meeting she told the group the direction the other team was taking, as well as her personal vision on student advising. She indicated that she would only come to another meeting if the team members wanted her to. After the meeting, three of the four team members approached her and told her that they would really like it if she would continue on; which she did.

For clarification, it should be noted that the other team, which will be described later, dealt with university-wide advising and career counseling issues; while the mission of this team became the actual functioning of the college's student services office.

As some background information, it should be noted that the student advising office where these women worked is housed on the fourth floor of the Business and Mathematics building. The Dean, every faculty member, and all other College of Business offices except for the office of external relations are housed in the Student Services building which is across a street. In other words, these people were physically isolated from every other College of Business employee including their direct superior, the Associate Dean. Also, the actual office where these members worked was extremely old and beaten up. Meanwhile everyone else working for the College was housed in a newly built structure which was mostly furnished with new furniture. This was a fairly new arrangement as the Student Services building had been completed only a few years prior.

The reason that the advising office remained in the building where it did was due to space limitations in the new building. The administrators could not move everyone and so they made the decision that it was best to keep the advising office in the building where students spent most of their time as that was where most of the class rooms were held.

The meeting on March 5, was held and all of the team members were present. The team's first task was to review all the job functions that the various people did. Johnson and I indicated that this was primarily for our benefit. After some discussion and some small talk including some tangential comments which had nothing to do with anything related, the four team members described one by one what each of them did. (This pattern of small talk and focusing on tangential issues would occur time and again whenever a topic that the participants would not want to address would surface. As facilitator, I would immediately try to get people to refocus on the task at hand, and most of the time they did, but it often required coaxing. At times though, the participants would just flatly refuse to address an issue that they felt uncomfortable with. In those instances, there was nothing I could to do to get people to deal with the issue. They would just change the subject.)

Each person seemed to know exactly what the others did, but it was an important step for Johnson and myself. At the meeting everyone seemed extremely polite and respectful of one another and it did not appear as though there were any problems at all. The next meeting was scheduled for March 17, 1993.

Everyone attended the second meeting. I suggested that we seek to determine which critical processes were most in need of improvement. I asked them "What processes bother you the most that could be improved?" No one wanted to identify a certain process, and we got off on some side topics. Then I suggested we use the brainstorming tool and identify everything that could be improved. There was some resistance, but they agreed to go forward. One member said: "the biggest problem is dealing with faculty." Once the ice was broken the following comments were made: "Commencement is all screwed up." "Prerequisites need to be enforced" (enforcement is by each department). "The communication throughout the college stinks. . . no one talks to one another." "Dealing with all the departments is a joke. They do not consult us before they make policy changes which later affect students. They don't realize the problems these policy changes create for not only the students, but also for us." "The department heads should be trained and educated about advising-related issues," Several other comments were also made about communications across the campus especially dealing with class registration and the class schedule.

Except for one comment which one of the members made about the communications within the office, not one of the problems identified dealt with their particular office or were the responsibility of any of the team members. In other words, they did not make any negative comments about anything for which anyone in their office was directly responsible. This was significant because in private, each of the individual team members had made some derogatory comments about the other staff people, but publicly would not say anything critical about another team member or about the process for which another team member was responsible.

I picked this up immediately and said: "Is there anything that needs improving in your office?" I got no response. I tried to encourage them by saying; "Remember the purpose of TQM is to improve, not to point fingers," but still there was no direct criticism of any processes under their jurisdiction. Very little got accomplished at that meeting.

The next meeting date was set. I advised the group that we needed to look at the critical processes one by one. One of the team members suggested that the retroactive late withdrawal process would be a good process to begin with since several of the team members were involved in this one process.

The next meeting was held on March 29. It is noteworthy to mention that on March 19, 1993 Brady announced the major reorganization of the College of Business and the members were concerned about what the reorganization would mean to them. At that point in time, it was still unclear how their office might change. One member was sick and another member came about thirty minutes late stating that she forgot about the meeting. We spent a little time talking about what the reorganization meant, but people at this point were unclear and only dealing with hearsay and gossip. Nonetheless, it was on all the team members' mind and would often creep back into the conversation during the meeting. The first planned item we started talking about was the late withdrawal process. Two of the participants had mapped out the process as they envisioned it. The flow charts were simiiar, although there were a few discrepancies.

The participants then jumped around from topic to topic. As facilitator I kept trying to get them focused on the task at hand, but each time the group would jump to a new problem area instead of focusing on just the one. Eventually, the discussion came back to the late withdrawal process. Julie Green became a little defensive about the process because it was primarily her responsibility. Lewis said: "We were picking on Green and said we should stop picking on her." I did not feel we were picking on her personally in any way and so I was surprised by the response.

The group then jumped on to other topics and became critical of the way that the team member not in attendance handled her responsibilities. That appeared to be a significant issue which could be easily remedied if the team members would openly discuss the situation.

A few other problem areas were also brought up. One participant commented that they needed clerical help. "We'll never get it though . . . .

The Associate Dean told me to my face that if we were men we would have a secretary here." The lack of focus was due to the members' insecurity about the future. Also, they seemed to feel that regardless of what they suggested or tried to do, the Dean would do what he wished anyway.

A few days after that meeting I spoke with two of the team members individually for at least forty-five minutes each. Prior to that time, I thought they were very close personally and respected each other professionally and so I was surprised to hear what I did. A great deal came out, and I learned for the first time the negative feelings between the two that seemed to have existed for quite a while.

When I shared with one of the members that I was surprised to hear all the negative comments since I thought the two of them were friends, she did indicate "that things had been much worse, but now were better." I asked her why she did not discuss her concerns with the other women directly since the team's goal was to improve the office. She said: "My actual relationship with her is much better these days and I am afraid that speaking honestly with her will destroy the relationship."

This person also added that one of the biggest problems was that the Associate Dean "did not want to confront or deal with subordinates and so he would tell someone else in the office something knowing that this person would tell the others." Also, she claimed that the Associate Dean "spread rumors about personnel either being promoted or being reassigned which were untrue." Another woman provided me with a similar story.

I spoke with Johnson later that week and she indicated that she had also spoken with one of the members for an hour and a half and another team member for over an hour. She was also told about the negative feelings prevalent in the office and heard even more criticisms. She was also advised that just about everybody in the office was concerned about their jobs. Also, Johnson became even more aware of how little each member felt appreciated. She commented to me about how low the morale was in the office and that "turning this group around would be extremely challenging."

Johnson and I spent sometime talking about what was going on in the office. I was amazed at just how bad things were, how little each of the people trusted one another, and how each of the parties would be so open and frank with Johnson and me in private, but not say one negative word in public. Everyone was very concerned with maintaining a nice front and not rocking the boat publicly. One of the participants said to me at a later date: "While we never discussed it, we as a group were actually united because we had an unstated pact that no one would criticize another team member at any of the meetings because after the meetings we would have to go back and work with that person."

Johnson and I agreed that if we could get the group to open up with one another, everyone would be better off since each individual was talented and able to make the needed improvements. Also, most of the critical comments that we heard about the various team members dealt primarily with the process or job which that person was responsible for rather than about them as a person. Also, each of the criticisms we heard addressed areas that could be improved.

Johnson and I considered doing some team building exercises, but the participants were very resistant to do anything in this area. Also, some of the team members indicated that this was would be ineffective since everyone had a long history with everyone else. Also, the participants were very concerned about what might happen in the course of a team meeting, since all the participants had to work together the rest of the time.

On April 7, 1993 Johnson and I met with Brady to share with him some of what we had been told and our own impressions. We did not share with him everything because some of what we had been told had been done so in confidence. We did tell him that one of the team members thought she was going to promoted, another thought she was going to get relocated, and also that all of them were concerned about their jobs. He said that "there are going to be no major changes over there and that they will have to work without any more resources. . . . They are just going to have to take responsibility for the performance of the office." He reiterated that they all claimed to want more responsibility, but when he offered it to them they refused to accept it. The comment about "working without any more resources" is significant to note, because at a later date, the Dean did agree to provide more resources once the team documented to him the need to do so.

On April 12, 1993 the team met again. Everyone was there including Miller who was in the middle of her one week vacation. I suggested that we cover the following agenda items: (1) Review the late change procedures. (2) Go over Davis' proposal for restructuring the office. (3) Construct a feedback survey which would be given to students. (4) Clear the air and be honest with one another. I said that "during the last week Johnson and I had talked to each of them and that it appeared that there were certain things bothering them about one another and that it would be helpful to clear the air."

The moment I finished the sentence, one of the members started talking about something totally unrelated and another member brought up something else. I persisted and urged them to open up. Two participants said that "they did not want to talk about the past, but only wanted to go forward." Another participant added this was no place for "touchy-feely kind of stuff." One member disagreed and said that "we need to clear the air and get things out into the open." The subject was dropped immediately though as the others started talking about other things. In fact, it was as though no one else had heard that person's words. I tried to get the participants to deal with the issue, but they refused to cooperate by just ignoring me.

In retrospect it would have been good for the facilitator to suggest doing a survey of internal customers in order to objectively look at their concerns. This would have been useful information to have and would have been a non-threatening way to approach some of the issues.

They moved on and started talking about what should be the mission of the office. We started to develop a mission statement, although we would often get side-tracked on who should do what in the office. Two of the members said that the mission of the office should be to serve students. Another said that the purpose of their office was "to support faculty and enforce the rules of the university." Obviously, the views represented two different perspectives.

While I tried to facilitate the meeting and keep things focused on one topic, the group just kept jumping around from the mission statement, to the layout of the office, to the hiring and training of student assistants. The reason things jumped around was because every time something which one of the participants felt uncomfortable with, was brought up, that person would change the subject.

After one and a half hours, some people came into the room and said that they had reserved the room and so we were forced to adjourn without closure. Overall the meeting went satisfactorily, although I still felt that the women kept avoiding the real issue of communication and the willingness to be open with one another. It was decided we would meet in another week. I suggested that for next time each team member should outline how she felt the work should be delegated.

That same day (April 12, 1993), Brady wrote a memorandum to faculty members soliciting applicants for the Director of Undergraduate Programs which was a new position he had created as part of the reorganization. Part of the memorandum read as follows:

> As part of the administrative reorganization currently take place, I believe it is important to identify a faculty member to serve as Director of Undergraduate Programs. . . .
>
> The Director of the Undergraduate Program will teach six units each semester and devote 50% time to the programmatic responsibilities. The focus of the position will be on further developing our approach to undergraduate student services-recruiting, advising, admissions, and retention activities.
>
> A key role of the Director will be to work with the advising and admissions staff to develop processes that are customer oriented and contribute to the development of positive student feelings about the administrative processes of the College. . . .
>
> I am looking for a person to assume this important leadership role particularly as it relates to student advising and admission processes. The position would be effective at the beginning of the Fall 1993 semester.

One member felt that she deserved to be selected for this position and was surprised and irritated that the Dean was advertising it to only full -time College of Business faculty members which she was not. It appeared that her morale was very low as she felt that she was the right person to assume this position since it dealt with an area where she had more knowledge and expertise than anyone else in the College.

At the next meeting on April 19, 1993, everyone was there. We started the meeting going over the mission statement that Johnson had written based upon the input she received from the last meeting. The mission statement was very eloquent and upbeat. Johnson stated that she showed it to her daughter who was an WCU student and her daughter read it and replied: "Who is going to do it" implying that none of the staff of the university cared anything about students. Lewis replied that "across campus people are very unhappy and don't care any more about the quality of their work. . . . They [employees] refuse to take any personal responsibility or admit that their office is all screwed up." This led to a discussion about how poor morale was all over campus because of the layoffs and extra work resulting from the budget crisis.

At the previous meeting, I suggested that each team member bring in an outline of how they believed the work and responsibilities should be split. I had encouraged the members to do so because I told them that Brady had told me on several occasions that they controlled their own destiny and that it would be better for them to suggest how the office should be reorganized, than to allow an outsider do it for them. Three of the team members brought in written outlines of how the office should be organized. The suggestions all seemed well thought out and required a fair amount of time to prepare. One of the women suggested the need to improve communications. Part of her memorandum read: "Improving communications: Circulate all written materials among staff members before distribution to clients. Hold a bi-weekly staff meeting to share changes/information, discuss problem areas, and act on appeals from clients. Create a monthly newsletter for academic department staff and others on campus." I was impressed to see that she had started to think in terms of working together as a team. Some of these things were later addressed.

Johnson then referred to a memorandum written by Brady to the staff on March 22, 1993 assuming that each of them had received it and read it. Each of them said they had not seen it despite the fact that it was supposed to have been sent to all staff members. This lead to a discussion about how Brady does not care anything about them and forgets they even exist. A great deal of hostility was expressed. One women said: "He should have delivered it [the memorandum] himself if he expected people to do what it asked of them."

Johnson then read part of Brady's March 22, 1993 memorandum in hopes of motivating the group to move forward and work as a team. The memorandum spoke about certain relationships that should exist between various groups of the college and the need for these groups to have meetings. Johnson read:

> 1. Customer service is the number one priority. . . . Our activities must be driven by customer requirements.
>
> 2. The focus of these planning meetings should be to design the most effective way of organizing our human resources to deliver the critical processes necessary to meet our mission . . . .

3. The process should be free of the constraints of traditional job descriptions. . . . It is inappropriate in any situation to respond "it's not part of my job description." In addition, we must not be constrained by the state's classification. . . .

4. Within each support group and advising/admissions offices, work must be organized on a **team basis**. . . .

5. All processes should be viewed as temporary and an attitude of **continuous process improvement** must be present in all units. . . .

Summary: We want a results orientation

To encourage risk taking

A quality focus

A customer orientation

A process orientation

To make this a great place to work

In other words:

Make continuous improvement your first priority

Become obsessed with customer satisfaction

Optimize both long-term and short-term efforts

Be process focused

Speak with facts (gather the evidence)

Build trust

Respect and invest in people

The group then spoke a little about the memorandum, but for the most part the members felt that it was only rhetoric and would never be carried through. Johnson then spoke about the importance of team work and open communication.

One team member then said she was very upset about the last meeting with respect to open communication. She said that all the negative feelings and thoughts were being passed through Johnson and myself and should be brought out into the open. She said "that we are only dealing with the symptoms, not the real problems." Two of the team members responded by skirting the issue and said that we should only deal with the future not the past. Again, I tried to get the team to deal with the communication issues, but they totally ignored me. Immediately the topic turned to the student survey that the university advising team had administered which was very negative. (A copy of that survey may be found in Appendix D).

One person said that she did not believe in surveys. The talk shifted to the surveys and never returned to address the communication issue. The conversation centered on what the students had said and how they could improve the office. Despite the fact that the results were very negative, the team members were not surprised and did not even try to downplay or rationalize them. Another team member said "What do you expect when you don't get any resources to help you do your job?"

The facilitator told the group that they needed to take the surveys seriously as they revealed that most students were dissatisfied with the advising they were receiving. I said that we should not place blame, but we should deal with the issues that the students identified. I emphasized again that the use of the surveys was to help us improve.

Since it was nearing time for the meeting to end, I proposed that for next time we do a cause and effect diagram in order to identify all the areas which they felt led to "a less than ideal advising office." I also added that if Brady was serious about continuous quality improvement, and if we could document to him what we needed, then he would have to be receptive to our wishes.

On April 26, 1993 the team spent most of the meeting doing a cause and effect diagram. The people stayed fairly focused on the job at hand because it was basically a gripe session where they could say "if we had this" or "if we had that" we could do our jobs. Nothing was brought up about the communication issue.

On May 3, 1993 we met again and the meeting was very emotional. The prior Thursday, the Associate Dean had notified one of the persons in the office that there was going to be a major reorganization in the office. He told her what each of the others was going to be doing. The jobs that each of them indicated they enjoyed the most and where they derived the most self-esteem appeared to be taken away. One participant, who had been doing graduate admissions work, was told that she would no longer be doing that. She felt that she was being demoted to a secretary. This person told the group that she had been advised that another member, who used to do petitions would no longer be doing them. This participant said that this was her job and what she loved. She said that "I no longer have any loyalty to this place or reason to stay. . . . I feel used and betrayed."

Another member said that "everything had blown up because of the autocracy around here." When hearing this Johnson and I both felt very annoyed with Brady because he kept indicating to us that the team "would design and control their own destiny." I asked them how they heard this. They indicated that the Associate Dean had spoken with one team member the previous Thursday evening. I asked if he had spoken to each of them individually. They said: "No, Steven came in last Thursday and told one of us. . . Steven and Brady know that if they tell one of us anything, then all the other girls will hear it from that person."

One member then spoke about her illness and disability and how hard it was to work. She stated that she was going to apply for disability and would be quitting as soon as she was able, but that it would take some time for the paper work to be processed and so not tell Brady or anyone else. Both Johnson and I assured her that when it was time for her to leave, she should tell Brady herself as it was not our place to tell him.

The meeting was very emotional with one of the women crying and another close to tears. Johnson and I asked them if it would be acceptable with them if we talked to Brady and voice their concerns and advise him that they felt they had been deceived. They said that it would not hurt. I also asked if we should invite Brady to meet with the group face to face. They also concurred with this suggestion, but one women said; "You can try, but he won't because he doesn't like to hear any of this stuff."

Johnson and I went directly to Brady's office and met with him. Johnson shut the door and explained to him what had transpired and said that if he was not serious about what he had being telling us that he needed to quit the TQM process. I concurred and added "that all along we have been trying to build these women up and get them to work together as a team and that our credibility had been destroyed." He seemed surprised and said that he was not planning any changes except for one person who would no longer be doing graduate work. He wanted to know why they thought this, and we explained to him that according to the women the Associate Dean had told them so. He reiterated that he had not made any changes and that he was serious about letting them organize their work any way they desired so long as they did quality work with a customer orientation.

We told him that the team no longer trusted him and that he should go over and meet with them. He said that now was not the right time to meet with them. "I should not go over there until after I've selected the director of the undergraduate program and then I'll go." I told him that unless he did something to address the situation that "he could forget about any continuous improvement stuff or TQM." He said he would send them an E-mail. Johnson and I both seemed reassured by his response; although we were both quite perplexed by the rumors being circulated. We indicated that we would try to go patch things up.

Within the hour, Brady sent the following E-mail to each of the team members.

> Undergraduate Programs Staff:
>
> I want to share with you the progress that I have made related to the identification of Director - Undergraduate Programs.
>
> I hope to be able to identify a person before the end of the semester. I will be discussing the candidates with the executive committee on Tuesday.
>
> It is my strong expectation that the director will sit down with the staff in the undergraduate program office to decide how best to allocate responsibilities to accomplish the mission of the office. I have no preconceived notions about how that should happen!
>
> We have an excellent set of staff people allocated to this function and I assume that with an opportunity to creatively think about how to deploy the resources we can become even more customer oriented!

In addition, I will ask the new director to continue to work with the staff and Johnson and Jeff so as not to lose any of the good ideas generated by that process.

Change, I realize is difficult for all of us, but we have a real opportunity to bring a focus and attention to the undergraduate program equal in importance to our recent efforts in the graduate program.

It is my assumption that each of you will continue to make the same high level of contribution to the College that you have in the past even if some of your responsibilities and assignments change to better serve our undergraduate mission.

I will keep you posted!

Richard Brady, Dean

Very little transpired over the next several weeks. In the middle of May, Brady named the new Undergraduate Director who was a faculty member from the finance department. Prior to Robert Williams meeting with the team for the first time, he met with Johnson for over four hours. She provided him with a complete history of the team and the various personalities involved in the office. She also advised Williams that the morale of the office was quite low.

On May 25, 1993 Williams scheduled a team meeting. Prior to that meeting, he and I spoke for about forty-five minutes about what had transpired over the last few months. He indicated that he would like Johnson and me to stay involved for as long as we so chose and thanked me for my past efforts. Everyone attended the meeting except Davis. I do not know why she was not there, but I do know that she was terribly upset that she was not named to the position.

Williams started off with his vision for the advising office. He started out by saying that he would like to see more interaction with faculty members, and that he would like a marketing class to do some market research for the office. He added that he envisioned the office as continually changing and adapting to the environment and that he encouraged the advising staff to offer suggestions and feedback to faculty members.

He also stated that he had a great deal to learn about each of their jobs and that he was relying on them to help him out. He then said that Lewis was going to be leaving soon as her disability benefits "came through sooner than expected."

Lewis then spoke about what her job entailed and the rationaie she used to make decisions concerning the fate of students whose grades fell below the requirements of the college. Some discussion on that followed.

Williams concluded the meeting by asking the group to develop a list of things that should be accomplished over the summer. He reiterated that he really needed their help in learning his job and that he really appreciated their efforts up to now.

I believe the meeting went exceptionally well and that the team members took an instant liking to Williams. Williams said that over the next week he wished to meet with each of them individually to learn about their jobs and to get to know them better. The next meeting was set up for June 1, 1993.

It should be noted that Brady did not expect Williams to actually begin working in the position until fall, but Williams indicated that he wanted to get going right away and work over the summer so that the office could be up and running by September. As will be described, Williams proceeded to spend a great deal of time working with the office over the summer. I think that this work ethic set a good tone for the whole office.

The following week Williams met with his staff alone for forty-five minutes and then Johnson and I were invited for the remainder of the meeting. They then spent a fair amount of time listing and then prioritizing what should be accomplished over the summer. He encouraged the inputs of each of the team members and each of the team members appreciated this.

Throughout the meeting Williams would make comments like: "How would you proceed with this?" "What would you do next? "What do you think is the best thing to do?" Occasionally I had the sense he knew the answer to a question, but asked it anyway in order to boost the morale and build up the self-esteem of the team members.

From that point on, I no longer played the role of facilitator. I merely observed, although I would offer input every once in a while. Williams took complete control of the team including writing up the agendas and so on. He still encouraged me to be a part of the team and he faxed to me all the meeting announcements, but my only interest and involvement from this point forward was as a researcher. The transition was perfectly natural, and I had no hard feelings or reservations about giving up the facilitator role.

On June 9, 1993 another team meeting was held. At this meeting, Lewis explained what she did so that the others would be able to carry on once she left. Then, Miller described a training program that she was just beginning to set up for student advisors. The group spent some time discussing how the office should be physically remodeled and each of the team members presented their diagrams. Later, Davis described a computerized student information system which she said she wanted to establish. She indicated that she would take the initiative and head up the effort.

Williams then advised the group that Brady wanted to use the student services team as an example for the college and said that Brady was extremely happy with the direction of the office. Also, Williams said that Brady agreed to commit considerable resources to remodel the office.

The group was very pleased to hear what Brady had said and felt proud of their accomplishments. The meeting ended on a very upbeat note.

A few days later, I asked Johnson what she thought about the job Williams was doing and the team in general. She said that she thought Williams was doing an excellent job and indicated that she had talked to all of the team members individually and that they had indicated to her that they really liked what he was doing. She added that she thought the team had turned the corner and had made significant progress since we started.

The group met again June 23, 1993, but I was out of town on that day. Judging from the agenda and from conversations with two of the team members, the meeting was a very productive one. According to Williams and Miller, the team was starting to become more focused and processed oriented. Topics and issues which were being addressed at the time included: a new training program for student advisors, the new office layout, a new computer system, as well how to deal with some new policy issues which had recently been approved by the faculty. The first three items were those that had been identified as critical issues during the brainstorming and cause and effect exercises done several months prior. The proposed innovations with the computer system tied into what the other advising team was doing on a university-wide basis. In other words, there was now considerable overlap between the two teams, largely in part to Johnson.

Six days later the team met again and dealt with many of the same issues, although progress had been made in many of the areas. For example, Miller distributed a written job description she had prepared for student assistants. She also outlined an extensive new training program she was planning for student assistants. Also, actual drawings prepared by the team members about how the physical space of the office should be re-configured were discussed.

Williams then indicated that Brady had actually authorized the expenditure of money to remodel the office. The team members seemed enthused and proud of their accomplishments. During short, private conversations with two of the team members after the meeting, each person indicated that they felt very proud of the team's accomplishments over the last several months.

Two weeks later the team met again. Many of the same topics were still being addressed, although further progress had been made. Miller described in greater detail the new training program which she had put together. She said that "as part of this training program, all newly hired student assistants would be required to attend a five session training course. The training would cover everything that the student needs to know to do his or her job." She also said that different parts of the session would be taught by different team members depending upon whose area was being covered.

Miller described the process she went through to create the course. She said that prior to designing the actual training sessions, she and Johnson had spent an extensive amount of time defining what the duties and responsibilities of the student assistants should be. Then, they prepared a formal job description. After that was done, Miller said she conferred with each of the team members to determine if there were any additions or changes they wished to make. While Miller took the lead on this project everyone in the office was involved.

While each of the women had provided input to Miller prior to the meeting, during the meeting Williams clarified what would be covered during each training session, how long it would take, and who would be responsible for it. Also, the team discussed what handouts would need to be prepared for the training sessions. It was also suggested that these handouts should be combined into a manual which could be used by the students for future reference. This was later done. It is important to note that prior to this time no formalized training program or training manual existed.

The training program was a significant milestone. When the team first started out, one of the major complaints issued against one of the team members was that she totally controlled the student assistants and did not share them with the others. It had been in this person's unofficial job description to oversee all student assistants, but the others claimed that she did a weak job in cross training them in all areas of the office. The others had complained to Johnson and myself that she only trained the students to do things that were under her jurisdiction. Also, one of the areas that had been identified as most critical early on in the process was to do a better job of training student assistants since this was the first point of contact for all the customers (other students) who came into the office for advising.

Later in the meeting, Davis proposed using a master schedule for all the staff. She suggested that each of the staff members should provide the student assistants his or her schedule for the week so that there would always be a staff person in the office. Previously, each staff member came and went as she pleased and some times there would be no one in the office to answer a student's question or request. Further, it was proposed that students should be allowed to make appointments with staff people which was also something new. This was another example of the effects of TQM and how the team was not only working together, but was also becoming much more customer (student) oriented.

Williams then announced a meeting to be held July 21, 1993 for all of the College of Business staff. This included department secretaries, as well as staff people working in all the graduate and undergraduate programs. Williams indicated that this was part of Brady's TQM plan to enable the staff to better communicate and work with one another. Williams said that Brady requested that he present at the meeting the following items: The office's needs for training, what the office is planning to do to get this training, and what the student service advising office needs from Brady's office in terms of resources and support.

Williams suggested to the staff that each person do a part of the presentation. After a discussion of each of these items, he asked "Who would like to present what?" Based upon the topics being covered, it would have been natural for Davis and Miller to do all the talking, but Williams said: "Let's break the training description into two pieces so that Green can say something." Green was very happy to be asked to participate and I believe it really boosted her self-esteem.

As was mentioned, Williams could have done everything by himself as the other directors later did at the meeting, but he wanted everybody to be involved and feel part of the team. This was an example of the type of leader he was--he tried to get everybody involved and feel empowered. Also, every time there was a project to be researched or something to be done, he would ask for volunteers rather than assign someone to handle it.

At this same meeting, the group further refined its plans for the new layout of the office. Davis said that she had been doing a complete inventory of the office and that she and Miller were working on the final plans for Brady. Williams indicated that this floor plan needed to be detailed and also that Brady wanted to know in writing how and why the new floor plan would lead to improved services. Near the end of the discussion, Johnson advised the group that she had obtained two computers for the office which was the result of her being on another team.

On July 21, 1993 the team met by itself for a short period of time prior to the meeting attended by the entire college staff. At the preliminary meeting, the members went over what they were going to say at Brady's meeting. Also, Williams gave the team a letter he planned to submit to Brady outlining his personal and program goals for the remainder of the summer. He asked the group to proof it and add its input before he gave it Brady. Here was another example of Williams wanting the group to buy into the direction the office was heading. Based upon some team member's input, Williams added two more program goals. One of the goals was to write a mission statement and the other was to define the goals for the next academic year.

Williams also detailed some of his personal goals for the summer which included:

1. Become acquainted with the people in the Undergraduate Program office. Develop a working relationship built on friendship, mutual respect, and the principles of teamwork.

2. Gain an understanding of the primary processes and flow of work in the Undergraduate Program office.

3. Assume leadership of the work begun by Suzanne Johnson and Jeff Glazer. Help define specific goals. Join in accomplishing these goals.

At this meeting, Davis displayed the final proposal for the physical reorganization of the office and the justification for the needed resources which Brady requested. The plans called for expanding the space, refurbishing and rearranging walls, as well as for new equipment. It was very professionally done. The proposal was forwarded to Brady who approved it at later date.

The meeting with the entire staff and Brady went extremely well. It was attended by fourteen staff members and administrators. Brady started the meeting by saying that the goal of the meeting was to share information and provide training. Williams then spoke briefly about the successes of the team and then introduced each of the team members who did an excellent job presenting to the group what they were working on. Other department heads then spoke about their departments. No other department heads had their staff members present as Williams had done.

Throughout the meeting, Brady talked about the importance of TQM and working together. He also spent a great deal of time talking about team work and made the distinction between "teams set up by management" and "team like behavior which is a whole philosophy and mind set." Brady also spent considerable time talking about the importance of setting measurable goals. "It is important to set objectives, but it is also important to set up indicators--for example if an office says their goal is customer service, how do they know they are improving?" He then instructed each office to go back and write down their objectives as well as the measures they would use to evaluate whether they have achieved these objectives.

A week later, Williams started the meeting by reading a letter from Brady to him commending the whole staff on their professional nature and teamwork. It was very complimentary and ended with "see what we can accomplish when we all work together." Some of this meeting was spent discussing what Lewis did as she would be leaving on permanent disability soon. Part of the time was spent trying to revise the mission statement for the office. Williams felt that the mission statement drafted by Johnson several months earlier was too flowery and not to the point. The team spent at least forty-five minutes working on what the mission statement should say. Throughout the discussion, Williams solicited the input of each of the team members.

The next item that was discussed was a letter from Brady to the department chairs dated July 26, 1993. The letter advised that there was going to be a follow-up meeting of all staff members on August 18, 1993.

> At this session, I would like each of the four groups to share with the whole group three objectives for 1993-4 and the performance indicators for each along with specific goals for 1993-94. I would expect a short ten minute presentation from each group about the process they used to develop objectives. Each group should prepare a handout using the format discussed at our last meeting.

> I am looking forward to seeing what each group develops and I hope it helps us become more focused in terms of our commitment to continuous process improvement.

The team then discussed what the office's objectives should be for the office. A variety of objectives were discussed including having the business student information system on-line by the end of the semester, formalizing a student assistant training program, and identifying each process in the office and determining how long it should take.

While in the middle of this discussion (at a time prearranged by Williams) the student assistants brought Ben and Jerry's ice cream into the meeting. Williams said that "he wanted to have a celebration to recognize our accomplishments." The student assistants working that day also joined us. It was a very nice touch and it again showed how Williams treated the team. The team members seemed to really appreciate it.

After a short break to eat the ice cream, the team finished talking about its objectives for the coming school year. After prioritizing the objectives that the team would work on in 1993-94, Williams asked each person to work on a particular objective and prepare a report on it for the following meeting. These reports would then be used for Brady's meeting. Davis volunteered to work on the information system and Miller volunteered to work on the training program and the late drop process. Lewis, Green, and the lead student assistant were to examine "one stop advising" so that students did not have to keep coming back to have questions answered.

The last item discussed was the office layout. During the last week, Brady had notified Williams that the advising office could take over the space occupied by another department. This added significant square footage to the advising office and was viewed as a major triumph as office space was extremely tight in the College. According to one of the team members, this event demonstrated to the team that Brady no longer "viewed them as second class citizens."

There is no question that Brady's willingness to expand and remodel the office was a direct result of the team's efforts. Several months prior, Brady had indicated to Johnson and me that he was unwilling to spend any money on remodeling the office. The team documented though why they needed to remodel and expand. When faced with the data, Brady agreed to approve what the team deemed necessary.

At the end of the meeting I made a note to myself that I felt my role as participant was now coming to an end. Earlier, I noted how my role as facilitator ceased to exist shortly after Williams took over, but now I felt as though I did not want to add comments or input since it was "their" office that they were talking about. I felt as though it was no longer my place to add anything since I was an outsider. Also, by this point in time, the meetings not only focused on continuous quality improvement items, but also dealt with some routine office matters.

Prior to the next meeting which was on August 4, 1993 each of the team members had been asked by Williams to bring her ideas, suggestions and modifications to the existing mission statement. Miller and Green each brought written proposals.

The topic of the mission statement was first on the agenda. Williams asked "Why are we here? Why does student services exist? Why is the office here? What is its purpose?" Williams started the discussion, but everyone was encouraged to participate and did participate. Each person felt free to speak and even if Williams suggested something they did not agree with, they were willing to suggest an alternative.

On August 11, 1993 the team finalized talk on the mission statement and came up with a final version. Each person was equally involved. Williams brought a draft and made suggestions, but he actively sought feedback from the others rather than force his ideas on them.

After the mission statement was completed, the team talked about the three objectives they would present to Brady. Miller's objective was to have the student assistants achieve a particular score on a written examination to test their knowledge. Davis spoke about her goals for the information system. Green proposed shortening the time it took to process late withdrawals. Williams wanted each person to speak at the meeting including Lewis who was sick and did not attend the meeting. They also discussed putting together a professional packet to go along with their presentation.

At this meeting, Miller presented her final draft outlining the job duties and responsibilities of student assistants and the student assistants training packet referred to earlier. Both of the documents were well received by the team.

I was out of town for the next several weeks and missed the meeting with Brady and the formalized training program for the student assistants, but I was told that both were very successful. I did get copies of the training packet and spoke to the participants of about what transpired.

On August 23, 1993 it was learned that Lewis' retirement on disability had been approved by the State and that her retirement was effective on that date. It was a surprise to all, including Lewis who thought she would have to work until the end of the calendar year. Some of the people in the office were fairly sad although each had known about it for some time. On the same day, Green sent an E-mail to all faculty members and staff in the

College, advising them of a surprise retirement party she planned to organize for Lewis. The E-mail also read: "Since Deborah has been such a valued employee and has been with us so long, I would like to take up a collection for her so we can present her with a cashier's check."

On September 2, 1993 Miller, Johnson, and myself spoke for an hour and a half about an upcoming presentation we were going to make about the results of the survey and about the positive things that were going on in the advising office. A great deal of time was spent discussing what would be said and by whom.

It was agreed that Miller would do most of the talking about the team's progress and the changes which had occurred in the advising office. The main thing which we planned to discuss was the results of the survey which had been administered to students the previous spring. The results were very bad and it expressed the extreme dissatisfaction of most students with all areas of advising. Johnson was very concerned about how the data were released since specific names were part of the report. Also, Johnson, who was always concerned about the political ramifications of doing things in a certain way, expressed other concerns and reservations which Miller and I went along with.

The meeting attended by some of the department chairs, several senior administrators and eleven staff members was held on September 2, 1993. I started out the meeting by briefly detailing the history of the TQM teams. Then, I discussed what I considered to be some of the significant achievements of the teams such as the student assistant training program and a new student resource book which provided detailed information about where students should go for information. This book had been distributed to all staff members, but only about half the group claimed they had ever seen it. I added that this was another example of the lack of communication across campus and how meetings like this were important for sharing information. Johnson also added that part of this information was available on the university's computer system which they could each access.

I did not spend much time talking about what had transpired because I felt it was better if they heard it from Miller who they would consider a peer. Also, I knew that Miller would express her true feelings.

Miller then spoke and said that when the team started; "there were a lot of personal agendas and politics which needed to be addressed and which later were." She added that "I did not feel that our office or myself had any support before. . . . I felt that all we got were hand me downs and that we were treated as second class citizens. . . This led to a why-bother attitude in the office. . . . Also, everyone was doing their own thing and no one was working together." She also suggested that each department conduct its own survey as it was very "helpful and eye-opening."

She then spoke about what she felt had been the biggest changes.

> Now, we feel we are getting the support from the administration. . . . We were able to renovate the office and pick up additional space. We now hold weekly meetings which generally go smoothly, but not always. . . . Even when we do not agree, people feel that it is acceptable to disagree. . . . We feel that we have more input on decisions and on how we do things. This has led to greater self-esteem. . . . We now have a student first attitude and feel that students should be our number one priority. . . . People are now working outside the boundaries of their job descriptions and it has helped a lot. . . . The appointment of Bob Williams has been

> wonderful. It feels great to have a team leader with such a student services focus . . . . He is fair, focused, and a great mediator. . . . The experience has led to greater trust building and communication.

Johnson then spoke at length about the survey results and how the student services team had already addressed many of the concerns of students. She emphasized how really "dissatisfied, upset, and angry" the students were about advising in general. She did acknowledge that many of the issues that the students commented on were not under the control of the College of Business staff. Johnson showed some transparencies she had prepared which had actual written comments sorted into the following areas: bureaucracy, wrong answers, send them somewhere else, attitudes, telephones, and miscellaneous comments.

Some of the staff members then asked some questions and commented on the survey. Overall the meeting seemed to go very well. I spoke with some of the staff members from other departments the next day and they indicated that they were very impressed with the results and that they would be willing to try TQM in their areas.

On September 10, 1993 the team met for two hours. A variety of procedural items were discussed at the start of the meeting. The next major item which was discussed dealt with who should be responsible for what processes in the office. Most of the conversation focused on the role of the lead student assistant. That student was invited to attend the meeting and provided significant input. This was another example of people working together at all levels of the organization and being willing to talk openly. Williams had started the discussion by asking "What should be her responsibilities?" Each staff member spoke and then Williams asked the student; What are your expectations and thoughts about the position."

She said that previously she had provided Miller with some written suggestions. These were then discussed. Also, the group discussed what the student assistants should be doing when the office was not busy. It was suggested that each team member bring a list of things to the next meeting which the team as a whole would prioritize.

Later, Williams said that he wanted the master office schedule in operation by the time school started in the fall. He felt that "it was important to know when people were in and out." Williams also wanted to know how people were doing on the goals they had submitted to Brady.

The next meeting I attended was October 8, 1993. At this meeting the conversation centered on hiring Lewis' replacement. University procedures required that the staff submit interview questions to the university to be pre-approved prior to actual interviews. Devising those questions took about forty-five minutes and everyone participated. Williams said that he thought it would be best if the team together interviewed all the applicants for the position. This was another example of William's style as he had the authority to interview and hire the person on his own.

A variety of other topics were also discussed including the announcement that Brady had transferred another student assistant to the advising office and that he had authorized the hiring of a temporary worker until Lewis' permanent replacement was hired.

One thing that I found significant was when Miller showed the group a letter which would be given to all new students and potential transfer students. The handout in the form of a letter referred to a variety of programs that the College offered The undated letter ended as follows: **At the College of Business Administration, our goal is to be small enough**

**to offer the individual consideration you desire, and big enough to provide the world class education you need.** (Bold in original)

Then, at the bottom of the letter each of the people working in the office including the student assistants personally signed their names to it. This exemplified the new spirit of the office as each person personally was willing to place his or her signature on it.

The purpose of the next several meetings was to determine the interview questions to be used for the scheduled interviews and then to actually interview the applicants. While Williams invited me to these meetings, I did not feel it was necessary or appropriate to go. Without knowing it at the time, the last time I attended a team meeting was October 8, 1993. It just seemed the right time to bow out.

## The University Advising Team

### Introduction

Another team was composed of Johnson and Miller who were on the team just described plus Sarah Grant, Geraldine Cox, George Hanson, and myself. These people held the following positions within the university: College of Business department chair, faculty member, the College's Undergraduate Advising Coordinator, the Director of Career Services, the Dean of Undergraduate Studies. (At the request of the participants, I have scrambled the titles and the names).

While I will summarize all the team meetings, much of what occurred with this team was done behind the scenes. A great deal was accomplished and many significant changes occurred, but most of these were the result of Johnson or Cox working with various team members in one-on-one situations. Further, because Johnson and Cox were on multiple teams, including teams with which I had no association, I had to learn second hand from them what actually transpired. What happened behind the scenes and why is discussed more fully in subsequent chapters.

The Team Meetings

Johnson took the initiative and scheduled the first team meeting. The full team met for the first time on February 2, 1993. I started the meeting and spoke a little about TQM in general. Also, I indicated that it would be best if we were to flow chart the various advising processes currently in existence. The members agreed to this, and we spent a fair amount of time identifying the various processes which we would later flow chart.

At the end of the meeting there was a short discussion about who would be team leader. Johnson volunteered and no one objected.

Prior to the meeting Johnson and Miller had met and discussed the types of advising that took place in the College of Business. They also came up with possible projects or things that could be undertaken by the team. Johnson summarized her notes and sent them via E-mail (February 2, 1993) to the other team members the morning of the first meeting. Miller's main suggestion was the creation of a computerized system which students could access from the new computer lab and which would contain a variety of information including news items, a "worksheet/program for mapping out a student's planned course load semester by semester" and a "data base that can be accessed in the computer labs and searched to meet student needs which would provide contact people, place, and time information." She envisioned that this could eventually encompass information on all advising areas including counseling and career services.

The next meeting was held on February 10, 1993. It started twenty minutes late. We spent the whole time diagramming how the various advising functions fitted together. It was very time consuming, but it did prove to be very educational to the team members who were not directly involved with advising. The team members indicated that it was a good starting point.

On February 18, 1993 we spent the whole meeting learning about the various functions that career services provided. We also flow charted many of the processes in the career services office. As with the other flow charting we had done of student advising the previous week, the participants felt that the exercise was productive and helpful.

The next meeting was held March 5. All of the team members attended, as well as Davis and Green who were on the other team just described. A meeting of the College's advising team was scheduled after this meeting, but Davis and Green thought they were invited to this meeting as well. It was the only meeting they attended.

Johnson set the agenda, but it was not really followed. At the beginning of the meeting, people jumped from topic to topic about a wide range of problems that existed in the advising area. While each of the points was relevant, the conversation was largely unfocused.

After about twenty minutes I urged the group to become more focused. Grant then completed describing what her department did which was where we had left off in the previous meeting.

Johnson then spoke in general about the importance of having a dialogue rather than a discussion, referring to Peter Senge's book The Fifth Discipline. This was her attempt to try to get people to open up with one another and to try to improve communication among team members. At the time, she felt that some of the team members were withholding their beliefs about the system.

Hanson then questioned our use of time and said that he felt we were "chewing up way too much time" and that we should become better focused or we would jump around forever and never get anything accomplished. He suggested "maybe looking at the relationship between the advising functions and having subgroups investigate these various relationships."

Grant added that "we should only look at the overlapping areas and let the other stuff go." She and Cox had continually indicated that they did not want this team "coming into their areas and telling them what to do because they also needed to be responsive to other colleges in the university." Both were always very protective of their areas and felt that they were perfectly capable of handling their departments without any external intervention.

Cox then said that maybe we should look for friction areas or areas where two or more departments do either the same thing or parts of the same thing. As an example, Miller said that in the past she advised a student about which major might be best for him or her, but now she referred everyone to career services.

Since time was running out, Johnson said that we needed to talk about where the group was going. She suggested putting together a master list of the places students could go for specific information. She advised that at the present time, neither students nor faculty members really knew which offices students should go to for specific information or advise. After developing this list manually, she felt that the next step would be to create a computerized data base which students could easily access. The team members indicated that this would be a worthwhile project to begin with.

A referral guide to campus resources was later produced by the Division of Undergraduate Studies, the Division of Student Affairs, and the Senate Committee on Student Affairs. One of the team members was very involved in putting this booklet together.

I suggested that we should do a survey and find out from students what their complaints and concerns were. Most team members felt that we should go ahead with this although; The Director of Career Services was concerned that the survey would look unfavorably upon her area since many students did not fully know what career services did until they approached their senior year. Also, she indicated that she had recently done a survey of seniors. The group decided to go ahead with a survey.

Up to this point in time, the team kept drifting from area to area and was not at all focused on any one area or topic. The team did spend a lot of time talking about how all the different advising areas did, or in many cases did not fit, together, but certainly Cox, Grant, and Miller already knew most of this information.

One week later the group met again. We started out the meeting more focused as the group decided that we would attempt to work an advising system. We asked what sort of questions do students need answered. We then brainstormed the various items that could be on the system including information on articulation rules, policy questions, where to go for answers, a bulletin board, information on career services including announcements of companies interviewing on campus, and so on.

The group spent a great deal of time discussing the potential system. Also, some of the participants shared what they knew with respect to what other campus departments were either doing, or planning to do, in this area. One of the participants noted that there was some conflict between some units on campus over who should be responsible for what, which would mean that politics would probably come into play.

The team moved on and discussed how the various units on campus fit together. One member then went to the black board and drew out the chain of command of Academic Affairs and described how the whole system was supposed to work. She spoke about what university advising did (her department) and then stated that there were also advisors in the various colleges as well as in areas such as disabled services, admissions and records, athletics, and the student resource center. She reiterated that in each of these areas, people are allowed to make certain decisions and that many of these decisions affect other areas. She felt that to create the kind of system she imagined would require that we get the cooperation of all these different areas which she indicated would not be easy.

At the end of the meeting we decided that we would go forward with trying to create a computerized advising system to address the areas where students had the most questions. We also reaffirmed that we would go forward with designing a survey which would later be administered to College of Business students.

The group had made a major break. If the team was able to fulfill its goal of creating a university-wide advising system, it would be a very significant achievement. Several of the team members were very astute politically and wanted to make real changes. All of the team members were very sincere in their desires to radically change the way students were treated on campus.

On March 19, 1993 all the team members except Hanson met. At the beginning of the meeting we discussed the reorganization of the College of Business that had just been announced by Brady.

The remainder of the meeting was spent talking about the proposed information system, including how we should set it up and what information should be on it.

Johnson advised Cox that she had spent a great deal of time on the Internet looking at information systems at other universities and informed Cox about whom she should contact to develop the software and get the system going. Cox seemed appreciative of the information, but she also appeared to have her own strategic game plan firmly in mind. The dialogue did seem to help both parties clarify what needed to be done.

The team suggested that this information system should be accessible in places other than the library and computer labs. It was also suggested that outdoor kiosks could be utilized if the computers and terminals could be protected from theft and vandalism. The Director of Career Services said that there was a kiosk outside her office which she would be willing to give up if she could access career services information on the system as well. The other three team members were thrilled with the offer. It demonstrated the willingness of the individuals to work together in pursuit of this common goal.

At the end of the meeting the team decided that at the next meeting it would focus on the survey for the following week. I offered to bring an outline to discuss.

On March 24, the group met again. Hanson had tried to find the room, but it was in an isolated part of the student services building and so he missed the meeting. As it turned out, he never attended another meeting.

Johnson brought with her a survey she had prepared during the week. I also prepared a sample survey. We spent a fair amount of time looking at Johnson's. I questioned why it wasn't more open-ended, but Johnson did not want the structured format and questions changed too much. Johnson indicated she had spent a great deal of time on it and that her doctoral dissertation dealt with survey instruments and so I did not challenge it too much for the sake of group cohesiveness. However, a second open-ended question was added and the ideas of the other team members were incorporated. The group decided that it would be administered the following week.

The conversation returned to the pilot information system. During the week, both Johnson and Cox had spoken to a number of people across campus about various aspects of such a system. Cox said that she had spoken with someone about whether technically the kiosk outside career services could be wired to accommodate such a system. The person indicated yes, but said that there was "no way career services would give up that space." When Cox advised this person that Grant had already approved of the transfer, she said that this person "almost fell off his chair." As was apparent from such a response, working together and sharing resources between departments was not something that was often done across campus. Grant suggested that the reason this statement was made was because when the new student services building was completed two years prior, she had to battle for every square foot of space.

Johnson then very excitedly added that she had gotten Brady to donate some old computers from the computer lab which was closing. She indicated that they could be used for the pilot information system. Johnson said that she envisioned free standing computers around campus which students could access to get answers to any questions they might have.

Things were going really well and the momentum was really started to build. Also, the team members seemed to both like and respect one another. Some team members reported "that it was a very exciting time."

During the next two weeks the survey was administered and the results tabulated. After a student assistant helped input the raw data to a computer file, Johnson spent hours summarizing and then typing the various comments from the 250 surveys which were then complied into a report.

Later that day I spoke with Johnson over the phone about Brady's response to the survey, and the survey in general. After that discussion we spoke for another hour on a very personal basis. She provided me a lot of background information on herself and her family which she would not have revealed if she did not consider me a friend. It was a good bonding experience and I felt closer to her afterwards. Also, it allowed me to understand where she was coming from and her motives for spending such a massive amount of time devoted to the two teams; as well as the other committees she was on. I believe that her primary motive for this commitment was that she felt very passionate towards students and wanted to make WCU a better place for them. Further, she realized the significance of the information system.

At the team meeting held on April 21, we spent a great deal of time reviewing the responses to the survey. Johnson explained to Grant about how she could put a lot of important information on the Gopher System which is a software system. The system allowed faculty members and students to access a wide range of information including class schedules and other campus-wide information. Later, Grant did start utilizing the system herself. Without Johnson's assistance she probably would not have started putting information on the system for quite some time.

On April 28, 1993 Johnson filled the group in on some conversations she had had with other people on campus. Also, Johnson indicated that Brady authorized her to give some older computers to the library in exchange for the library people helping the College to set up this information system.

On that same day, Cox went to Brady and advised the Dean that Johnson was getting involved in some things that she should not be involved in yet. I was not privy to any of what was said or what happened, but apparently Johnson started forming alliances with people which were not politically wise in the eyes of Cox.

Brady's response to Cox was that he would talk to Johnson, but he also added: "Isn't it nice for a change to have to restrain a faculty member for being over-zealous, rather than to have to always prod them along?"

According to Johnson's interpretation, Cox did not tell Johnson or the team everything that she was trying to do behind the scenes and Johnson ignorantly got involved where she should not have. Cox, on the other hand, believed that she had made herself perfectly clear, but that Johnson went ahead forming alliances nonetheless. Cox sent Johnson some E - mail messages voicing her displeasure which Johnson was both surprised about and hurt by. Johnson was just trying to get things moving as quickly as possible and did not know that Cox was simultaneously working on the same idea, but utilizing different people and pursuing different avenues.

The rift between Johnson and Cox was a major problem for a short period of time. Johnson was emotionally hurt by it, although over time she and Cox patched things up as they both served on another university committee and also took a Spanish class together over the summer. At the time, Johnson indicated to me that she needed to think smaller and cool things for awhile. The team did not meet again during the spring semester or over the summer.

In November, 1993 the team formally got together to discuss what people were doing and the new developments on campus. The Director of Career Services told the group that she was now using a university television channel to communicate to students. Also, she said that she had put a great deal of information on the university-wide information system thanks to the knowledge she had gained from being a part of the team.

Cox said that she was still working on the university-wide advising system, although things were moving fairly slowly. She said that she had been working with some people in Admissions and Records who were going to be introducing a new computerized student information system to the university and with some people in the library on an information system.

Johnson told the group about an open house to be held in the College of Business' new computer lab and said that an announcement would be made by the University Librarian, about an important relationship between the College of Business and the library. This relationship partly stemmed from the work of some of the team members.

At the end of the meeting the team agreed to meet again some time during the spring semester, but the meeting never happened. That was the last time the group formally met. Cox and Grant both told me that even if the full team never formally met again that the team still existed in spirit. They both indicated that they were still in touch with the other team members and continued to work with them on many related tasks. Johnson also felt that the working relationships between the various team members will continue on indefinitely because of the shared vision that the team members have.

The relationship between the library and the College of Business was a very significant event and was the result of a great deal of behind the scenes work by Johnson, Cox, several people from the Library and Dean Brady, among others. The actual announcement made by the head of the library was that the library would be acquiring and operating a new computerized information and E-mail system and that the College of Business would be the College which would serve as the pilot to test the system.

According to some sources, this system will be the first step towards making the library, rather than a college within the university, the center of a university-wide information system. How this evolved was very complicated and politically sensitive, but it was influenced by some of the team members.

Sources told me that what was actually achieved by the library was due to the personal and professional relationships of several individuals from across the campus whom all shared the same vision of the creation of a university-wide information system in order to improve the services provided to students. One person who was directly involved said that "what each of the individuals shared was a true passion to improve the University unencumbered by any political or egotistical motivation."

Of all the players involved in what transpired, Johnson had the least authority because she was a faculty member who was only involved because she had volunteered to be on three committees (teams), while all the other individuals involved held very powerful administrative positions across campus. Nonetheless, all of the people involved stated that Johnson was a significant driving force behind what actually happened because of the relationships she had formed.

While I am not at liberty to disclose all what transpired, a little history on Johnson's role is necessary. First, she viewed the three committees which she was on as interrelated and that is why she had volunteered or agreed to be on all three committees in the first place. One of the committees she was on was the new College of Business Information Technology Team (ITT) which she was asked to join. She agreed even though she was involved with the two student services teams as she saw the natural link between the three. One of the charges of that team, which was composed of College of Business faculty and staff, was to figure out what to do with approximately 50 old computers as the College had purchased new computers. These were in a computer lab which was closed by the College. As it turned out, Johnson lobbied the rest of that team and Brady to authorize the transfer of some of those machines to the library to be used for several purposes including, this university-wide information system. That gift was viewed by the library as quite extraordinary as historically different areas on campus rarely shared resources. Also, as a result of this transfer several meaningful relationships were formed which have had far reaching ramifications.

While it is impossible to say for certain what changes occurred as the direct result of the team acting on its own, most of the people I spoke with felt that the team was a prime catalyst in the movement towards a university-wide information system. One person said that "because of the team, the process is moving faster and now has a much greater chance of success than ever before."

According to some of the team members and other knowledgeable sources in the University, the work of some of the team members acting as members of the team and in conjunction with other teams led to the formation of a University-wide information systems committee. On February 15, 1994 the Senate of the University met and passed a resolution creating a new University committee called the University Information Systems Committee (UISC). The Senator from the College of Business sent an E-mail to all College of Business faculty describing this committee.

> This important committee is charged with making recommendations to the Senate concerning acquisition, allocation, and coordination of University systems' resources. The committee seeks to ensure appropriate standards, support, materials, and policies for all components of the University's information systems.
>
> It will be a large committee with 20 members (faculty, staff, students) drawn from all areas of the University. . . . It should be pointed out that ten other members of the UISC would be drawn from other areas of the University such that staff and administrator representation on the committee was a virtual certainty.

## Summary

Most of the teams accomplished a great deal. Towards the end of the research project, I interviewed most of the participants about their personal experiences and perceptions about what had transpired. Most of the team members indicated that the experience was extremely worthwhile and led to significant changes within the College and University.

In Chapter Five, the results of those interviews are summarized and organized around the research questions I outlined in Chapter One. In Chapter Six, I will expand on those findings and analyze why things happened as they did.

# CHAPTER FIVE

# RESEARCH FINDINGS

The overall purpose of this study was to document and analyze what happened as the College of Business Administration at WCU embarked on its TQM journey. In order to complete this task, a case study was conducted by the researcher. In order to conduct this case study, the researcher spent over fifteen months working with the various teams and observing the process. This entailed attending most of the team meetings, talking with the participants both formally and informally throughout this time period, and finally, conducting extensive interviews with all of the major participants at the end of this study. Further, several of the key participants have read a draft of this final report and were encouraged to both critique it and provide feedback on the findings.

In order to report the findings of the case study in a logical order, this chapter is organized around the nine research questions presented in Chapter One. A summary of what was observed directly or learned through interviews is presented followed by a short synthesis. Chapter Six is more analytical and contains a discussion of the theoretical implications of the data. Chapter Six will also compare what transpired to other research done in this area.

## Forming Teams

The first research question is: What was the basis for forming teams and choosing members?

How people came to join the master student services team varied. Brady sent a memorandum to all faculty members asking them to volunteer for this team or be a part of two other teams he planned to form. Only three faculty members volunteered to be a part of the team and one of them said that he volunteered only because of his friendship with the researcher and therefore, his desire to support this research effort. It is worth noting that the two other teams never became operational.

The three members of the team who worked outside of the College of Business Administration were personally asked by Brady to be a part of the master student services team. Cox said that Brady asked her because "he knows that I am interested in improving the experience of students at the University. He sent me an E-mail message and I said yes. Grant, and the Director of Admissions and Records indicated that they were also asked to participate in the same fashion.

With respect to the staff members, only one person reported that she volunteered on her own to be a part of the team. The other staff members indicated that the Dean told them that they should participate and therefore, they did. One individual who became a member of the class scheduling team indicated that it was something that really interested her, but she did not feel that she had the time to devote to the team. She noted that the Dean called her and basically told her that "she should make the time."

Two individuals joined the College advising team after the admissions team determined that the only way meaningful change could take place in the College's student services office was if everyone working in that office participated. When this researcher requested that Brady invite the two other people in the office to join the team, he declined and indicated that they should be asked to participate by the researcher. These individuals noted that when this researcher asked them to join the team, they interpreted it as a direct command or order from Brady and that is why they participated. Both indicated that this was not something that they would have freely done on their own.

Also, two students were asked by two of the team members to be on the master student services team. These students never participated on the sub-teams, although originally they were each assigned to a sub-team. When the sub-teams were formed, the students were not advised of the meeting time. The reason for this is that all the meeting times were arranged via E-mail and the students did not have access to it. In one case, an unsuccessful attempt was made to reach one of the students by phone. In retrospect, it was probably better that students were not present on the two advising teams because the matters being discussed were both sensitive and confidential in nature. For example, many of the areas which were addressed on the College advising team related to personnel issues, as well as some of the team members relationship with one another and with some administrators. Obviously, it would not have been appropriate for students to be involved in those types of discussions. On the University advising team, the team spent considerable time talking about issues which were confidential in nature. Those discussions would have been inhibited by the presence of students. Student presence would have been helpful on the class scheduling team.

Each of the team members on the master student services team volunteered to be on the sub-teams. One faculty member volunteered to be on two teams, although he indicated at a later date that he wished that he had not.

Another faculty member ended up being on two teams because she was the leader of the University advising team. When the College advising team formed, she felt that it was important to come to the first meeting to share the other team's visions. At that meeting, she indicated that she would only continue on the team if the team members so desired. She said that, after this meeting, three of the four team members asked her to continue, and she did so. She was also asked to be on two other teams not related to this research project and agreed to because she felt the subject matters that these teams were addressing were also interrelated. While her involvement on these various teams was helpful for the teams as a whole, she should not have over committed herself; because she later indicated that she felt overworked and stressed out by doing so.

Synthesis

For the most part, those who volunteered indicated that they felt more committed to the teams than those who felt coerced to join. Most of the participants who felt coerced said that the only reason they attended the meetings was because they were afraid that if they did not, their behavior would be "frowned upon by the Dean." Also, as would be expected, those who were most committed to the cause were the hardest working and productive members of the teams.

On the University-wide advising team, all but one member ended up being very enthusiastic about the direction the team took. This enthusiasm, in turn, caused these people to be very productive members of the team. The one member who was the least committed eventually dropped off the team, although his reasons for doing so centered primarily upon not having the time to attend most of the meetings.

On the College advising team, most of the team members felt that the Dean was requiring them to participate. If external scheduling by the researcher or Johnson had not been provided, this team most certainly would have died.

With respect to having students (the customer) on the teams, most of the participants did not feel it would have been appropriate or productive because of the sensitive, and often political, nature of the issues being addressed. It is this researcher's belief, however, that in certain instances that it would be productive to have students join faculty members and staff on some teams.

Overall, I cannot make any definitive statements about how teams in the future should be formed based upon the data. At times, administrators will need to coax people to participate. Ideally though people will volunteer to be on teams or form their own teams. The key ingredients are that the right people (those most directly involved in the process) with the right mix of skills (social, technical, TQM) are involved in the improvement process.

Hopefully, people will start forming their own teams once a problem is identified, but at this stage in the College's TQM process this is not likely. One of the main reasons for this, is that at this point in time, team members are not rewarded for their efforts. If the Dean wants people to volunteer more in the future he should offer incentives or positive feedback to those who do so.

There is no clear guidelines on how teams ought to be formed in the literature. There are various types of teams who do a variety of things and thus, it varies how teams should be formed (Lewis and Smith, 1994; Seymour, 1992; and Spanbauer, 1992). Quorum Health Resources (1991) advised; "Process improvements teams are ad hoc teams formed to improve a specific process. . . . Who should be on a team? People who work in, own, or are customers or suppliers of a process may be on a process improvement team" (pp. 5-6). Spanbauer (1992) wrote; "In Fox Valley Technical College's quality process model, several types of teams are advocated. . . . No preferred pattern has emerged for the formation of these teams" (p. 30).

## Training

The second research question is: What training in TQM was necessary for the teams to function?

Most of the members of the master student services team indicated that when they started the process they had no prior knowledge of TQM. The training materials distributed at the first meeting were found to be very informative and provided some of the participants a new perspective on how to manage and treat students. One member said that prior to reading the material, "she had never considered the concept that students should be viewed as customers."

The training materials which the team members received included information about the philosophy surrounding TQM, the purpose of a TQM team, who should be on a team, the role of team members, how a team meeting should be run, and a little information on a few of the TQM tools. Each of the team members also received some readings describing which universities were currently involved in TQM and how these institutions were applying the principles to higher education. Other readings included an outline of what specific processes these universities targeted first and an article entitled "TQM on Campus: What the Pioneers Are Finding" (Seymour, 1991).

A couple of the team members felt that the introductory session, which provided an overview of the philosophy surrounding TQM, was very boring and a waste of time; yet others indicated that it provided them with a valuable overview of what the teams would be doing. For the most part, those individuals who were the most team oriented, found the presentation to be a waste of time because they felt that they were being told the obvious. Those who were more individualistic in their work habits indicated that they found the presentation helpful and a necessary point from which to start. Also, the few people who had some previous exposure to TQM, indicated that the presentation was a little too basic.

One participant who indicated that she had always been team oriented said that she found the initial presentation "aggravating. . . . At the time, I said to myself, 'Oh God, what have I gotten myself into. This is so boring'." This person said that the written materials would have been ample for her. She indicated that she read everything I gave her and saw no point in verbally going over the same material. On the other hand, at least four team members indicated that everything they learned was through the oral presentations, as they did not read one thing given them. They indicated they did not have the time, or in some cases the interest, to read anything.

Other than the introductory training session, all the training was on the job and "just-in-time." People responded in different ways to this approach. A few of the staff members said that the College should have sent everyone to training sessions or had this researcher, as facilitator, conduct several workshops devoted solely to learning what TQM was all about and the various tools utilized; they felt that they were continually in the dark as to what TQM was all about. Most of the faculty members and the outside deans/directors, however, indicated that they did not want to spend any time in training sessions and that they wanted to just attack the problems and learn on the job.

Synthesis

Ideally there should have been more time devoted to training, as some members did indicate that they felt in the dark throughout much of the process; however, the ideal content and method of presentation of such training is not at all clear, given the wide range of individuals involved. The participants had differing levels of educational background ranging from high school diploma to the Ph. D. Each of the team members also had a different knowledge base of what TQM entailed. Further, some of the team members felt that they learned better by reading, while others believed that they learned best through listening. Some preferred to learn in a classroom setting, while others preferred to learn on the job. This created difficulty in the training process. Ideally, the training would have been customized for each of the team members, which is a suggestion for future teams.

The way I would customize a training program is I would first decide what training or skills people needed. Not everyone on a team needs the same skills. For example, if flowcharting was going to be done, not everyone on the team would need to know the mechanics of doing a flowchart. Only one person would need to know how to do the actual charting; the other members would just need to provide the information.

The literature describes a wide variety of skills that people need to master to be effective TQM team players. These skills include: problem solving, decision making, knowing how to use basic TQM tools, statistics, the ability to listen and understand what customers want, communication, feedback, how to facilitate, leadership, human relations, and how to be a change agent. Obviously, people can not master all of these before they volunteer for a team. Nonetheless; a significant amount of training must take place either on the job, or in outside workshops.

As an example of the difficulty in training the staff, one of the team members reported:

> During the last year, Brady brought groups of administrators and staff together to deal with some core processes. At one of the early meetings, Brady spoke about his vision for the College and about his desire that everyone work together as a team. He also said that everyone in the office should have a working knowledge of what everyone in the office did so that if someone was out of the office, another person could temporarily fill in for him or her if a customer needed something. . . . After the meeting, several staff members came up to me and said that what they interpreted Brady as saying is that no one would be in charge in the office, that everyone was suppose to be a clone of everyone else, that all staff classification levels (used for salary determination) would be eliminated resulting in everyone earning the same amount, and that everybody had to learn how to do everybody else's job as well as the other person knowing his/her own job.

This is not what Brady meant, but according to the person about half the people understood what he was trying to get across, while the other half totally misinterpreted it. She indicated that it took quite some time before people were able to grasp what he intended.

Much more training should have been devoted to team-building and communicating. There was very little focus on this area during the training, although it was an area which proved to be critically important. It would be best to use an external trainer/change agent for this aspect of the training, because often, an insider is too close to the situation, or the situation that needs addressing is too confidential and private to be disclosed with a supervisor or other employee with whom the person has a long-term relationship.

One of the problems that I had as facilitator was that my role was multi-dimensional. Besides being both the researcher and facilitator, I also had some other involvement with the College.

## Problem Identification Methods

The third research question is: What problem identification methods were utilized?

The master student services team used the Electronic Board Room (EBR) to identify all of the student service areas needing improvement; this allowed the master student services team to quickly form three sub-teams. Also, during the EBR sessions, the group attempted to define the missions of the various student services areas and the goals of the corresponding teams. While each of the team members received a written copy of the session, the participants said that they never referred to it again. Most of the participants did not feel that the EBR was tremendously useful, although most participants stated that it was a useful starting point for the journey.

None of the teams utilized the EBR again, although it might have been useful. The anonymity of the process could have been helpful to the College advising team, although the group was probably too small to insure true anonymity.

Each of the groups flowcharted various processes to differing degrees. The University-wide student services team spent over three sessions doing flowcharts and most of the participants felt that it was extremely worthwhile.

The primary benefit of doing the flowcharts was that it served as a very strong team-building exercise for the team. Each team member felt free to jump in and offer his/her input and help another team member see how the various pieces fit together. One team member said; "It was exhilarating, we were all in there grappling with the issues. . . it caused us to bond as a group." Additionally, the majority of the University advising team members felt this exercise was helpful because most participants only knew their own unit and were not totally aware of what the other units across campus did and how all the pieces of the puzzle fit together. On the other hand, one team member was totally turned off by the exercise as that person felt that it was a waste of time and that one of the participants dominated too much of the conversation.

The class scheduling team also did some flowcharts, but the team as a whole felt that the actual process of how the schedule was created was not the core issue which needed addressing. Rather the team felt that it was more important to look at the decision-making processes and priorities used by the various departments to create the class schedules.

The admissions team started its journey by doing flowcharts of some processes, but it stopped when it became evident that all of the processes that were scheduled to be flowcharted were handled by one person working alone. Therefore, the team members felt that the time would be better spent attacking the problem from a different perspective. Also, the Office of University Admissions had already flowcharted all the processes in its office one year prior and there was no reason to do it again. That particular flowchart was very detailed and provided some of the participants with an overview of how various processes were coordinated throughout the University.

The University-wide student services team and the class scheduling team both designed and administered surveys to students. (Copies of the surveys can be found in Appendices C and D.) The results of the University-wide student services survey were useful, as it showed unequivocally how dissatisfied students were with the services they were supposedly being provided. Only a few members of the University and College advising teams team saw all of the unedited survey responses, as many of the comments made by students targeted specific staff members. Later, the report was summarized by Johnson and then presented or circulated to other staff members. The reason that all the completed surveys were not circulated was because TQM dictates that a team not point blame at any one person. Also, as Deming noted, it is important to "drive out fear." Johnson and I did not want people worrying about what was said and who might read it. Our main intent in administering the survey was to gain information which could be used to improve the situation.

The summarized survey results were used fairly extensively both within and outside of the College as a tool to illustrate student dissatisfaction and anger. That survey was very important as a rallying cry. It did the job that it was intended to do as it provided a great deal of very useful information.

While the survey presented concrete data, many of the providers whose services were surveyed responded defensively saying: "they [the students] can't be talking about my area," or "they don't know what they are talking about," or "what do they expect us to do given the amount of resources that we have?"

How the team members and others in the administration responded to the report also varied. Most of the people in the College of Business Administration Student Services office were embarrassed by the report, but discounted much of the report saying that the students must have been referring to the services provided by other University departments. Basically their response was one of denial. I know that several of the participants were embarrassed though because they were very protective of who saw the actual survey responses.

Cox, on the other hand, said that while the survey was believable, it was not necessarily helpful to her, as she already knew "all this stuff." She related that Johnson showed her the results and said to her "you are probably going to be devastated by the responses." Cox said that , in fact, she was not surprised by the results as she was fully aware of how frustrated and unhappy students were.

Brady had Johnson, Miller, and the researcher present the summarized results to the department chairs and the staff members at the September 2, 1993 meeting described in Chapter 4 to serve as "a wake-up call." This meeting, which came during the first week of school, was used by Brady to demonstrate the need for continuous quality improvement.

The class scheduling team administered a survey, but the results were not widely circulated. Brady received a summary of the results and he indicated that he circulated those to the department chairs. None of the other team members received a copy of the survey results due to the demise of the team described in Chapter 4. This survey was not a wasted effort, however, as the completed results have been provided to a newly formed team which will be addressing the same issues. This new team is made up of different members including both the graduate and undergraduate directors.

These results should be very useful because they identify students' preferences. For example, 90% of the students prefer for classes to meet twice a week rather than only once a week. Also, over half of the students indicated that the scheduling of classes in the Business College "has absolutely slowed down their ability to make reasonable progress towards getting their degree," while another 25% said that "maybe it has." The survey then asked students to identify the specific reasons why the class schedule hindered them. Those results should be very useful to the next team as the students identified specific classes which were difficult to enroll in, time conflicts between required classes, and so on. Students were also given the opportunity to respond to the question: "What is the single most important thing that could be done to improve the class schedule?" Many useful suggestions were made which should be considered by the new team.

Two of the teams used brainstorming. The College's advising team utilized brainstorming primarily for problem identification, while the University-wide advising team used brainstorming primarily to clarify problems and devise possible solutions. The College advising team found the brainstorming tool useful because it was able to identify all of the potential weaknesses in the office instead of isolating only one or two. Brainstorming was helpful at the time because the participants were only asked to identify all possible areas that could be improved and were not asked to prioritize or critique the list until later. This caused the participants to open up more because they felt that the assignment called for them to list every area that could be improved. In other words, this exercise forced them to create an exhaustive list of all processes needing review.

The University advising team brainstormed on several occasions, but with a different emphasis. In the student services group, the tool was used to determine what problem processes existed, while on this team brainstorming was used primarily for solving problems as the team members felt they knew the problems areas. One of the team members said:

> We've been around this place long enough to know what all the problems are. . . . The challenge is to try to figure out how to solve them. . . . This is often very dangerous though as you may be wrong. In this instance though, I feel that the team was correct in its assessment of the problems. Now all we have to do is solve them.

I tried on several occasions to get the University advising team to do a cause and effect diagram. In fact, I passed out some blank forms for them to use on two occasions, but the team members thought they knew everything. As facilitator, I should have pushed more for them to use this tool, but the team members were quite strong willed and felt that they knew all the problems. Solving "them" was all they were interested in.

The class scheduling team used brainstorming to determine all the factors that should be considered when designing a class schedule. That exercise was helpful as it pointed out the complexity of the process. Once all the factors were identified, the team brainstormed the various constraints on the scheduling process. The team determined that all the constraints were internally generated, implying that a reasonable solution to the scheduling process was attainable.

The College advising team used a cause and effect diagram to classify all ways in which the office could be improved. The actual items included in the diagram came from brainstorming. This diagram was extremely useful as it was often referred to when determining which processes were most in need of improvement. In fact, it is my belief that this tool had the greatest influence on what the team actually accomplished. (A copy of this diagram is found in Appendix E.) If the reader compares the factors listed on the cause and effect diagram to what changes actually occurred (refer to the next question), he or she will see that well over three-quarters of all the problem areas were addressed and improved. The significance of this cannot be overstated.

The College advising team also used a cause and effect diagram to examine one of the processes in the office. This helped people focus on the process at hand, although there was a great deal of resistance to using the tool when reviewing this person's process as she felt that the team was being critical of her.

Each of the groups also spent a great deal of time discussing the various problems areas and possible solutions. While these discussions would often drift, they were very helpful. Another way in which problems areas were clarified and discussed was in one-on-one situations with the various team members. Johnson spent a great deal of time talking with the other team members outside the meetings and much information was generated in this fashion. Johnson indicated that generally she was able to learn much more in one-on-one conversations than during the team meetings because it was her belief that the College advising team members were not open and because members on the University advising team felt that they needed to be guarded about what they were doing for political reasons.

Members of the College advising team also did written assignments which addressed a process or area under investigation. For example, when the team examined how the office might be reorganized, each team member, outside of the meeting, prepared a written outline or proposal which was then circulated to all team members at the following meeting. All of the proposals were then read by everyone and discussed. All team members participated in these exercises and reported finding them to be very helpful.

Synthesis

The surveys were, without a doubt, one of the most valuable tools; more of this type should have been conducted. Most people involved in TQM indicate that the voice of the customer must be heard. Although many of the team members believed that they already knew the customers' feelings, wants, and needs, I believe that the staff members did not always know the customers' views or their intensity.

The cause and effect diagram used by the College advising team was also extremely valuable. This tool was so helpful because it required that the group verbalize and acknowledge all the deficiencies or problems in the office. Not until the weaknesses were voiced were they acted upon. Also, it allowed the participants to let off some steam as it enabled them to get out into the open feelings which had been bottled up inside for quite some time. A skilled facilitator could garner significant information through use of this tool, as I did. Further, this exercise proved very revealing about how the participants were feeling. The team members' responses indicated that they felt that they were being managed in a Theory X manner, while at the same time they were "screaming out" for a Theory Y managerial style.

The flowcharts were a useful tool for team-building, although the teams did not use them as extensively as they could have. The University-wide team did not fully utilize the flowchart as a tool because the team chose to devote most of its time to an uncharted area, rather than to an existing process that needed improving. In theory though, the team could have used the flowcharts to examine all the interrelationships between the various advising units, which later could have been incorporated into the computerized advising system. Flowcharts were not widely utilized on the College advising team because each of the participants was responsible for a particular process from start to finish, and every time it was suggested that a process be charted, the person doing the process felt that he or she was being "picked on."

I believe that the Electronic Board Room could be an extremely useful tool despite some negative reactions from a few of the team members. The group utilized only a few of the available tools which the EBR has to offer. Several companies in San Diego have used it for TQM related projects; one local company wrote its Baldridge application for a national quality award utilizing the EBR.

## Changes

The fourth research question is: What changes in student services policies and other changes were recommended before the teams disbanded?

Many changes resulted from the College advising team:

1. The office where the staff worked was remodeled and enlarged. The new office has allowed the staff to offer much better service to students, as before the office was very cramped. Further, the new office has improved the morale of the staff members working there.

The size of the office was increased by around 300 square feet. Also, the remodeling was very extensive. It included new counters, new carpeting, tearing out walls and re-configuring them, painting, and so on. Approximately $7,000 was spent on the project which also included upgrading office equipment.

Brady indicated that, "when the team was established, I had no intention of approving any remodeling or expansion. The only reason I approved it was because the team pulled together and demonstrated to me the need for it."

2. A new training program for student assistants and other College of Business Administration staff was designed and then utilized. The actual training session was conducted over several days and was attended by all student assistants and some other staff members in the College, including department secretaries.

As part of this program a new training manual was prepared which the student assistants and staff members now refer to in answering student questions. This training manual includes information on various college and university procedures, where students should go for other university services, what the duties of the student assistants are, and other information that is needed by a person in that position. The booklet is quite comprehensive.

3. A new computerized information system within the College of Business Administration was established which gives students the ability to access a wide range of information previously unavailable to them unless they went all over campus to find it. Also, the system will help students answer many questions for themselves. For example, students will be able to determine the courses they must take to fulfill graduation requirements based upon their "catalogue year."

While other departments have provided some information for the system, most of the information about College of Business Administration policies were inputted by team members. At this point in time, the system is not widely used by students, but it will be, as soon as more students learn about it.

4. With respect to personnel policies, several staff members who had previously resisted seeing students, now do so. Prior to the change in procedures, only one or two staff members would see students. Further, the unwritten norm used to be that the role of the student assistant was to screen out and send away as many students as possible, rather than permit them to talk to an advisor.

The change was accomplished because the staff members "listened" to the surveys and realized that a change of attitude was needed. Also, Williams had an influence on this because he set an example by spending a great deal of time at the front desk. His predecessor only saw students with major problems, while Williams often sat at the front desk answering general questions.

5. Students may now make appointments to see staff members. Prior to the formation of the team, students were unable to make an appointment to see an advisor. Instead, they just had to show up, stand in line, and then hope that an advisor was in the office at the time.

6. There is now a master calendar in the office which all staff members are expected to use. That insures that at least one advisor is in the office during working hours. Before the team was created, it was not uncommon for only student assistants to be present in the office.

7. As a result of the team, whenever a policy change was necessary, all of the staff people met to discuss its possible implications rather than having just one person make a decision which had implications for all the other staff members. The group consensus generally became policy.

8. The appointment of Williams as the full-time undergraduate director was greatly influenced by the work of the team. Brady said to me that he "more than likely would have chosen someone other than Williams had it not been for the momentum created by the team."

9. Brady authorized the hiring of more student assistants and another staff person. Together, with the addition of Williams, the office is better able to satisfy the needs of students This decision by Brady was the result of the team documenting to Brady the need for additional personnel.

10. According to Williams, one of the most significant changes has been in the admissions process. "One person used to do it all. . . . Now, while one person is primarily responsible for the process, the team is much more involved in improving the process and defining the criteria used to admit students."

11. The team also improved the counseling process for students admitted on a marginal basis. Under the new plan, students admitted on a conditional basis are required to sign a contract outlining the performance needed to stay in school. Also, in order to help these students, the team started offering a group counseling session prior to the start of the semester in order to help students improve their study skills and educate them on what resources are available for them on campus. Further, the new plan requires that each student come in monthly to meet with a counselor for a progress report. Most of these new procedures were achieved after Williams started working with the team.

Other changes that are currently being worked on, but not completed as of March, 1994, include:

1. Buying a new phone system so that students can call the office and talk to a person rather than hear a recording or leave a message on voice mail as is currently the case.

2. The creation of a new undergraduate program committee which will be composed of faculty members and staff. According to Williams;

> This committee will look at the whole undergraduate program including such issues as the admissions criteria and process, the class schedule, impaction status, retention, etc. . . . . As part of this committee, each of the staff members will present reports about the processes he/she is responsible for. . . This committee should serve to build bridges between the faculty members and the staff working in the College of Business Administration.

3. Preparing a survey instrument to be given to faculty members and other staff members.

What exactly happened as a result of the University-wide team is difficult to assess, because both Johnson and Cox were on multiple teams and there was a great deal of overlap between the teams. Cox summed it up best when she was asked what changes have actually occurred as a result of the team:

> This is a very difficult question because I was also on a liaison committee which was made up of all of the deans and key student affairs personnel. I was also on several subcommittees including one which dealt with improving student access to services. In addition, there was a deans' retreat where Brady and I both spoke passionately about improving student services.
>
> For me this was part of a bigger picture as I have been working for over one year on a central information system for advising. . . .

> Since I have had a foot in so many areas, it is difficult for me to put a line around this team. Nonetheless, I strongly believe that this team has been absolutely central to the progress which has been made on the campus with respect to a University-wide advising system. . . .
>
> Other things also occurred because there was a sense of synergy that grew out of the team. For example, Johnson said some things to me which changed the way I approached some of the problems I was confronted with. For example, she just laughed at me when I told her how well we were informing students about various things. She told me how we could do a much better job using technology. . . .
>
> With respect to this synergy, I put her in touch with some people in the library which led to a significant relationship between the library and the College. That clearly was an outgrowth of this committee.

Grant also felt that it was difficult to specifically identify what changes came as a result of the team. She indicated that by being a part of the team, she had a much better understanding of what was being done across campus and this has helped her department. Also, Grant indicated that the sharing of information has been very helpful to her. She stated that without the team, she would not had the know-how to put a variety of information on a new computer system.

Synthesis

Clearly, the efforts of the College advising team has led to many significant changes in the college. On the surface, it appears, that the class scheduling team and University-wide advising team were failures.

It is my belief that some of the efforts of the class scheduling team, such as the survey results, could lead to some changes within the College in the future, assuming that a new team begins where the other team left off.

The actual changes that will result from the efforts of the University-wide team will not be known for some time; this does not mean that the team failed. In fact, the work of the team could have a profound effect on the University. As Senge (1990b) wrote:

> Delays between actions and consequences are everywhere in human systems. . . . Systems seem to have minds of their own. Nowhere is this more evident than in delays--interruptions between your actions and their consequences. Delays can make you badly overshoot your mark, or they can have a positive effect if you recognize them and work with them. (p. 89)

The team should recognize this fact and be patient. While the team has not met for several months, one of the team members said to me "the fact that the team has not met for some time does not matter--the team still exists in spirit and will meet again when the time is right."

## Influence Patterns

The fifth research question is: During the team meetings, how did influence patterns develop among the faculty, staff, and students?

On the master student services team and the admissions team when Brady was present, he helped guide the teams, although all of the participants indicated that they felt they had equal influence and could speak their minds.

As an example, on the master student services team when the group was deciding which sub-teams should be formed, Brady suggested that there should be four teams: an admissions team, a student services team, a class scheduling team, and a career services team. While the decisions about admissions and student services team were reached by general consensus, it was Brady who pushed for the creation of a class scheduling team and a team to address career counseling. The class scheduling team was added because no one objected, but because the Director of Career Services objected to having a team devoted to her area, that team was never formalized.

On the University advising team, Cox and Johnson set the direction of the team and were the most vocal in the meetings because of the nature of the project which was undertaken. While Grant felt equal with the other team members, she indicated that the direction of the team resulted in Cox and Johnson having more influence and power. Hanson was only able to attend a few meetings because of time conflicts, but when he was there, he was only slightly influential due to his lack of familiarity with topics under discussion. However, as one participant noted "he was very analytical and provided a good perspective."

Miller did not participate as much on the University advising team as she did on the College advising team. She indicated that she felt much more comfortable on the College advising team because she knew the people. One member observed that because of Miller's position, she tended not to participate or control the direction of the process as much as the others, although she did have a very good understanding of the processes being discussed.

Cox did not feel that either she or Johnson were really in control of the group, but rather that things just evolved because everyone was committed towards the same thing. One participant noted:

> The research indicates that when you have women in a group, the group tends to think of itself as a team which is more committed to working towards the achievement of some goal rather than as a group with just one leader following the leader's wishes. . . . . With men, they tend to be more concerned with who the leader is. In this group, we really believed that we were a team rather than that this was one person's group. We all valued each other's point of view, although Johnson was probably the one that had the most to say and was responsible for setting the direction of the team.

The members on the University advising team perceived the researcher to be a participant-observer, but not a working or productive member of the group. More on this topic will be covered in Chapter Six. One member said:

> You were part of the group, although you weren't really part of the group. We let you be part of our group, but you were in fact trying to figure out what was going on and we were quite a bit ahead of your level of knowledge. You were a team member, but you were involved with the other groups and so your attention was divided. Also, you were a person that was asking questions and trying to figure things out, while the rest of us knew what all the problems were and we were trying to solve them.

On the College advising team, Johnson and I set the direction of the meetings, although each person, at one time or another, influenced the group as a whole. As previously mentioned, if it were not for this external influence, the team would have stopped meeting. As soon as Williams began participating in the team meetings, he set the direction. Johnson quit attending meetings shortly thereafter, and my role and influence became diminished with each passing meeting.

There was a striking difference in the ways that people tried to influence others on the College advising team versus the University advising team. In the University advising team, people were not afraid or shy to state their position, argue for their position, or disagree with another team member if they felt that another team member was wrong. People were very open and honest and did not play games or talk behind other team member's backs.

As an example, when Johnson started forming the alliance that Cox felt was politically unwise, Cox sent Johnson a very clear and firm E-mail stating her objections and then the two women spoke at length about what happened. At the time, it was a very uncomfortable situation for both, but the disagreement ended quickly. After the incident, the women continued to trust one another, worked better together and became close friends. Cox used the following metaphor when discussing the situation: "If you want things to bond together, first you have to rough up the edges really well so that when you apply the sealant you have a much better bond. That is the way Johnson's and my relationship was."

On the other hand, the team members on the College advising team would not say anything derogatory or critical of another person directly to them. Anything that was controversial or critical was passed through Johnson, the investigator, or later on, through Williams. Part of the reason the participants acted in this was way was due to their personalities; although I feel that the primary reason why they weren't very expressive and open was due to the management style of the previous manager. According to several of the team members, he never wanted to hear any criticism or any negative comments. Also, when he designed the work flow in the office, he did it in such a way that everybody just "did their own thing." In other words, there was a unwritten edict that you were just supposed to do your own job and mind your own business.

Things evolved as they did on the College advising team because of the non-confrontational approach that everyone took. As one participant said:

> It is obvious why what happened occurred. . . . The projects which we finally spent the most time on and addressed were projects that at the time, no one had any ownership or interest in. The office layout, the new technology, and the training program for student assistants were areas that no one person was responsible for. Therefore when we discussed them, no one felt defensive or that we were attacking her area.

Each of the participants agreed with this assessment.

There were many one-on-one conversations between Johnson and members of both teams. On the College advising team, these conversations focused more on how people were feeling and about what direction the team should go. According to some of the team members, "on several occasions, Johnson served as counselor and morale booster."

On the University advising team, Johnson spent hours in one-on-one conversations and meetings with Cox, Grant, and other people in the University trying to make the University-wide advising system a reality. She acted as the linchpin and go between for different individuals on many occasions. Over the past year, she formed several significant relationships with people all across campus, which is unusual for a faculty member.

It is this researcher's belief that Cox still had the most influence and power of those involved and, if the information system ever becomes a reality, she will be the one person most responsible for it. Others will probably get much more of the credit.

Cox was able to influence the other team members because of her power resources which included her position in the University, her knowledge, and her charisma. When Cox spoke, the other team members paid attention as she thought out everything she said before she did so. This generally made all her comments "right on." She was very guarded in what she said though as she knew that the team was part of my dissertation and she was not totally comfortable with that.

On the class scheduling team, Brady helped set the tone and was perceived by some of the team members as being the leader, although he did not see himself that way. All of the team members said that they felt an equal part of the team and that any suggestions or comments they made were listened to and given weight based upon their merit, rather than on who said it. As will be discussed later, one of the problems of that team was that no leader surfaced or took control which resulted in the demise of the team.

Synthesis

Rost (1991) defined influence "as the process of using persuasion to have an impact on other people in a relationship" (p. 105). Influence as persuasion involves the utilization of power resources. "Influence does not come out of thin air. It comes from people using power resources to persuade" (p. 105).

Johnson, either consciously or unconsciously, used a variety of power resources to influence the process. According to French and Raven (1959) there are five types of personal power: reward, coercive, legitimate, referent, and expert. During the process, Johnson used primarily referent and expert power to influence the situation, although her real source of power came from what Wagner and Hollenbeck (1992) referred to as the structural sources of power or "power which originates in the structure of patterned work activities and flows from information within an organization" (p. 467).

According to Wagner and Hollenbeck "individuals or groups that can reduce uncertainty on behalf of either a group or whole organization may be able to exert influence by trading uncertainty reduction for whatever they want in return" (p. 469). Three ways to reduce uncertainty are to gain resource control, information control, or acquire decision making control.

Johnson was able to convince another College advising team that it should give most of the old computers used in the College's computer lab to the library and to another University unit. According to her, she was able to do this because the other members of that team did not want to devote the time to figuring out how to dispose of them. She used this resource to form relationships with people in the library and to further cement a bond with another team member, as that team member sought a few of the computers for an area she was interested in. The control of this resource led to the formation of a relationship with the library, which eventually resulted in the link between the College of Business Administration and the library. Some of the computers also went to the College's Student Services office for the information system.

Johnson also controlled the flow of information on both teams by having many one-on-one conversations and correspondences with team members and others involved in the process outside of the meetings. These meetings included having lunch with many of the team members and others. Through these separate encounters she was able to determine what the other team members were thinking and doing. By doing this she became the only person who knew what everyone was doing, enabling her to put all the pieces together. With rare exception, none of the other team members met outside the scheduled meetings. Therefore, Johnson was able to influence the direction of the whole team by influencing each of the participants individually. While it is this researcher's belief that she did not abuse this source of power, nonetheless, she was able to exert a great deal of influence from this posturing.

Power can also be achieved by acquiring decision-making control. Johnson was able to exert a great deal of influence on the University-wide team by being the one to schedule the meetings and by often controlling the agenda.

For example, Hanson indicated that when the team first formed, the only times he missed a meeting was when he had an unavoidable conflict such as teaching a class or having to attend another meeting. He stated that Johnson did not consult with him prior to scheduling meetings which he felt she should have done if she truly wanted him to be part of the team. Johnson, on the other hand, felt that Hanson was not interested in the team due to his many absences.

Controlling the agenda is also a major source of power. Johnson controlled the agenda from the start of the University-wide team and to a certain extent on the College advising team. Also, two other instances stand out when Johnson was able to exert significant influence. At the meeting when the University-wide team designed the survey, she brought to the meeting a draft which was to be discussed, although she was very reluctant to make any changes to it. This researcher also brought a draft survey to the meeting, one that had been adapted from one used by a leading educational consulting firm in the United States, but Johnson prevailed with her survey.

On the College advising team, a fair amount of time was spent talking about what the mission of the College advising office should be. To prepare for this exercise, each of the team members brought with them a written draft of what he or she was felt the mission should be. (This was before Williams became involved.) After spending most of a meeting on it, Johnson took the notes with her and then drafted a mission statement that roughly reflected the views of the team, although it was biased towards what her vision was, rather than the vision of the whole group. The mission statement was later totally redone by Williams and the other members of the team.

In all these instances, Johnson was able to exert a great deal of influence through her use of power resources. What was her motivation? It is this researcher's belief that Johnson was motivated by a strong and sincere effort to improve the College and the University, with the best interests of the students in mind. Most of the team members shared this view of her, although a few felt that she was only "interested in pursuing her personal agenda". However they could not state what that personal agenda might be. Nonetheless, because she did things with such passion and zeal it is understandable that some people might have viewed her as too rigid and unwilling to compromise.

With respect to working in a team environment, both Johnson and Brady were so driven by their motivation to improve the College, they often had great difficulty compromising when their personal visions conflicted with the visions of others. One person indicated to this researcher that they felt Brady and Johnson were a lot a like for this reason. This person added that "their zeal to improve things is both their greatest strength and biggest weakness because they have great difficulty being patient and compromising."

## Worthwhile Aspects

The sixth research question is: What aspects of the process did the participants feel were particularly worthwhile?

Most of the participants indicated that they found most of the process very worthwhile and the time well spent. This was despite the fact that the work of the class scheduling team did not lead to any apparent results. One of the members on that team said "even though the team did not go anywhere, it was a very valuable experience for me as I learned a great deal about TQM which I now use on other teams which I've formed."

All the participants felt that the surveys were a good use of time and were either useful, or will be useful, in the future. One person who was on the class scheduling team indicated that "probably the most significant thing that came out of the whole process was the survey done by the University-wide advising team because that survey was used at a staff meeting and it really shook things up."

Other tools that the participants found especially worthwhile were brainstorming and the cause and effect diagram, especially on the College advising team. Several members proudly noted that many of the problems identified on the cause and effect diagram have already been improved.

Most of the participants indicated that they found the flowcharting to be a valuable exercise. One member said that when the team began the process she thought,

> these people don't know what they are talking about, but it got better because we did begin to come to terms with some of the things and after we did the second flowchart I felt that we had penetrated to a

> better level and so I was much happier after we got there -- I did see some progress.

She stated that the reason she thought most people liked the flowcharting was:

> because we were fighting, we were grappling with it. Before this process I felt distant and not a part of the process. Also, when you are with a new group, the group has to do some forming as a group and there was probably some alienation when we started out since not everyone was part of the College of Business Administration and so I did not feel in tune with the others.
>
> Part of the reason that this exercise was so helpful was that we started arguing and disagreeing with one another which was actually healthy as it showed that we were starting to bond as a group. Prior, to this point people were hesitant to speak their mind for fear of alienating another participant.

Cox indicated that one of the downsides of flowcharting was that shortly thereafter, Hanson no longer remained as a member of the team and that "as a group, we failed to involve him in it in a way which made him want to be a part of the team."

All of the members on the advising team except one, indicated that what they enjoyed the most was the bonding that took place. They felt that working together as a team was truly an enjoyable experience and the best part of the process. One member said that "I really enjoyed the social aspects of it--I looked forward to coming to the meetings." Another said, "visualizing the project and working on it with the other people was very exciting." This person also indicated that she felt that the experience was very beneficial for her unit as she now has a much greater understanding of TQM and a much closer relationship with the College of Business Administration.

A few of the members on the class scheduling team indicated to me that they felt the abbreviated flowcharts were helpful, as they demonstrated that there was absolutely no coordination between any of the departments within the College. Not one department consulted with another department when preparing the class schedule." One person added "in my fifteen years working in the College, this was the first time I have ever seen the class scheduling process discussed outside the confines of any one department." This person indicated that "all of the departments have been extremely protective and territorial about the scheduling process, but maybe this will be the start of something new."

As noted elsewhere, most of the participants on the College advising team indicated that they felt the tools were valuable, but they did not enjoy the process very much at all; although they acknowledged that things are currently much better in the office.

Synthesis

Most of the participants felt that the use of the various TQM tools was very beneficial. In particular, the surveys and flowcharts were viewed as especially worthwhile. In general, most of the participants did not feel that any particular aspect stood out as especially significant. Most of the people on the University-wide advising team and College advising teams said that the process "evolved over time and that each of the steps the teams went through were necessary and worthwhile."

The members of the College advising team did point out that what they found enjoyable and what they found worthwhile were often at odds. This point will be elaborated in the next question.

The Aspects Not Worthwhile

The seventh research question is: What aspects of the process did the participants feel were a waste of time or money?

Two of the participants indicated that they did not like using the Electronic Board Room. One team member said

> that people were coming out with thoughtless comments. . . . We really had deep, challenging subjects, but people were just throwing out responses off the top of their heads that were not deeply thought out. What I think would have been better would have been for people to think about the issues beforehand and then sit down and discuss them from a much deeper level rather than use the board room for exploratory level issues."

One of the members on the College advising team felt that "we spent an endless amount of time going around in circles." The researcher then indicated the reason for this was that the team members changed the subject whenever a significant issue was brought up. She said: "I know that, but still we wasted a lot of time." While this member said that without any doubt, the efforts of the team did lead to real quality improvements, she felt that the whole experience was basically a waste of time for her. She said:

> I didn't want to be there. I felt as though I was forced onto the team and I really didn't feel it was worth the time and effort. I always was psychologically drained within minutes after the meeting started. Part of it was due to personal reasons related to my feelings about my job.

The other members of the College advising team did not like the pressure that was exerted by Johnson and the researcher to get the participants to open up; a few acknowledged that it was necessary. Everyone indicated that the various tools were worthwhile.

Two members of the class scheduling team indicated that the only thing they did not like was that the team ended. They felt that the team was making progress and that it should have been continued.

Synthesis

With very few exceptions, people found nearly all aspects of the process worthwhile and productive. Several members of the College advising team indicated that early in the process, they felt that the team was spinning its wheels because it refused to address the issues which needed to be addressed. Also, several members of the University-wide advising team stated that it took some time for the team to start to gel. These reactions are consistent with the research on group development which suggests that groups usually progress through four developmental stages referred to as formation, differentiation, integration, and maturity (Albanese & Van Fleet, 1983; Bass & Ryterband, 1979; Gersick, 1988; and Wagner & Hollenbeck, 1992).

Wagner & Hollenbeck (1992) summarized these stages:

> The initial stage of formation is characterized by uncertainty and anxiety. . . . The members tend to discuss 'safe' topics like the weather, local news and sport that have little bearing on the group's purpose. . . .
>
> When the group enters the differentiation stage of development, conflicts are likely to erupt as members try to reach agreements on the purpose, goals and objectives, of the group. Strong differences of opinion may also emerge as members try to achieve consensus on exactly how they will accomplish the group's task. . . .

> Having weathered the differentiation stage, group members must resolve conflicts over other crucial issues in the integration stage of development. Integration focuses on reestablishing the central purpose of the group in light of the structure of roles developed during differentiation. . . .
>
> In the final, maturity stage of group development, members begin to fulfill their prescribed roles and work towards attaining group goals. (pp. 372-373)

The reason that this is significant is because what some of the members considered a "waste of time" or "spinning our wheels" were actually very important steps in the development of the group. Especially, on the College advising team, it took a great deal of time to establish trust and build cohesiveness. These initial steps which did not appear to be productive, paid dividends in the end by making both the University-wide and College advising teams much stronger, and in turn, more productive.

The class scheduling team really did not progress as a team and did not follow the pattern Wagner and Hollenbeck described. The University advising team reached the differentiation stage once the flowcharting was done. I believe that a major breakthrough came when the group first decided it would work together on the university advising system. The group clearly reached the integration stage, but I do not feel that it ever really reached the maturity stage.

The College advising team spent a great deal of time in the formation and differentiation stages. It was not until Williams was hired that the team progressed. Whether the team has reached the maturity stage is unclear. As of March, 1994 the team members are working very well together, but I do not feel they are as cohesive they could have been.

How To Improve

The eighth research question is: What would the participants do differently?

Both Grant and Cox indicated that at the beginning of the process, the teams should have done more team-building exercises. Grant said that it took her a long time to "feel a part of the team primarily because I missed the introductory meeting." She said that she wished she would have been contacted after she missed the first meeting and been filled in on what she had missed, as she felt lost for quite some time. When this comment was related to Cox, she said "I felt the same way and I was at the first meeting." Cox indicated that she had attended other workshops and seminars where team-building exercises were done and she said that "it was amazing how quickly you can build a team by doing some of these exercises." She said much more team-building procedures should have gone on in the first couple of meetings.

As noted, two of members on the College advising team felt that Johnson and this investigator pushed much too hard to get people to open up. One said;

> Had we truly opened up and told the other team members what we thought of the job they were doing, all hell would have broken out. You need to remember that after the meetings we had to work in the same office with the other team members for the rest of the week. . . . If we would have done what you and Johnson wanted us to do, I honestly feel that it would have done some serious damage.

Another person said:

> You and Johnson were inexperienced amateurs trying to do T-groups. If we would have gone along with you, no telling how bad

> things would have gotten around here. . . . I hated coming to the meetings. They were always so intense and emotional and everyone felt as if they had to be on guard. . . . Fortunately, all the staff members had an unstated pact that we would never say anything negative about a process done by another person, as we all would have taken the comment to be a criticism against that person. . . . The only reason I came to the meetings is because I knew if I didn't, then the others would spend the whole meeting talking about me behind my back. I know the others felt the same way.

When asked how they would have gotten the group to work as a team and cooperate, these people said that they didn't know. One said: "Maybe, you had to push, but it was just so draining." Another said

> If Williams hadn't been hired, things really wouldn't have changed much. He acts as a buffer between people so that if we have a problem with the way someone else is doing something, we can go to him and then he can go to that person. . . . We still aren't real comfortable being truly open with the other people in the office although we've come a long way.

Two of the team members of the College advising team indicated that the facilitators (Johnson and the researcher) should have established greater trust with them earlier in the process. "We felt that you were Brady's spies and that you were only doing what Brady wanted done, and really did not have the interests of the team in mind." When asked if they ever came to a feeling of trust, one said; "about halfway through the process, I started believing that you did have our best interests at heart." Another team member relayed the perception that Johnson and I had personal agendas, although she wasn't sure what those agendas were. "I think that Johnson came in with presumptions of a faculty member who was unhappy with the system and who wanted to make a lot of changes without really understanding the system."

Another member of the team was more comfortable with the pressure; however she indicated that she would have preferred to begin the process with more team-building and trust-building activities. She also indicated that she would have preferred more training. Additionally, she said that she wished that people had known "early on what the stakes were."

The primary reason that the class scheduling died was that there was no clear leader. There was a misunderstanding about who the leader was. Some of the people thought that the leader, or person who was responsible for scheduling the meetings, was one person, while others thought is was someone else. In any event, no one thought he/she had been designated leader and this breakdown led to the demise of the team.

Synthesis

The members of the College advising team did not find the process enjoyable. Change was very difficult for them. It is this researcher's belief that if Johnson and the facilitator had not pushed so hard, no meaningful changes would have occurred.

The College advising team meetings were not enjoyable for Johnson or the facilitator, as well. Johnson indicated that she hated going to them "because they were confrontational, but barriers needed to be broken down. Contrary to one participant's belief, Johnson did have training and experience in crisis counseling, team building, and one on one counseling. She also indicated that her Ph.D. degree in Business Administration included an emphasis in organizational theory and behavior and that she has taken additional classes in social psychology and industrial sociology.

Did Quality Improvements Result

The final research question is: Did the participants believe that the efforts of the team will lead to real quality improvements?

Every team member on both the University and College advising teams said that, without a doubt, the efforts of the team led to real quality improvements. Each of the members interviewed gave both tangible and intangible examples of how the College and University were better off as a result of the teams. The tangible examples given by the College of Business Administration team members included the following:

1. "Now students can schedule appointments."

2. "Student assistants are able to do a much better job answering questions for students and working with staff in the office because of the new training program."

3. "The new information system will help students out immensely when it comes to determining their degree requirements. Also, the system will help students know where they should go for answers to their questions.

4. "The one-stop philosophy we now have has been a tremendous help to students. Before if we could not answer a question, we would tell them to go try somewhere else if we were not the office which handled that particular process. Now, we try to determine exactly what their question is and if necessary phone another campus unit to get the answer for them rather than make them walk across campus and wait in another line to hopefully find a person who might be able to help them. . . . Many times they still need to go elsewhere to pick up a form or get something signed, but at least they don't have to wander aimlessly not knowing where to go."

5. "The new office allows us to provide much better service to the students. Before, students would oftentimes have to discuss whatever

problem they were having in front of other students or other staff members."

6. 'While we have not resolved the problem yet, we are working on the phone system so that now when a student phones he/she will not get a recording or voice mail. We are going to make an effort to answer as many calls personally as possible."

7. "We are now more willing to see students and help them. Before we would generally have the student assistants screen them out for us."

8. "We are now much more willing to work as a team and share information which helps everyone in the office do a better job. . . . Because we are now working in a team we are able to accomplish things that we would never have been able to do before. The student assistant training program, the proposed phone system, the design and layout of the new office, the computerized information system are just a few examples."

9. "Each of us is now more willing to give and receive feedback and/or criticism about how a process should be improved. Before, no one wanted anyone else involved in her work. This has helped each one of us improve the processes we are directly involved with."

10. "The addition of Bob Williams has had a major impact on the services we now provide. Also, we have been given additional resources for both permanent staff and student assistants."

11. "We now have a much better working relationship with faculty members and staff across the street which has resulted in much better service to the students. . . . Before, the faculty would make some policy issues and tell us about it after the fact. We would then have to deal with the ramifications of their policy, which generally they were totally unaware of when they made the policy. Now, whenever a policy decision change is

considered, we are asked to participate in the discussion which leads to much better decisions being made in the first place.

12 "We now have much more formalized guidelines on when exceptions to rules should be made. Before, whoever was responsible for the decision would have his or her own guidelines, but none of the rest of us knew what went into that person's thought process and so we couldn't explain to students or faculty members why one person was allowed to do this and another was allowed to do that."

13. "Since we now meet as a group every other week, we now know much more about what other people in the office are involved with and about any developments in the College or University. . . . This allows us to be much more responsive to students when they ask us a question."

14. "There is much more cooperation between people. Staff members are now thinking about the needs of others in the office, as well as the needs of students. Now I understand what you meant when you spoke about internal and external customers. . . . This had led to dramatic improvements in how we service students."

There were also many intrinsic changes as a result of the process. Each member of the College advising team told me that as a result of the team she felt more motivated and committed to do a good job. One member said "I feel much more energized now. . . . Now, I really look forward to coming to work . . . . Before, the attitude in the office was so negative." Another team member said, "I was really considering quitting, but now I really like my job again." Each of the team members also stated that the morale and worker satisfaction in the office was much higher now than at any time before. The team members also indicated that they now feel much better about the other people they work with in the office. As an example, within the last month the team celebrated two birthdays in the office. In the first instance, one of the team members surprised another team member by bringing in a cake and card. While this might not seem as a significant event to most readers, this was the first time that a birthday had ever been celebrated in the office. The person who had the birthday said she was "really touched by the gesture."

Further, each team member stated unequivocally that the productivity of the office had increased and that the office was much more customer focused than ever before. One team members said:

> The office has a totally new philosophy now. We are now really trying to look at things through the eyes of students, rather than only through the eyes of administrators. We seem to genuinely care a lot more about students than we did before. . . . We wrote a mission statement that I think everyone now buys into since we wrote it as a team. All of us seem committed to fulfilling the objectives of this vision.

One person indicated that without any doubt the efforts of the University advising team had already started to lead to real quality improvements and would continue to lead to real quality improvements. She indicated that in order to institute any meaningful change on the campus, you needed to have enough people feeling that something needs to be done. She felt that this team provided a good core group with energy and optimism and empowerment. That person added:

> It was a very synergistic group in that a lot of really terrific ideas came out of the team meetings and the talks with one another. The team allowed me to share a lot of ideas with people and they provided me feedback which allowed me to have a certain level of

maturity in my plans which resulted in moving these plans to a much higher and more sophisticated level.

There was also a great deal of networking and idea sharing that went on between all of us with respect to the University-wide advising system. One of the significant things that I think happened in that group was the enthusiasm and optimism that grew out of it because many of us were feeling that there were problems going on and nothing was happening about them, but we soon realized that there was a committed group of people across campus trying to do something about them. It was really an exhilarating sort of thing and so it is really hard to put a finger on it, but it was clearly there as we really felt as though we were getting somewhere and we also became aware of who else was doing things. It became obvious there was a real enthusiasm across campus and we tended to reinforce it in each other.

The practical outcomes have probably come faster and with more enthusiasm and with more of a sense of joy than might have happened before. One of the things that happens a great deal on this campus is that things get started out and then they don't go anywhere. It is very depressing and sometimes you feel you are all alone battling these things, but I really feel that this group energized each other.

I feel that Suzanne has incredible enthusiasm and energy and it was catching. The whole group got really emotionally bonded. I remember when Suzanne read her letter advising her that she had been granted tenure and we all celebrated together and felt really excited for her. There was really a lot of emotional stuff that went on there. Being a member of the team was truly an enjoyable experience.

Another participant also indicated that she felt that if she had a problem which another team member could help her with, she would not feel at all reluctant to go to that party for help.

It is also of interest that because of the positive experience Johnson had with TQM, she started a team composed of accounting faculty members to address a major change in that department's curriculum. Five other faculty members bought into the idea and the team was formed in March, 1993. During the summer, that team constructed the contents of two new six unit courses in the accounting department's curriculum.

Most of the team members on the class scheduling team felt that the work of that team, as a team, did not lead to any real quality improvements; although one member said that the knowledge she gained has made been invaluable to her and has led to quality improvements in other parts of the College.

## Concluding Comments

Does TQM work? When I first discussed the formation of TQM teams, Brady said that there were three areas he wanted to address: The overall mission statement of the college, curriculum and teaching, and student services. It should be noted that as of this point in time, only the student services team has made any real progress consistent with Brady's vision.

I believe that while change has come slowly, this study has had positive and far reaching effects for both the College and the University as well. TQM is also referred to as "continuous quality improvement." The point is that the process is never ending. The College's journey has begun, but there is still a long way to go.

What can be learned? TQM literature revealed that team members must share a common vision for things to change. On the University advising team, most of the team members shared a common vision. This caused the participants to be extremely motivated, despite the fact that there was very little reward for doing so, other than personal satisfaction. The class scheduling team was not motivated by a common vision. That team was interested in improving the class schedule, but the team members did not go out of their way to accomplish this mission.

The members of the College advising team did not share a common vision when the team was formed and many of the participants' personal visions were in conflict with one another. This caused things to move very slowly. Williams was able to meld each person's individual vision into a common vision. He was able to do this through his Theory Y management style. Once all the team members were headed in the same direction, great things began to happen.

TQM requires that people manage with data. Also, the literature advised that teams need resources in order to improve. This was definitely the case with the College advising team. Once the team documented to the Dean the need for additional resources, the Dean provided them. Once this occurred, great things began to happen.

The literature also stated that people need to feel empowered. Until Williams was hired, the participants did not feel empowered and this affected how they did their jobs and their attitudes towards the team. More on the significance of this topic will be discussed in the next chapter.

Learning the TQM tools was the easiest part of the process. Some of the participants were very resistant to use them though because they felt that they already knew all the answers. The TQM tools used for decision making were also very useful, although the University advising team was reluctant to use such a structured format. I cannot document what difference this made though.

TQM requires a strong and well trained facilitator. I did not assert myself enough on the class scheduling and the University advising teams. Much of the reason for this was because of who the participants were and what positions they held in the University. I had multiple roles on the teams and in the University and this often complicated things.

On the University advising and class scheduling teams, I consciously made the decision that I would not enforce "TQM rules" just for the sake of this research project. I was more concerned that the teams made progress and sought meaningful changes. Most of the things that they did were consistent with the philosophy of TQM, but the teams often neglected some of the tools which I feel was detrimental to the process. More on this will be discussed in Chapter Six.

My role as facilitator was somewhat weakened on the College advising team because of my limited background in group counseling and group training. When I began this research project I did not anticipate the human relations problems which immediately surfaced. While I have extensive experience in organizational behavior, communication, and building trust; what I encountered was quite extreme. I tried to handle the situation as best as I could by being sensitive to the motivations and needs of all the participants, by being open and honest, by being empathetic, by searching for the truth, by not playing favorites, and by trying to talk to all the participants as much as possible to try to understand their points of view. I feel that these techniques were useful.

In Chapter Six, I will go into greater detail on why things happened as they did. That chapter addresses the question of whether the groups were actually doing TQM or something else. Also, I will go into greater detail on what was learned.

# CHAPTER SIX

# SYNTHESIS, CONCLUSION AND RECOMMENDATIONS

## Introduction

The purpose of this study is to provide an in-depth description and analysis of what transpired when the College of Business Administration embarked on a TQM process. As part of this descriptive case study, the researcher analyzed the inner workings of this process in order to benefit future TQM teams in the higher education sector.

This chapter is organized into six sections. The first section provides a short review of what TQM is so that I can deal with the real question of whether the College in general, and the teams in particular, were doing TQM. This section addresses the question of what distinguished these TQM teams from normal University committees and why I feel confident in stating that some of the teams did total quality management.

The second section presents a summary of the findings as they relate to the nine major research questions described in Chapter One so that others can learn from what was discovered. The third section addresses the question of why the teams evolved as they did. The fourth section relates some of the present findings to the field of leadership. The fifth section addresses the question of what changes must occur if TQM is to become fully incorporated into the culture of the College. In this section, I will present specific recommendations on how to improve the process. The final section outlines recommendations for future research in the field of total quality management.

## The Principles of TQM

According to Seymour and Collett (1991), the basic principles of TQM can be divided into three groups: tools and techniques, philosophy, and management. I also believe that these three areas represent the core elements of TQM.

TQM utilizes a set of tools and techniques. The tools of TQM include flowcharts, cause and effect diagrams, Pareto diagrams, and check sheets. The techniques of TQM include action plans, barriers and aids diagrams, benchmarking, brainstorming, customer needs analysis, interviewing, multivoting, nominal group technique and surveys.

With respect to the philosophy of TQM, the following principles are important: be customer focused, continually try to improve, and focus on processes. The goal is to continually improve the quality of a product or a service in order to satisfy customers. Further, the goal is to produce a product in the most efficient way possible.

TQM also represents a set of management principles which includes empowering workers, forming self-managed work teams and managing in a Theory Y style. Teams are different than committees or groups. "A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable" (Katzenbach & Smith, 1993, p. 111). These authors believed that work groups or committees focus more on "individual goals and accountabilities as working group members don't take responsibility for results other than their own" (p. 112). The following table summarizes some of the differences between teams and groups:

Table 1

What Is A Team?

| Teams | Groups |
| --- | --- |
| • Shared leadership role | • One person assumes the leadership role |
| • The team members set their own direction | • Managers or an outsider sets the direction for the group |
| • Members feel a sense of ownership towards the process being improved | • Members feel that if the project fails it is because they did not receive enough outside support |
| • Members are open and honest with one another | • Members try to maintain harmony, but are not open with one another |
| • Members trust one another | • Lower level of trust |
| • The group's goals take precedence over the goals of the individual team members | • The individual goals of the group members take precedence over the goals of the group |
| • Members take the initiative | • Group members wait for instructions |
| • Shared Vision | • No shared vision |

Note. Table partly adapted from text from Katzenbach & Smith, 1993, p. 112.

TQM practitioners and researchers believe that every organization implementing TQM should use its own approach (Bowles and Hammond, 1992; Chaffee and Sherr, 1992; Corts, 1992; Hiam, 1993, Marchese, 1992; Seymour, 1993; and Seymour and Collett 1991). From a research point of view that presents a problem. If there is no one model, what prevents the researcher from calling anything that occurred TQM? In other words, how does one know TQM when he or she sees it? I believe that the three core principles described above must exist within an organization and/or team if one is to say TQM is occurring. The model may not fit exactly, but at least the resemblance should be a close approximation. I intend to compare what was happening on the three teams with these guidelines. If all three of these principles were mostly present, TQM was occurring; if they were not, then TQM was not taking place.

## Were the Teams Doing TQM?

### Introduction

When all the teams were formed, they intended to do TQM. Whether they actually did TQM is a different story. This section addresses that issue.

In retrospect, I believe that the College advising team practiced TQM, especially after Williams came on board. It is debatable whether the University advising team was doing TQM. Finally, I believe that the class scheduling team was not doing TQM. In other words, that team did not do anything much different from what an ordinary college committee might do.

In the next three subsections, I will back up these claims based upon an analysis of the data. For each of the three teams, I describe whether they utilized TQM tools, were guided by the general philosophy of TQM, and functioned as a team consistent with TQM management principles.

Class Scheduling Team

Tools. The team used a variety of the TQM tools and techniques. The first work was done in the electronic board where some of the problems were identified and the goals of the team delineated. These goals served as an informal mission statement. The team also used flowcharts, brainstormed, conducted interviews, and surveyed students.

Philosophy. I believe that when the team was formed, the participants were excited about trying to improve the class scheduling process because they viewed the process as flawed and not customer focused. When I interviewed all of the participants, they said that they believed in the principles of being customer focused, process oriented, and continuous improvement. From a research perspective though, I needed to take some of these comments with a grain of salt because I would not expect anyone to tell me that they were not student oriented or against improving the College.

With respect to having a customer orientation, I believe that most of the team members were committed to helping students and that, in general, they viewed students as the primary customer. At least a few team members felt that it was equally important to schedule classes based upon the needs of faculty members who might have outside commitments. These thoughts were exposed during a session in the electronic board when the question was asked: "What is the goal of the class scheduling process?" The following list is a representative sample of the responses:

1. To make the curriculum operational and accessible.
2. To have a sufficient mix of classes.
3. Students should be able to get the classes they need and not have to take unnecessary classes as fillers for their schedules.

4. To coordinate student requirements across departments.
5. Fine tune student demand and course availability.
6. Build the class schedule to best service the customer, not on faculty teaching preferences.
7. To create an optimal allocation of limited faculty resources to provide the greatest possible number of students with the highest possible percentage of their desired classes.
8. To schedule classes at times that are logical and practical for students rather than the instructor.
9. To make available to students a class schedule that meets their requirements.
10. To balance the scheduling needs of students with the scheduling needs of faculty.
11. Faculty needs and desires should not be ignored.

The team members were customer oriented, but there was not a consensus on who the primary customer was. While I have a personal bias that students should be the primary customer within a university, I can also understand why others might believe that faculty members are equally significant customers whose needs must be satisfied. As one team member said: "Students come and go every four years. The administration's role is to satisfy the needs of faculty members because if the quality faculty members are dissatisfied, they will move on leaving the weaker ones who cannot find jobs elsewhere behind. In the long run, this will hurt the school a great deal more than treating a few students badly."

The team focused on trying to improve the class schedule process, but the team was not in existence long enough to make any improvements. This leads to question of whether the team was committed to the philosophy of continuous quality improvement. The team members may have espoused this theory, but their actions indicated otherwise. As long as the Dean carried the ball, the other teams members were active, but once he dropped out of the picture, no one else took the initiative to call a team meeting or make any effort to resuscitate the team, Therefore, I cannot say that the team was serious about its commitment to improve the process.

Management principles. I do not believe that the team exhibited a management style consistent with TQM principles. The Dean set the meeting dates, guided the direction of the meetings, and controlled most of the process. When his interest dwindled, the team ceased to exist. In theory, if TQM was occurring, another team member should have taken up the slack and guided the team forward, but no one did. The team members should have felt empowered to finish the job, but they did not. One member said "that if the Dean did not find it necessary to schedule a meeting, then there was no use in doing so."

Based upon the characteristics described above, the group did not exhibit team behavior. There was no shared leadership as the Dean primarily set the direction for the team. Also, the members did not take the initiative and feel a sense of ownership towards the process. Although some of the team members indicated they were disappointed when the team broke up, no one made any significant effort to revive it.

Another obvious reason for my conclusion was that none of the team members felt that it was a team. They indicated that it was just like a typical College committee.

College Advising Team

Tools. The College advising team utilized many of the quality tools including flowcharts, a cause and effect diagram, a barriers and aids diagram, brainstorming, a Pareto diagram, and surveys.

Philosophy. I believe that when the team was formed, the team members exhibited behavior that was antithetical to TQM. The office where the team members worked was not very customer focused and not concerned about continuous quality improvement. For the most part, people did what they were asked to do, but not much more. Each person was responsible for a specific process and he or she did that process fairly well, but there was no synergy among the office staff. There was no teamwork whatsoever.

This antithetical TQM behavior and attitude continued for several months, but slowly things began to change. Frankly, it was not until Williams was hired that the team truly embraced the philosophy of TQM. After that point, the team members became very customer focused, process oriented, and driven by continuous quality improvement. I do not feel that the team members would have been converted had it not been for the hiring of Williams, or at least someone with his characteristics.

As was noted in earlier chapters, the team was directly responsible for significant quality improvements. There is no question about that. The question is, did these quality improvements come about simply because Williams forced the team members to make changes or did the changes come about because the participants got the TQM bug? I feel that without Williams, the team would not have changed, but the reason that people changed was not because Williams forced them to, but rather it was because he allowed them to. As will be discussed in a later section, he created an environment where everyone could work as a team. He was also able to provide the resources people needed. This enabled them to do quality work in which they could take pride.

Management principles. Prior to the hiring of Williams, the team only stayed together because the facilitator and Johnson forced them to stay together. The group was not a team as there was no common vision, no collaboration, little trust, no ownership of the group, and people were more concerned about what was good for themselves rather than what was good for the group.

I believe that the team member's behavior was due to the previous manager's style. The group developed into a team once the members felt liberated from what they perceived to be as an autocratic manager. Once Williams empowered the team members and challenged them to embrace the principles consistent with TQM, they did so.

By the summer of 1993, the group became a team. While Williams had the authority, leadership was shared. This was exhibited when the group developed the office's mission statement together, when the team as a whole interviewed and then hired Lewis' replacement, when short-term goals were prioritized and approved for the office, when the student assistant training program was developed, and when the group as a whole helped redesign the office.

At the same time, team members started taking the initiative and felt a sense of ownership for the advising office as was demonstrated when all of the staff members hand signed a memorandum for new students. They started tackling old projects which everyone knew needed to be done, but had not been because they required teamwork. Also, the team members become more open and honest with one another.

University Advising Team

Whether this group was a TQM team is debatable. Many of the things they did were consistent with TQM principles, but many were not.

Tools. The University advising team utilized some of the TQM tools including flowcharts, brainstorming, and a survey, but the team was often reluctant to use the tools that the facilitator recommended. For example, on several occasions the facilitator tried to get the team to use a cause and effect diagram to diagnose a problem, but they refused to do so. They did this by basically ignoring the facilitator. Also, at least one of the team members said that the reason we "do not need these tools is that we already know all the problems, we just don't know how to solve them."

While some tools were used; the results were not always utilized. For example, the team spent several sessions doing flowcharts, but these were never used.

In summary, some of the tools were used, but not very effectively. The team felt that discussing the problem and analyzing it verbally was a better approach.

Philosophy. The team members were very customer oriented and process focused. All of the team members had a deep passion and desire to improve the University. Also, the team members were very concerned about continuous quality improvement.

None of the team members felt coerced to stay involved. Each person stayed involved because he/she was committed to improving the university. Everyone was driven by a passion to make things better.

For the most part, all of the team members were involved for altruistic reasons. While each of the team members was concerned about his or her professional reputation, there was very little to be gained personally from being a part of the team other than a pat on the back. The time and effort that the team members put into team far exceeded what they expected to get out of it other than their own personal satisfaction. One of the members was up for tenure during this period of time and one could argue that this person was motivated by this fact, but I cannot say with any certainty whether this is so.

Management principles. When the team was formed, there were five members, plus myself. Within a month, one of the team members dropped off or was excluded from the group, depending on one's perspective. This was because many of the earlier meetings were scheduled at a time which made it impossible for that team member to attend. As facilitator, I should have prevented this, but the team "leader" had taken charge.

Despite the fact that I was suppose to both a researcher and a facilitator for the group, in retrospect I must say that I really did little facilitation. My role was primarily as researcher. Johnson and Cox, in reality, controlled the direction and focus of the group. As one member said when referring to me, "You were part of the group, but you really weren't part of the group. We let you be part of our group."

The fact that two members of the group were basically excluded is not consistent with team behavior. The people that remained became a very cohesive team. All of the team members shared a vision to create a university-wide information system, but it was Johnson and Cox who spent the most time carrying out this mission. It is debatable whether these two did what they did as team members or as individuals sharing a common goal. While everyone on the team shared the same vision, Johnson and Cox were the ones who carried the ball. The other two were willing to assist; although they really did not do much.

While there was a lot of progress made towards the realization of this goal, the actual game plan for carrying out this grandiose plan was never formally discussed during the team meetings. Most of what occurred happened outside of the team meetings.

Was the group a bunch of vigilantes or a TQM team? It is my opinion that they were both. The following summarizes why they were and why they were not a team.

Table 2

Were The University Advising Team Members Acting As A "Team"?

| Was A TQM Team | Was Not a TQM Team |
|---|---|
| • Customer focused | • Did not include all team members |
| • Process oriented | • All members did not participate in all decisions affecting the team |
| • Concerned about continuous quality improvement | • The team did not utilize all the TQM tools |
| • Once the core group was established, it became very cohesive | • Some team members were more controlling than others |
| • Shared a common vision | |
| • Set their own direction | |
| • Were self-managed | |
| • Team members took the initiative | |
| • Members felt a sense of ownership to team | |
| • Members were honest and open with one another | |

The process and procedures used by the University advising team was not the best, but I feel that for the most part the participants were doing TQM. Some of the team members may have overstepped their bounds and alienated at least one of the team members, but for the most part, they tried to make a difference in the quality of services provided to students.

### Were Brady and the College Acting in Accordance With TQM Principles?

While the efforts of Brady and the teams were not specifically based on Deming's philosophy, I feel that it is important to compare reality to that philosophical model. The fact that there is considerable overlap should demonstrate that, in fact, the College has been at least attempting to do total quality management.

In Deming's model, point one is to create constancy of purpose for improvements of service. Since the inception of this study, Brady's primary focus in the College has been to create a new culture based on a customer orientation and continuous process improvement. Examples include: the creation of several teams, including teams not described in this research; his urging all departments to administer surveys; and his emphasis on customers, processes and teamwork in the many memoranda he has sent out to the faculty and staff. There is still a long way to go though.

Point two is to adopt the new philosophy. I believe that Brady was making an effort to do this, but change at the College and University has been very slow in coming. Brady tried to spread his vision across campus. He has talked continually about TQM at dean's meetings, and he has sent the president of the university articles about the movement towards TQM in higher education. Additionally, Brady has met with both staff and faculty members on several occasions to discuss this new philosophy. Several of the meetings have had both staff and faculty members in attendance; this was generally rare in the past.

Points three (cease dependence on inspection to achieve quality) and four (end the practice of awarding business on price tag alone) do not really applied.

Deming's fifth point is to improve constantly and forever the system of production and service in order to improve quality and productivity. Since the initiation of this study, several surveys were administered and many of the core processes of the College including the accounting system, alumni records system, and the use of technology have been re-examined and improved. The people involved in the effort realize that the process is never-ending and that the goal is to continually try to improve. Also, the fact that the class scheduling team did not complete its mission does not mean that the problem was ignored. A new team was formed in 1994 to re-address the process.

Point six is to institute training on the job. The Dean has asked each staff person for a written outline of what training he or she needs. While the training has not been extensive thus far, Brady has committed more resources to training staff people. Before this study, most of the training and development resources were spent on faculty development only.

Brady is fully aware of the importance of training. As an example, several of the students who completed one of the surveys indicated that one individual in particular had very weak interpersonal skills. The Dean's response was not to belittle this person or to make that individual feel bad, instead he offered the staff member the opportunity to attend a seminar in order to improve on these skills. The staff person is now doing a much better job due, at least in part, to the training. Several other staff people who were recently promoted to new positions advised the researcher that they were encouraged to attend several seminars and workshops in order to help them do their jobs better.

If TQM is to succeed at the College, more training will need to take place. Rather than covering only TQM tools, this training should also deal with such issues as team building, working as a team member, building trust, enhancing communication, and so on.

Also, there should be greater emphasis placed on faculty development. One senior member of the faculty said that the College really does not do a very good helping to bring along junior faculty members. He suggested that there should be some sort of mentor program which would help junior faculty members be better teachers and researchers.

Point seven is to institute leadership. According to Deming, the role of the leader should be to help people do a better job. It is this researcher's belief that Brady's appointment of Williams as Undergraduate Director has been a significant step in that direction. Williams' responsibilities include not only supervising the personnel in the student services office, but also examining, changing and revitalizing the entire undergraduate program. As described earlier, he is very team oriented and that has made a significant difference to those who work with him.

Also, the people whom the Dean has added to his administrative and operations staff within the last year are all very team-oriented people. As an example, the director of operations indicated to me that she has always worked in a team environment and "feels that it is the only approach that works." Since she is responsible for most of the financial, accounting, and other operational functions within the College, her management philosophy should have a very profound influence on the whole College.

Point eight is to drive out fear. Several people in the College have indicated to me that they have been afraid of losing their jobs due to the massive cutbacks and lay-offs which have occurred across the University over the last three years. That fear led to very dysfunctional behavior. As an example, some of the team members on the College advising team indicated to me that for some time they were fearful about being reassigned or losing their jobs altogether. They candidly indicated that this fear was the motivating factor which caused them to be very secretive and protective of the processes for which they were personally responsible. They felt that if someone else could learn how to do what they were doing, they would be replaceable.

All but one of these team members reported that they now feel much more secure in their positions than they did one year ago. They reported that Williams has been a stabilizing influence who has also helped them feel better about themselves and helped them recognize their importance to the College.

As noted, the Dean has started doing a variety of surveys. It is important that these results be for improvement purposes rather than to place blame. Otherwise, people will become fearful of these surveys and feel that someone is constantly looking over their shoulder.

A new committee has recently been formed in the College to look at the issue of "teaching-learning." The committee's intent is to try to help faculty members become better teachers. This may include having one's peer critique one's teaching style. Faculty members will not participate if they believe that their performance will be used for tenure or promotion decisions. Rather, the process must be used solely for improvement purposes. The Dean also brought in someone to help the faculty members develop teaching portfolios.

Deming's ninth point is to break down barriers between staff members. All of the teams were composed of people from different areas of the College and University in an attempt to break down the barriers between faculty and staff, between different departments, between the College and the University, between faculty and the administration, between staff and the administration, and between different staff members. Most of the team members indicated that one of the primary benefits of the teams was the closer communication and feeling of trust which resulted from working together and sharing ideas. This has been an area where Brady has placed special emphasis.

Point ten is to eliminate slogans, exhortations, and targets for the work force. While Brady has made it clear that the College is to be driven by continuous quality improvement and teamwork, he has not used the term TQM or other buzz-words as faculty members have had a tendency to react negatively to what some would consider the latest management fad.

Deming's point eleven is to eliminate work standards or quotas. Many TQM practitioners disagree with this point. Since this process began, Brady has asked all staff members to submit goals and objectives along with a way to measure their attainment. While this particular device is contrary to Deming's philosophy, Brady feels that it is important for employees and departmental offices to set measurable goals so that employees can measure their progress. It is important to note that Brady has allowed each of the departments and the people in them to set their own goals, instead of him setting the goals for the them. As part of this process, people are measuring the current systems to serve as benchmarks. This later activity is consistent with Deming's philosophy.

Point twelve is that the managers should remove barriers that rob the worker of his/her right to pride of workmanship. The small size and deteriorated condition of the College's Student Services office were viewed as detrimental to the people working in the office. Also, the team members felt that the office was understaffed. Brady's financial commitment to enhance the physical appearance of that office and to add more people were major steps in the right direction.

To institute a vigorous program of education and self-improvement is point thirteen in Deming's formula. While training and education have increased in the College, much more could be done. Brady is attempting to create a new culture geared around these principles.

Deming's final point is to put everybody in the organization to work to accomplish this transformation. Brady is trying, but the process is extremely slow. He has started primarily with his own office and the graduate and undergraduate offices, which includes the student services office. Eventually, he will need to get faculty members on board if he is to truly accomplish the transformation to which Deming refers.

I do not feel that the College's culture is totally geared towards TQM at this point in time, but I believe that it has started in the right direction. As noted in the literature, it takes a minimum of three to five years for TQM to take hold. Therefore; the Dean should not give up just because it has not happened yet. Change takes time. One of the biggest reasons why TQM efforts fail is that those at the top give up on the change effort too soon. The College is heading in the right direction, but it must stay the course.

## Key Findings

In Chapter 5, the nine research questions were answered in detail. In this section I will summarize the key findings so that others can learn from the lessons of these teams. Since my intent is to try to help future teams, I intend to broaden the scope of many of the questions. For example, the first research question is "What was the basis for forming the teams and choosing members." That question has a fairly simply answer, so I also intend to answer the questions of "What teams should be formed and who should be on these teams?" The purpose of this discussion is to help others learn based upon the experiences of these teams.

### What Was the Basis for Forming Teams and Choosing Members?

In general most of the team members volunteered to be on the teams, although a few were told to participate. Generally the people who volunteered were more receptive and committed to the teams than those who did not, but as the process unfolded some people who volunteered became dissatisfied with the teams, while others who were told to participate were glad that they had participated.

Most of the team members on the College advising team felt coerced to join it. This caused them to resent being on the team. Also, the team members did not particularly like one another. As one member said, "The only reason I showed up to the meetings was because I knew if I didn't, people would talk behind my back." Even though most of the team members on the College advising team hated being on the team in the initial stages, they eventually did see its benefits. The point is that sometimes the person in authority must strongly encourage people to participate on teams, although this is not recommended.

What teams should be formed and who should be on them? There are basically four types of teams that could and should be formed within the College. One of the most important teams is the **Quality Council**. This team should serve as a steering committee and help guide all the other teams. This team should be made up of many of the people on the College's executive committee, but should also include some of the faculty members who are experts in the field of TQM.

**Functional teams** such as the College advising team, should be composed of people within a functional area. Currently, the college is divided into administrative support areas. There should be teams in each of these areas. Ideally, the individuals working in those area will volunteer to be a part of a team. These teams should be continuous and meet at least every week or two; although I would anticipate that they would meet more frequently while they were working on a specific process. In order to get people to volunteer the Dean and the department heads should create an atmosphere where people see this as part of their job and not something that has to be done on the employee's own time. As of this point in time, this atmosphere has been lacking. Additionally, team members will need resources and should be rewarded for their efforts.

**Cross functional teams** are teams that address ongoing processes that cut across functional areas. These teams should include people from across the college and/or university depending on the nature of the process being examined. Membership should be voluntary; although it may be necessary for the Dean to strongly encourage someone to volunteer if he or she is vital to the process understudy. The class scheduling process requires a cross functional team as its cuts across many areas and is quite complex in nature. In order for the class scheduling team to be a success, the team must be composed of both the graduate and undergraduate directors, all of the department chairs, as well as a few other faculty members and staff members.

A **task team** is created to look at a specific issue or problem. This team should be made up of people directly involved in the process. Members should be selected based on their expertise, experience, and closeness to the situation. This type of team will function for a while and then disband.

In summary, teams need to be composed of people with a mix of skills and backgrounds. While, ideally everyone on a team should get along and like one another, this is not necessary. In fact, sometimes this can be a disadvantage as it can lead to groupthink.

Nonetheless, the ideal setting would be for people to self-select and form their own teams to address the problems they feel are most critical. At many companies committed to TQM, this is what occurs. In the College, it will take some time before this happens. When a team is successful, the Dean should reward the team and make a big deal out of the team's success.

One obvious, but important point, is that when a process is targeted for improvement, all of the significant people involved in that process should be on that team. Brady did a fairly good job of getting a cross section of college and university advising people to participate on the master team.

If a team is not made up with the right mix of people, it cannot work. The admissions team did not work because everyone in the student services office was not on the team. The class scheduling team was hindered because not all of the department chairs who were responsible for class scheduling were on the team. Also, on the University advising team, it would have been better if others would have joined the team once it was determined which direction the team was going. For example, it might have been good to have some one from the library on the team.

What Training in TQM Was Necessary for the Teams to Function?

The University advising and class scheduling teams did get some on-the-job training, but they could have used more. All the training was done on the job which often led to some problems; especially on the University advising team. On that team, some of the members were very reluctant to use some of the tools such as a cause and effect diagram. These members felt they knew all the problems and did not need to utilize the tools. As noted, the facilitator had very little control over that team. The team members preferred to talk about problems and how to solve them rather than use the TQM tools. They made decisions based upon their gut reactions instead of on facts as is the recommended TQM practice. As facilitator, I should have been more forceful with the group, but I did not want to hurt the group's chemistry. The participants were very enthused and excited about what they were doing and I did not want to dampen this enthusiasm by imploring them to follow TQM procedures just for the sake of my research. The team was making sufficient progress utilizing a few of the tools and so I let them run with what they were doing.

The class scheduling team did receive some training both verbally and in writing on such things as flowcharts, surveys, and brainstorming, but the training was not extensive. The reason for this is that the team did not remain in existence very long. Most of the team members knew how to use some of the tools, but the team fell apart before they could be utilized.

The College advising team received ample training on the tools, but they could have used much more training in the area of human relations. As noted, the team members were very reluctant to open up and trust one another which of course prevented much from getting accomplished early on. Most of this reluctance had to deal with the fact that they were very concerned about the relationships they had with the other members of the team. The facilitator should have tried to do more training on how to communicate and work as a team so that the team members would have worked better together.

Related to this issue, while the facilitator stressed over and over again that the purpose of TQM was to improve a process and not to point blame, the participants could never separate the two. People took everything personally. This was why several members of the team were so hurt by the survey which was administered.

In retrospect, a variety of training formats would have been better because people prefer to learn in different ways. As noted, some of the participants preferred to read the material and other needed to hear it. This is much more expensive and time consuming. Nonetheless, some of the training should have been more customized because of the diverse educational and skill levels of the participants.

All the training needed on TQM was provided on-the job. Was this the best way? Probably not. It would have been better for people to be trained out of the office in one week training courses as those type of courses cover the whole gestalt of TQM. Of course, those are very expensive and time consuming. As a facilitator, I only had time to fill people in on the basics as we went along.

What Problem Identification Methods Were Utilized?

Most of the participants found that surveys, brainstorming, flowcharting, and cause and effect diagrams were very useful problem identification methods. The process or problem being examined dictated which TQM tool or tools was most appropriate.

Many team members echoed the sentiments voiced by one respondent: "The use of TQM tools was a significant improvement over purely discussing the problem as is normally done on committees." The people also indicated that they found the use of the tools highly efficient and generally led to better results.

On the College advising team in particular, the tools forced the respondents to be more open which allowed them to make better decisions. The survey and cause and effect diagram, in particular, helped them identify which areas were most in need of improvement.

Some of the members on the University advising team were very reluctant to learn some of the tools as they felt that they either knew all the answers or felt that talking about the problem was a more efficient method. In my opinion, that was not the case.

What Changes Were Made Before the Teams Disbanded?

The College student services team enacted many significant changes as a result of the team. Many of the problems identified through the use of brainstorming and a cause and effect diagram were addressed and later corrected. The most tangible result of the team was the renovation and expansion of the undergraduate student services office. The work of the team also resulted in other changes including a new training program, a new information system, and new personnel policies. Additionally, many other policy changes were instituted ranging from the scheduling of appointments and the ability to see counselors to the admissions and counseling processes.

At this point in time, it is not clear what the overall effect of the University-wide team will be, although the work of the team has resulted in an alliance between the College and the library to test a new information system.

The work of the class scheduling team resulted in no tangible results, although a new team has been formed which will carry-on where the initial team left off. I anticipate that the newly formed team will use the results of the survey administered by the first team.

How Did Influence Patterns Develop?

The amount of influence that people had varied. These differences could be explained by a variety of factors such as how passionate the person was towards the cause, or the position he or she had in the organization. The power resources various participants had, and were willing to use, accounted for some of the differences in the influence they had. Typical power resources used to influence the group were one's reputation, prestige, personality, knowledge, status, vision, interpersonal and group skills, give-and-take behaviors, authority, and level of motivation.

On the class scheduling team Brady had the most power. His power resources included his reputation, authority, status, and personality. Both, Johnson and Cox exerted a lot of influence on the University advising team. Johnson's power resources included her give-and-take behaviors, her use of information, her vision, and level of motivation. She was passionate about what the team was doing, did the most work, and therefore was able to influence the outcome. Cox' status, knowledge, vision, and group skills caused her to have a great deal of influence.

On the College advising team, Johnson and I were able to lead the team in the right direction and keep the team together, but Williams was the one who truly influenced the group. He did so through his personality, human relations skills, vision, and because of his authority. I do not feel though that his authority was the primary reason why people changed the way they did. People changed because they really liked Williams and what he stood for. The team members wanted him to succeed.

Some of the things that Williams did early on affected how much influence he had. The first thing that he did when he was hired was tell the participants that he needed their help. He admitted that they knew a great deal more than he did. Rather than guard their knowledge as some of the staff had done in the past, the members eagerly showed Williams the ropes. Williams unassuming and humble nature caused the team members to respect him and want to produce for him.

Williams was very team oriented and got everybody involved in the decision-making process which the team members found very satisfying. When the team did the mission statement and hired a new advisor, Williams was more influential than the other members, but the other members were also able to influence him. Whenever the team presented anything to the Dean or an outside group, Williams made sure that everyone participated in the decision.

This leads to an interesting question. Does the leader's style make a difference in whether TQM will work? On two of the teams there was what I would consider more dominating and autocratic leaders, while on the College advising team there was a very democratic type of leader.

I believe that teams with more dominating leaders can make effective changes, but more likely than not, it will be the changes which the leader wanted to make had he or she been working alone. In other words, if the other team members had a different reading on the situation and wanted to do something differently, I am not sure that the majority's decision would be accepted. Therefore; if there is a strong leader and if everyone else on the team shares the leader's vision, then the leader's influence, work, and enthusiasm will be contagious and great things can be accomplished. I believe though that if the leader falls out of the picture, there is a high probability that the team will disintegrate as was the case with the class scheduling team.

I believe that teams with very democratic leaders such as Williams will work much better in a TQM environment. The reason for this is that for synergy to happen, all of the team members need to be active, interested, involved, and feel that any decision was the group's decision. This will cause all the team members to want to do their fair share. In this scenario, if the leader's commitment dwindles, more likely than not, the other team members will stay involved due to the member's sense of being individually and mutually accountable to the group.

What Aspects of the Process Were Worthwhile?

For the most part, people felt that the use of the various problem identification tools was the most worthwhile aspect of the process. In particular, the surveys were viewed as extremely worthwhile, although the members of the class scheduling team indicated that unless the results are utilized by the next team, it was a waste of time.

All except one team member on the University-wide team indicated that they "thought everything about the process was terrific." Several members on that team added that the best part was the bonding that took place among the team members. These members told the me that they found the whole experience "exhilarating and exciting."

Several members on all three teams indicated that the process had a very positive effect on them personally. One member commented that "had it not been for the team, I probably would be looking for a job elsewhere, but I am not, because I found a solid core of people who are committed to the same core ideals and values I am. It was a very positive experience for me."

Another member said that the being a member of the team was "one of the most exciting, enjoyable, and exhilarating experience of my professional career. I have only had a similar experience one other time in over twenty plus years." Another person said "It was a wonderful bonding experience and I just know that at some point down the road, our efforts will lead to major transformational change on this campus."

What Aspects of the Process Were Not Worthwhile?

Several members of the class scheduling team indicated that since the team ended before it completed its task the whole effort was basically a waste of time. One member indicated that she had gained a lot personally, and hoped that the next team would be able to learn something from the initial team.

On the University-wide advising team, most of the members felt that everything was worthwhile, including the flowcharting, although the actual flowcharts were never actually used for anything other than as a team-building exercise. Another team member said though that the flowcharts were very unproductive and that he felt frustrated by them because not everyone had equal input.

The members of the College advising team were very critical of the whole TQM process. These members indicated that the facilitator and faculty member involved were insensitive to the needs and feelings of the participants and that the facilitator and faculty member "pushed too hard." All of the team members stated that they hated attending the meetings due to the stress that they created. The major reason they did attend the meetings was that they were afraid if they did not that "they would be attacked by the other team members."

Once Williams started facilitating the meetings, there was much less stress. One of the reasons for this was that by that time, many of the initial interpersonal problems had been addressed and at least partly overcome. The primary reason that the participants experienced less stress was because they no longer experienced role conflict. Prior to Williams being hired, the team members were forced to act one way during the team meetings and another way when they performed their jobs. The team member's prior boss was fairly controlling, nonempowering, and had set up the system where everybody did their own thing. Therefore, what Johnson and I encouraged the group to do was in conflict with their manager's wishes. Once Williams was present, this conflict ceased to exist and change came about quickly. This is an important point as it demonstrates the need for support from top managers.

What Would the Participants Do Differently?

Several members indicated that more team-building exercises should have occurred at the start of the process. The members of the College advising team indicated that the there should have been less pressure exerted by the facilitator and team leader. They did admit though, that without such pressure, the team would not have been able to make the advances that it did.

The members of the class scheduling team stated that there should have been a greater understanding of who the leader was and who would be responsible for scheduling the meetings.

Did the Participants Believe That Worthwhile Changes Occurred?

All of the participants on the University-wide and the College advising teams stated that the efforts of the teams have led to significant quality improvements. Even a few people on the class scheduling team indicated that the efforts led to some quality improvements.

While the College advising team made many contributions to the College, it is the University-wide team which had the greatest potential to literally transform the whole university. If the team is able to fulfill its mission, it would probably be one of the most significant events in the history of the University. Aside from the technical achievement of linking every unit within the University in a centralized, organized, user friendly information system, it could also result in changing the culture of the University because it would mean that the University was united rather than divided. Currently the information system of the University organization consists of dozens of uncoordinated and uncooperative subsystems. In order for this transformation to occur, every college and department must be willing to work together. This cooperative effort is the goal of a new University Senate Committee recently formed.

Should the system be implemented, another benefit would be that it would both enable, and hopefully motivate, the leaders of the University to think and act systemically. As Peter Senge (1991) wrote: "Effective policy design requires understanding an organization and its environment as a unified system so as to shift management attention away from the large number of low leverage policies to the relatively few high-leverage points" (p. 133).

## Why Did the Teams Evolve as They Did?

TQM literature portrays a scenario fairly consistent with much of what happened. Most of the literature states that without a strong leader, any TQM effort is destined to fail. On the class scheduling team, there was no formal leader. This turned out to be a major problem. When the team first formed, Brady arranged the meeting times and sent out the minutes. Also, Brady set the direction and tone for the meetings and most of the participants felt as though he took a more active leadership role than anyone else. At the first meeting, when the facilitator suggested the need to appoint or elect a leader, Brady suggested that a particular faculty member be the leader. However, that faculty member had no recollection of ever being asked or agreeing to be the leader, and thus there was no formal leader.

Not having a designated leader did not present any problems until after Brady announced the reorganization of the College. Following this, he no longer made the team one of his top priorities, as he felt he needed to devote more of his time on external relations and development. Therefore, the team ceased to meet because no one took the initiative to schedule a meeting.

I tried to schedule one meeting, but not enough of the team members were able to make it so the meeting was not held. As facilitator, I must also take some of the responsibility for its demise. I should have pushed harder to schedule another meeting, but I let the Dean control the process as I believed that without his involvement on the team, the team would be ineffective. Whether that was an accurate perception, I cannot say with certainty.

It was unfortunate that the team died since most of the team members said they were committed to the team and felt that the team was making progress. As a matter of fact, most of the team members indicated to me that they "were disappointed when the team meetings stopped." Nonetheless, no one took the initiative to schedule a meeting.

Another reason that the team might have failed was that most of the members on the team were not the people directly responsible for the class scheduling process. In retrospect, the team should have been made up of all of the department heads, a few faculty members, the Dean, and the Associate Dean of Academic Affairs and Graduate Studies.

It should be noted, that the Associate Dean came to a few meetings, but he was never really viewed as part of the team because he was not on the master team and because he joined the process late. In fact, it was somewhat coincidental that he joined the team at all. When the team was meeting for the first time, he happened to come by the conference room and the Dean said to him; "you should probably sit in on this meeting." He attended a few meetings after that point in time.

On the College advising team, Johnson drove the process until Williams was selected as the Undergraduate Director. Once Johnson volunteered to be a part of the team, she became committed to making sure that it succeeded. Had she not be so driven to improve the level of services delivered to students, the team would have died as the team members, for the most part, were all hoping that it would die.

I believe that Williams' presence made a radical difference because of his attitude and philosophy. He was both customer focused and team oriented. Shortly after Williams came on the scene, many of the problems which the team members had previously identified during the team meetings were addressed and alleviated. The team members were aware that these problems existed, but they were either unable or unmotivated to address them until there was a change of management.

One might ask "Did TQM make a difference, or did Williams' use of human resources type interventions win the group over?" The answer is both. The Dean's selection of Williams was based upon what had been happening with the team. The Dean knew Williams was very team oriented and so he chose him over several other candidates.

After Williams was hired, he continued to do TQM. The team meetings continued to be held every week or two and he carried forward much of what had been started before his arrival. One of the first things he did was have the team draft a mission statement. He knew that the team had done one earlier, but it had never been formally accepted. He wanted everyone to buy into it together. After that, many of his other actions and the actions of the team were just a continuation of what had been started by the facilitator.

If Brady would have hired someone else who was not as democratic as Williams, then TQM would not have led to any improvements as the team members would have resisted changing, as they had done under the old regime. TQM is more than a set of tools; it requires a particular management style which is team oriented and empowering in nature. Williams was a necessary, but not a sufficient condition for the changes which occurred. Further, TQM was a necessary, but not sufficient condition for the changes that resulted. It was the combination of the two that led to the numerous quality improvements.

The success of the University advising team was primarily due to Cox and Johnson who served as catalysts, although each member played at least some role. On that team, everyone who remained on the team shared a common vision which was consistent with their personal visions. That made it very exciting and rewarding for all the participants. If everyone had not shared Cox and Johnson's vision, the team would have fallen apart as I suspect there would have been a lot of dissension.

Senge (1990a) wrote that if an organization is to empower its workers, it must first insure that all employees are aligned and headed in the same direction or have a shared vision. Further, "a shared vision or collective vision can only emerge from personal visions" (Senge, 1990b, p. 211). Clearly, the members of the University advising team all held a shared vision which evolved from each person's personal vision to improve the University. That is why the members of that team felt so close to one another and why they exhibited what Katzenbach & Smith (1993) called "a true team."

On the other hand, before Williams' arrival each member of the College advising team came with his/her own personal vision and these personal visions often conflicted with one another as well as with the administration's vision. As an example, each of the team members was content to work independently and not have to interact with anyone else in the office or with the Dean. Further, none of the team members embraced the idea of working together as a team.

Therefore, it was very difficult for Johnson and the facilitator to get the participants to change because the vision of making the office a unified whole committed to quality improvement was inconsistent with the team members' initial visions. It was not until these individual visions became a shared vision that much progress was made. Over time, the members of the team gradually found some common ground. Once, this was done many of the problems or processes which had plagued the office were addressed and later rectified. But it took a great deal of time to get to this point.

In the literature review, the researcher found many references to the link between TQM and Theory X versus Theory Y behavior. McGregor (1960) differentiated between Theory X and Theory Y assumptions about human nature and human behavior. This researcher contends that when the TQM journey began in the College's advising office, both the managers and the staff were practicing Theory X attitudes and behaviors. At that time, most of the members of the office preferred to be directed rather than take the initiative, wished to avoid responsibility, had relatively little ambition to achieve, and, above all, sought job security.

As an example, when the team did a cause and effect diagram in order to identify all the reasons "why the office was less than ideal," the following exact quotations were heard and later categorized under the heading entitled people issues: "under trained," "high turnover," "less than ideal communication between people in office," "low expectations," "lack of standards," "feeling stuck," "lack of trust and open communication," "no empowerment with respect to faculty," "looked down upon," "poor communication with Brady's office," and, "need way to make staff people feel included and important." Most of these responses are consistent with working in a Theory X environment.

McGregor wrote that employees working in a Theory X environment behave in certain ways not because it is their nature, but as a response to the practices of management.

> People, deprived of opportunities to satisfy at work the needs which are now important to them, behave exactly as we might predict--with indolence, passivity, unwillingness to accept responsibility, resistance to change, unwillingness to follow the demagogue, unreasonable demands for economic benefits. . . .
>
> Theory X explains the *consequences* of a particular managerial strategy; it neither explains nor describes human nature although it purports to. (McGregor, 1960, p. 42)

The people working in the College's Student Services office felt ignored, neglected, and discounted for years by managers. Eventually they lost most of their motivation to try to do anything innovative. Several staff members indicated that on several occasions they proposed new innovations or made suggestions to their supervisor, but they got the sense that these proposals were either not read or not seriously considered. Shortly after the team was formed, more than one member of the team said: "This is just a waste of time. They [administrators] don't want to hear from us. . . . As long as they don't get any complaints, they are happy. . . . All their time and resources are going towards the graduate program, while we are ignored over here unless some student or faculty member complains."

Therefore, it was only natural for the team members to be skeptical when the team was formed and the members were told that they were now empowered. The members felt that it was only a guise as, according to one member, "Brady is going to do whatever he wants, regardless of what we suggest." This attitude was also why Johnson and the researcher were viewed as agents for Brady as the team members could not accept that Brady was committed to a new management style of openness, trust, and empowerment. After the research on the teams was completed, staff members noted in interviews that they did not totally believe that management was serious about empowering them, although they indicated that the Dean's approval of the office remodel was a major step in this trust-building process.

When Williams was hired everything changed because of his management style. He managed in a Theory Y style. One of the first things that Williams did after he was hired was talk to Johnson and myself about the concerns of the team members. He was concerned about them as people. Then he met with each of the team members individually to talk about their visions for the office, their concerns, and their training needs. The team members said that at these meetings, Williams made them feel really important and helped ease their fears about losing their jobs.

During the initial team meetings, Williams kept emphasizing that advising was a new area for him and that he really needed to rely on the other team members. He did not come in with his own agenda and radically go about making changes, but instead helped the team members make the changes that they had already identified in the cause and effect diagram. His Theory Y management style motivated all the team members to change.

As facilitator, I could not get people to change because they were unwilling to even give it a try due to the Theory X atmosphere in the office. While I spoke about the importance of being customer focused and team oriented, this had very little effect on the participants because I was only at team meetings an hour or two a week. Meanwhile, they were still being managed in a manner inconsistent with what I was espousing. Williams was able to get the participants to change and be more cooperative because the team members believed that if they did exert the effort to suggest changes, those suggestions would be seriously considered and acted upon if they made sense.

Williams essentially liberated the team members and made them feel important. He encouraged them to take pride in their work and then provided them with the resources necessary to do so. How did he determine what resources they needed to do a better job? He asked them, and they told him what they needed. TQM will not work unless people are given the resources needed to do their jobs. Deming said that people want to do a good job, but are often prevented from doing so because of training or the equipment being used. This was the case here. As an example, some of the team members needed more specialized training which they were able to get. The staff people had outdated 286 computers which did not have enough memory to run the latest software programs in a "Windows" environment. Also, the team members concluded that in order to improve their level of service they would need a larger, refurbished office and an additional staff person.

Deming said that it was important to manage with data. The team put together a very detailed and extensive package for Brady outlining these additional resource needs. Williams then took this package to Brady who was forced to approve the additional resources as Brady had indicated that he was committed to a quality transformation and would provide the necessary resources if the team documented to him that they were essential.

One should not be surprised by the team members' hesitancy to embrace this new philosophy prior to the hiring of Williams. Over time, if managers continue to follow through on their promises and prove themselves to be totally committed to the notion of empowerment, the level of trust will continue to rise. Further, if this pattern continues, the productivity and the level of job satisfaction reported by the team members will also continue to improve. According to everyone involved in the process, productivity and job satisfaction already have improved markedly. This pattern is consistent with studies by Bowland & Hammond (1992) and Uzelac (1993). Nonetheless, according to several team members, it will take at least another year or two before the years of the Theory X management style utilized by the administrators is erased from the memory banks of the staff, despite the fact that Williams is their new boss.

## How Do the Findings Relate to the Field of Leadership?

I feel that without any doubt, Williams presence on the College advising team made a radical difference because of his attitude and philosophy. The other team members changed as a result of Williams because they were intrinsically motivated to change. Williams was a very likable person and he was able to influence the others to make real intended changes. Williams as a leader was an extremely important component in what happened, but together as a whole the team did leadership. They brought about real intended changes that reflected their mutual purposes.

The success of the University advising team was primarily due to Cox and Johnson, who acted as the catalysts for the team, yet every member of the team played an important role. This team was unique in that it practiced what Rost described as "a postindustrial paradigm of leadership." Rost (1992) wrote that leadership is "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes. From this definition, there are four essential elements that must be present if leadership exists or is occurring" (p. 102). On this team, those four essential elements were present. Rost outlined those elements as follows:

1. The relationship is based on influence. . . .
2. Leaders and followers are people in this relationship. . . .
3. Leaders and followers intend real changes. . . . .
4. Leaders and followers develop mutual purposes. (pp. 102-103)

The University advising team truly practiced leadership based upon this definition. The relationship was based solely on influence, as no member of the team had authority over another. Everyone was active in the relationship and the influence relationships were multidirectional. Also, throughout the process, the roles of leader and followers were not static. The real intended changes that the team strove for were based upon the mutual purposes of all. As one team member said:

> This team was unique. . . . Generally, when a committee or team is formed its purpose is to fulfill the wishes of the convenor. On this team, we worked together as a team and our separate visions became a common vision. We were all striving for the same thing. . . . Further, none of us were doing this for our personal gain, but rather for the good of the students and University as a whole.

What the teams did was similar to what Burns called transactional and transformational leadership. Burns (1978) wrote:

> I will identify two types of leadership: the *transactional* and the *transforming.* The relation of most leaders and followers are transactional--leaders approach followers with an eye to exchanging one thing for another . . . . *Transforming* leadership, while more complex is more potent. The transforming leader recognizes and exploits an existing need or demand of a potential follower. But,

> beyond that, the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. (p. 4)

Based upon Burns' models of leadership, the work of the College advising team was transactional leadership, while the work of the University advising team was transformational leadership. On the College advising team, people were generally concerned about how a proposed change might affect them and people often exhibited more concern for themselves than the cause itself, but in the long run the team was responsible for significant changes that directly benefited students. Generally, there was always some give and take and posturing before changes actually resulted. Also, I feel that the people in that group still placed their self interest above the interest of the group.

On the University advising team, the "relationship was truly one of mutual stimulation and elevation." Three of the participants indicated that they experienced a very personal transformation as a result of the experience.

The essence of successful teams is a common commitment and a willingness to work together. In my opinion, TQM teams which will make the greatest contribution to an organization will be teams that practice leadership. Successful teams will have both active leaders and followers and the participants will be motivated to make changes that reflect the mutual purposes of the team members.

## What Changes Must Occur if TQM Is to Become Part of the Culture at the College?

Whether TQM will become a part of the culture of the College will hinge upon whether the perceptions of faculty members, staff, and administrators can be changed. As in most cases, perceptions become reality.

Much of the hesitancy to embrace TQM, not only by the original teams, but later on by other staff members and the faculty as a whole, was due to people's perceptions. Argyris (1982) wrote that within an organization, reality is socially constructed. According to attribution theory, when people listen to or observe other people, they naturally seek to develop explanations of why someone said or did what they did. According to Argyris, when an individual makes inferences about another person he or she places more emphasis on a person's actions, than on his or her words. "There are important differences in the meanings created when people espouse their views versus acting them out. Moreover, individuals are often unaware of these differences" (Argyris, 1982, p. 48).

> Argyris labels what we say as the 'espoused theory-of-action,' that is, how we cognitively interpret our behavior and action to ourselves and to others. How we act is labeled our 'theory in use,' that is, our actual behavior as it is observed by others. Thus, an individual might say and truly believe that he or she acts primarily for the good of others, but nevertheless continue to act in a manner interpreted as self-serving by others. (Foster, 1986, p. 156)

Many staff and faculty members told me that there was often an inconsistency between what some administrators said and what some administrators did. Also, these same people said that there was an inconsistency between what many faculty members have espoused and what these same faculty members have actually done.

A significant number of faculty members and staff members indicated that they felt the Dean wrote and spoke about the importance of TQM and empowerment (his espoused theory of action), yet some of his actions have run counter to this philosophy, particularly when he reorganized the College. Further, most of the faculty members indicated that they placed greater weight upon Brady's actions than upon his rhetoric.

When Brady chose to reorganize the College, he believed that the only way to achieve the desired outcome would be for him to mandate it, as he believed that a faculty committee would be unable to agree upon the changes that he perceived to be necessary. While this conclusion may have been true, Brady's decision unfortunately resulted in the faculty perceiving his actions as autocratic in nature, rather than democratic, which is contrary to the philosophy of TQM.

While the faculty, generally speaking, has over the years espoused that it wants to take more responsibility and control over the governance of the College, the actions of many faculty members have indicated otherwise. While faculty members have said that they wanted to be more involved in the operations of the College, several sources indicated that this has not been the case. One faculty member stated: "Generally, it is a small group of faculty members who volunteer for everything around here. . . . What is ironic is that the faculty members who complain the most about not having any say in the College are generally the ones who just teach their classes, do their research and quietly refuse to volunteer for anything." Again, there is a divergence between the "espoused theory-of-action" and "theory-in-use." Consequently, this inactivity or passivity by the faculty over the years has perhaps caused Brady to govern in a more autocratic nature than he would prefer.

Both the Dean's actions and the faculty's actions have resulted in a "chicken-egg" dilemma. The question is: Has Brady been so forceful in his governance approach because of the inactivity of the faculty or has the inactivity of the faculty been the result of Brady's leadership style? What has happened in the past is not important at this juncture. What is important is that the perceptions on both sides must change in order for TQM to become a part of the culture on the academic side of the College.

The literature indicates that change is always very difficult and very slow in coming. Most studies indicate that it takes a minimum of three to five years for the culture of TQM to really take hold in an organization (Crosby, 1979; Hunt, 1991; Walton, 1990). As of this writing, the College has been on the journey for about fourteen months. I believe that the progress of the College is consistent with these research findings. Many of the staff people are beginning to enlist in the process, but the progress has been slow. According to the faculty members with whom the researcher has spoken, only a small percentage of faculty members have joined in the effort thus far, although the number may be increasing in 1994. If TQM is to succeed, the Dean will have to get a majority of the faculty members on board.

The primary reason that the administration has had difficulty in involving the faculty in the TQM process is that many faculty members have the perception that the top administrators are unwilling to empower them and let the faculty make any significant decision on their own. In the words of one faculty member: "The administrators are very good at rhetoric, but when it comes time to actually let the faculty do something that is contradictory with their position, you can forget it." Another faculty member said: "The administrators often let you in on the decision-making process, but if they disagree with the decision that is made, the administrators will exert veto power." Other faculty members voiced this complaint, but all acknowledged that the administrators were getting much better at giving up power.

When faculty and staff members were asked the following question: "If you were to measure the Dean on a continuum from 'totally empowering' to 'totally nonempowering', where would you rate him?" most team members indicated that they would rate him primarily on the empowering side, although not at the extreme end. They indicated that a year or two ago they would have rated him on the nonempowering side.

Perhaps the situation is best interpreted this way. Brady is so passionate and so clear in his vision and plans for the College that it is difficult for him to share authority. He knows exactly what he wants to accomplish and how he wants to do it. Yet sometimes, faculty members have a different vision and/or a different means to get to a desired direction, and these differences, of course, create conflict.

Related to this issue, at times faculty members do not agree among themselves as to the best course of action for the College. Because they are unable to reach a consensus, they often fail to take any action. This requires Brady to make the decision for them, which, in turn, alienates those who disagree with the action taken.

Making TQM part of the culture of the faculty will be very difficult, although it is still possible. The key will be changing the perception and behaviors of everyone involved. Administrators must be willing to empower the faculty members and then abide by the recommendations that the faculty members make. This will often be difficult, especially if the administrators have a different point of view. Sometimes, however, the administrators must be willing to lose a few battles for the sake of the long-term relationship.

The faculty members, on the other hand, must respond by taking more responsibility for decisions involving the College. As a group, they must work together and be able to reach a consensus. in order to do this, they must give up their historical tendencies to protect their own departments and themselves. As a group, they must be committed to the College as a whole, while they focus on continuous quality improvement and total customer satisfaction.

The recently formed Steering Committee of the College of Business Administration whose mission is "to serve as the principal committee regarding faculty governance and, as such, to coordinate the actions of the standing committees, including the Graduate Committee, the Undergraduate Committee, and the Strategic Planning Commission" is a step in the right direction.

Another thing that should be helpful is the strategic planning that the Dean is doing in conjunction with the Business Advisory Committee, which is a support group of the College in the community. That group, together with other business people and alumni in the area, will be exploring what current students should be studying from a customer's perspective.

As noted, changing the culture of the College will be challenging and slow. Some recommendations that the researcher believes would be helpful include the following.

1. Establish a Quality Council composed of senior faculty members and administrators together with faculty members who are TQM experts. The

Quality Council should write a mission statement and create a vision statement that inspires other faculty members.

2. Have the Quality Council prioritize which core processes of the College are most in need of improvement and encourage faculty members and staff members to address these. The Quality Council should also set some specific goals and objectives.

3. Encourage faculty members and staff members to form their own teams. Senior administrators should let everyone know that quality is part of their jobs and not an extracurricular activity. Employees should be given time to work on teams.

4. Provide positive reinforcement to successful teams when improvements are made. Currently there is very little reinforcement given for "service" types of activities in the College.

5. Accentuate the positive aspects of TQM and the other things that are working. The best example was when the College advising office hosted a reception in their "new" office. Many of the people in attendance commented that "things have really changed and improved over here." Some staff members said: "we should do that in our office."

6. Use faculty members to train staff and other faculty members on TQM tools and teamwork. Currently, there are several experts on the faculty who conduct workshops and consult with companies using TQM.

7. Have some staff and faculty members attend outside seminars and workshops. The training should be offered to a wide mix of faculty members and staff. Some staff people have the perception that only a few people get all the training and other "goodies."

8. Continue to use surveys and then respond to what they reveal.

9. Use the benchmarking data that has been collected by the California State University system.

10. Open and honest communication should be encouraged between administration and faculty. Both "dialogue" and "discussion" (Senge, 1990b) need to become an everyday part of the culture. These should lead to greater trust on both sides and will eventually lead to greater cooperation.

11. To improve communication within the College, the Dean should consider taking different faculty members and possibly students to lunch in order to hear their concerns and share his vision. This is a critical thing to do because building relationships and trust are crucial. Many faculty members have the perception that Brady relies on just a few faculty members for advice and counsel and ignores the rest of the faculty members and staff. This causes those left out of the loop to be resentful.

12. More teams composed of faculty members, staff, and administrators should be formed. These teams will need team members with a common vision, as well as the right mix of skills. The best teams will be composed of people who have technical expertise, problem solving and decision making skills, as well as good interpersonal skills. Further, those selected for the teams need to be the ones directly involved in the process being addressed and have the needed authority to make changes.

13. Both faculty members and administrators should examine the discrepancies between their espoused theories and their theories-in-use.

14. The Dean should hire or designate a person to be the quality champion for the College, as has been done in other academic institutions concerned with the implementation of TQM principles (Coate, 1990; Crosby, 1979; Harris & Baggett, 1992; Hull, 1992; and Spanbauer, 1992).

15. The College as a whole needs to address the question of "who is the customer?" There is a perception that the College considers the MBA program to be significantly more important than the undergraduate program. Several faculty members have the perception that most of the resources of the College including the allocation of teaching loads as well as the best classrooms have gone into the graduate program.

16. Greater attention should be given to internal customers. Many faculty and staff members told me that they feel there is a real morale problem within the College which they feel affects the level of service they provide to students. These individuals said that they do not blame the Dean for several years without pay raises, but believe that he could be doing more to improve the overall morale of the College. Several staff members said that little things will help. Recently the Dean started recognizing people's years of service and their birthdays. Many staff people indicated that these were really appreciated.

17. Begin a mentor program for junior faculty members. One senior faculty member said that there is no mechanism to assist younger faculty members to become better teachers and researchers. He said that he has seen several good people not get tenure or promotion when they could have if they had been properly trained and developed. The mentor program should be the responsibility of the department chair who should match the junior faculty member with experienced researchers and teachers.

The cause and effect diagram on the following page depicts all the elements needed for the ideal implementation of TQM in a college or university. A college considering implementing TQM should consider using this figure as a guide.

**PEOPLE**

Offer Training
Provide Positive Reinforcement
Empower Workers
Focus on Internal Customers

**POLICIES**

Form Quality Council
Form Teams
Mentor Program for Faculty
Hire Quality Administrator

**IDEAL TQM MODEL FOR A UNIVERSITY SETTING**

**ENVIRONMENT**
Team Oriented
Theory Y Management Style
Open Communication
Empowered Workers
Focus on Internal and External Customers
Continually Try To Improve

**PROCEDURES**
Prioritize Critical Processes
Use Faculty Members To Train
Benchmark
Utilize Surveys
Use TQM Tools
Focus on Processes

Figure 1. The elements needed for the successful implementation of TQM in a university environment.

Recommendations for Future Research

I found that implementing TQM requires that people must be willing to change. Further, these people must be allowed to change. Individuals will only want to change and be able to change if they have a Theory Y manager. Otherwise, the effort is hopeless. Also, I learned that people's perceptions play a very significant role. People will not be motivated to change unless they both hear and see a leader acting in ways which are consistent with the principles of TQM.

1. Future research should integrate the two disciplines of TQM and "change" more closely. There is a great deal that could be done in this area including research on overcoming resistance to change. In particular, future researchers should try to apply Argyris' work on change to TQM.

2. Future research is needed to look at the relationship between Theory X and Theory Y behavior and why people resist embracing TQM. I believe that much more could be done in this area.

3. Related to this issue is the question of whether someone can be trained to be a Theory Y manager or whether this is a personality trait which is learned and developed at an early age and cannot be changed. As part of researching this question, someone might look at the relationship between the personality traits of locus of control, authoritarianism, and Machiavellianism and one's willingness to embrace TQM. One might also look to see if there is any relationship between any of the need theories used by organizational behavior researchers and a person's willingness to embrace TQM.

For example, several people told me that empowering others and working in a team environment was natural for them and the management style they liked best. Meanwhile, other people said that giving up power and empowering others was not in their nature and they demonstrated this in their actions. These individuals felt that it was necessary to be in control. The question is: could a leader or facilitator get a controlling type person to change and embrace TQM? If the answer is no, then an organization should not attempt to implement TQM unless it is willing to replace these type of managers.

4. This study was a single site case study. More research needs to be done at other colleges and universities, especially researching the implementation of TQM on the academic side of the university. I believe that other researchers will find similar patterns at other higher education institutions.

## Concluding Remarks

About a year and a half ago, I began this experiment. When I started I had two objectives: to improve the College of Business Administration and to add to what people knew about TQM. I feel that I have accomplished both. The experience has been extremely worthwhile, although it was a lot of work.

With respect to my goal of improving the College. I can say without any hesitation that certain areas of the College are better off today than they were when I started this project. There is now a major difference between the way students were treated when the teams began and the way they are treated now. Everyone I spoke with in the College stated that this research project made a world of difference in the quality of advising that students now receive.

While I feel that I deserve some of the credit for the success of the College and University advising teams, most of the credit goes to the team members who worked so hard. On the College advising team, the team members made incredible sacrifices. Many of the early teams meetings were incredibly emotional and stressful. What happened was not fun or easy, but the team members persevered. While none of the team members enjoyed the experience, each person felt that the effort was worth it in the end.

On the College advising team, the team members were placed in a very difficult situation as they perceived they were getting mixed messages from senior administrators. They were told to work as a team, but they were being evaluated as individuals. Further, some of the participants were fearful of losing their jobs. I came in and encouraged the team members to change the way they behaved, yet I was not the person they were accountable to nor was I the person evaluating them. I think that they believed in what I was recommending, but they were unable to change their behavior until a new administrator appeared on the scene.

One of the lessons I learned is that people will not behave differently unless they are motivated to do so. In this case, as soon as the participants felt that their efforts were appreciated, they immediately showed a lot of initiative and worked harder. I found it striking how close what the team members described as "people problems" in the office corresponded to what McGregor described as the consequences of Theory X behavior.

Williams was a masterful leader. While he had many strengths, I think what set him apart from many other administrators was how empathetic, caring, and team oriented he was. He made sure that everyone was included on everything. He was also very concerned about his relationship with the other team members as well as with the relationships the other team members had with one another.

Relationships are very important in teams. One of the reasons that it was so difficult to address any of the core processes in the College advising office was because none of the team members wanted to hurt the feelings of any of the other team members. All of the team members were very concerned about what they said in the meetings because they knew that once the meetings ended, the team members would have to work together all day.

One of my biggest failures as facilitator was my inability to make the team members differentiate between a process and the person responsible for that process. In other words, all of the team members refused to address problems dealing with a given process, because they felt that by doing so, they were criticizing the person doing it. I tried and over and over again to make this point clear, but it never sunk in.

This concern about relationships caused the team to initially address the issues which it did. Originally the team focused on three main areas: student assistant training, the office remodel, and the information system for students. At the time, no one was responsible for any of these areas and that is why the participants were willing to deal with them.

Trust was also very important. I do not believe that the team members initially trusted Johnson or me. They felt that I was an agent of the Dean. This also hampered my ability to get people to want to change. The team members also mistrusted their previous supervisor to a certain extent. One of the first things Williams did was establish trust with the team members, which was very helpful.

The University advising team had an impact on the University. Only time will tell how significant an impact it was. The success of that team must be credited to Johnson and Cox who worked tirelessly to try to improve the University.

On both teams, Johnson worked tirelessly. She spent an incredible amount of time helping the teams and helping me. Some people perceived her as overbearing and autocratic, which she may have been some of the time, but she was also caring and empathetic as well. She was responsible for much of what happened. She was driven by a desire to make things better. At times her zeal got her in hot water and alienated others, but I believe that she really tried to do what was best for the College.

In addition to improving processes, there were also other benefits that resulted as well. One of the most significant findings was that most of the team members on the University and College advising teams reported that their involvement resulted in at least the partial satisfaction of what Maslow (1954) referred to as higher order needs. These higher order needs include: the need for friendship, affiliation, interaction and love; the need for self-esteem and esteem from others; and the need for self-actualization. Several members reported that their involvement on the teams affected them "in ways they never imagined possible when the process started." Many team members indicated that it was truly a fulfilling and worthwhile experience because it resulted in them feeling better about not only their work, but also about themselves. Several members indicated that the team "re-energized" them.

I feel that the research effort was well worth the time and money, and it should result in many long-term, significant changes in the College. All of the team members who participated indicated that they are now more customer oriented and indicated that the introduction of TQM raised their consciousness and ability to serve students. Further, the efforts of the team led to better delivery of services.

I believe that what has transpired in the last fourteen months will serve as a strong foundation for future continuous quality improvements. This study demonstrated that the implementation of the principles of total quality management can have a positive, dramatic, and perhaps even revolutionary impact upon the way colleges fulfill their missions.

For quite some time, many colleges and universities have not treated students very well. Dealing with bureaucracy, standing in lines, and having large classes are grudgingly accepted by students and university personnel as the way it is. It doesn't have to be that way, nor should it be that way. Students are the customers. They are the ones who write the checks that keep the doors to the universities open, although tax payers of the state are also major stakeholders.

Things are changing though. No longer is there a long line of students beating down the doors to universities. The top students are being very selective in where they go. They are demanding more. The universities which will prosper in the years ahead will be the ones which realize that students count!

TQM will work because it makes perfect sense. It is centered on the most basic of business principles: work together, be customer focused, continually try to improve, and give the people doing the job the resources necessary to do it right.

These principles are also the most basic of human principles. As a society we have become much too individualistic and concerned about ourselves rather than others. If we would try to work closer with our fellow human beings to improve humankind, all of us would be better off. TQM can work in all settings and all environments because it basically is about quality and caring.

## REFERENCES


Albanese, R., & Van Fleet, D. (1983). *Organizational behavior: A managerial perspective.* Hinsdale, Il: Dryeden.

American Assembly of Collegiate Schools of Business. (1992). *Achieving quality and continuous improvement through self-evaluation and peer review:Standards for business and accounting accreditation.* St. Louis: Author.

Argyris, C. (1982). How learning and reasoning processes affect organizational change. In P. S. Goodman & Associates (Ed.) *Change in organization.* New York: Jossey Bass.

Argyris, C., Putnam, R., & Smith, D. M. (1985). *Action science: Concepts, methods, and skills for research and intervention.* San Francisco: Jossey Bass.

Artzt, E. (1991, August). Conference summary. *Proceedings of the Total Quality Forum: Forging strategic links with higher education* (pp.132-133). Cincinnati, OH: Proctor and Gamble.

Austin, A., & Baldwin, R. (1991). *Faculty collaboration: Enhancing the quality of scholarship and teaching.* Washington, DC: The George University Press.

Baggett, J. M. (1992). Demythologizing quality improvement for faculty. In J. W. Harris & J. M. Baggett (Eds.), *Quality quest in the academic process.* (pp. 95-101). Birmingham, AL.: Samford University Press.

Barker, R. (1992). *Leadership in a world of total quality.* Unpublished manuscript.

Barrow, J. W. (July, 1993). Does total quality management equal organizational learning? *Quality Progress*, pp. 39-43.

Bass, B. M., & Ryterband, E. C. (1979). *Organizational Psychology.* Boston: Allyn & Bacon.

Bateman, G. R., & Roberts, H. V. (1992). *TQM for professors and students.* Unpublished manuscript.

Becker, H. S. (1968). Social observation and social case studies. *International encyclopedia of the social sciences* (Vol. 11). New York: Crowell.

Becker, H. S., & Geer, B. (1970). Participant observation and interviewing: A comparison. In W. J. Filstead (Ed.), *Qualitative methodology* (pp. 125-140). Chicago: Markham.

Bellah, R. N. Madsen, R., Sullivan, W. M., Swindler, A., & Tipton, S. M. (1991). *The good society.* New York: Knopf.

Bensimon, E. M., Neumann, A., & Birnbaum, R. (1989). *Making sense of administrative leadership--the "L" word in higher education* Washington, DC: The George Washington University Press.

Bowles, J. G. (1992, September). Quality '92--Leading the world-class company. *Fortune*, pages not numbered.

Bowles, J., & Hammond, J. (1992). *Beyond quality: New standards of total performance that can change the future of corporate America*. New York: Berkley Books.

Brassard, M. (1989). *The memory jogger plus.* Methuen, MA.: GOAL/QPC.

Brigham, S. E. (1993, May). TQM: Lessons we can learn from industry. *Change*, pp. 42-48.

Burns, J. M. (1978). *Leadership.* New York: Harper & Row.

Butterfield, R. W. (1991, March). Deming's 14 points applied to service. *Training*, pp. 50-54.

Cameron, W. A. (1992). Service quality advancement at its best.In P. F. Fendt & G. M. Vavrek (Eds.), *Quality Improvement in higher education and organizations* (pp. 89-109). Lampeter, U.K.: Mellen Press.

Carnegie Foundation For the Advancement of Teaching. (1989a). *The condition of the professoriate.* Lawrenceville, NJ: Princeton University Press.

Carnegie Foundation For the Advancement of Teaching. (1989b). *The condition of the professoriate - Attitudes and trends , 1989.* Lawrenceville, NJ: Princeton University Press.

Carnegie Foundation For the Advancement of Teaching. (1990). *Scholarship Reconsidered.* Lawrenceville, NJ: Princeton University Press.

Carnegie Foundation For the Advancement of Teaching. (1990). *Campus life.* Lawrenceville, NJ: Princeton University Press.

Carothers, R. L. (1992, June). *Some thoughts on quality.* Paper presented Motorola University, Chicago, IL.

Cavalier, L. A. (1992). Land grant universities and quality improvement. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality improvement in higher education and service organizations* (pp. 35-51). Lampeter, U.K.: Mellen Press.

Ceridwen, J. (1992, March). Using quality's tools: What's working well? *The Journal for Quality and Participation*, pp. 92-99.

Chaffee, E. E., & Sherr, L. A. (1992). *Quality: Transforming postsecondary education*. Washington DC: The George Washington University, School of Education and Human Development.

Coate, L. E. (1989). *Implementing total quality management in a university setting*. Corvalis, OR: Oregon State University.

Cole, C. C. (1982). *Improving instruction: issues and alternatives for higher education* Washington, DC: The George Washington University Press.

Corts, T. E. (1992a, July). *Total quality management at Samford University.* Paper presented for the Quality Conference at Lehigh University, Lehigh, OH.

Corts, T. E. (1992b). Customers, you can't do without them. In J. W. Harris, J. M. Baggett (Eds.), *Quality quest in the academic process* (pp. 1-6). Methuen, MA: Goal/QPC.

Crosby, P. B. (1979). *Quality is free.* New York: Mentor.

Crosby, P. B. (1984). *Quality without tears: The art of hassle free management.* New York: Bantam-Hill.

Deming, W. E. (1982). *Quality, productivity and competitive position.* Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study.

Deming, W. E. (1986). *Out of crisis.* Cambridge, MA: MIT Press.

Dew, J. R. (1992). Deming and the demise of American industry. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality Improvement in higher education and service organizations* (pp. 35 - 51). Lampeter, U.K.: Mellen Press.

Dewey, J. (1929). *Reconstruction in philosophy.* New York: Henry Holt.

Dewey, J. (1938). *Experience and education.* New York: Macmillan.

Dibiaggio, J. A. (1989, Summer/Fall). The president's role in the quality of campus life. *Educational Record*, pp. 8-12.

Dyer, W. G. (1972). *Modern theory and method in group training.* New York: Van Nostrand Reinhold

Ewell, P. T. (1993, June). Total quality and academic practice: The idea we've been waiting for? *Change*, pp. 49-62.

Feigenbaum, A. V. (1991). *Total quality control.* New York: McGraw-Hill.

Fendt, P. F. (1992). Comparing philosophies of Deming and Knowles. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality improvement in higher education and service organizations* (pp. 143-157). Lampeter, U.K.: Mellen Press.

Fendt, P. F., & Vavrek, G. M. (1992). Leading the quality improvement gestalt. In P. F.Fendt & G. M. Vavrek (Eds.), *Quality Improvement in higher education and service organizations* (pp. 157-166). Lampeter, U.K.: Mellen Press.

Foster, W. F. (1986). *The reconstruction of leadership.* Victoria, Australia: Deakin University Press.

Foster, W. F. (1989). Toward a critical practice of leadership. In J. Smyth (Ed.), *Critical perspectives on educational leadership* (pp. 39-62). London: Falmer.

French, J. R., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power.* Ann Arbor, MI: Institute for Social Research, University of Michigan.

Galvin, R. (1991, August). Keynote address. *Proceedings of the Total Quality Forum: Forging strategic links with higher education* (pp.72-76). Cincinnati, OH: Proctor and Gamble Company.

Garvin, D. A. (1986). *A note on quality: The views of Deming, Juran, and Crosby.* Cambridge, MA: Harvard Business School Publishing Division.

Gersick, C. J. (1988). Time and transition in work teams: toward a new model of group development. *Academy of management journal.* (31) pp. 9-41.

Glaser, B., & Strauss, A. (1967). *The discovery of the grounded theory.* Chicago: Aldine.

Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research.* Orlando, FL: Academic Press.

Guba, E. G., and Lincoln, Y. S. (1981). *Effective evaluation.* San Francisco: Jossey Bass.

Halverson, J. E. (1992). Private continuing higher education and Deming. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality improvement in higher education and service organizations* (pp. 51-67). Lampeter, U.K.: Mellen Press.

Harris, J. W., & Baggett, M. (Eds.). (1992). *Quality quest in the academic process.* Birmingham, AL: Samford University.

Harvard University. (1992). *Quality at Harvard: Harvard quality process.* (Internal publication).

Hau, I. (1992). *Teaching quality improvement by quality improvement in teaching.* Madison: University of Wisconsin.

Henrickson, R. L. (1992, April). *Leadership and the American college presidency.* Paper presented at the Conference on Nonelitist Leadership and Social Responsbility, Monmouth College, NJ.

Hiam, A. (1992). *Closing the quality gap.* Englewood Cliffs, NJ: Prentice Hall.

Hiam, A. (1993). *Does quality work? A review of relevant studies.* (Report No. 1043). New York: The Conference Board.

Hillenmeyer, S. G. (1992). In J. W. Harris & J. M. Baggett (Eds.), *Quality quest in the academic process.* (pp. 21-36). Birmingham, AL: Samford University Press.

Hodgkinson, R. L. (1983). *The philosophy of leadership.* New York: San Martin's Press.

Holmes, E. (1992). Leadership in the quest for quality. *Issues and Observations, 12*(3), 5-7.

Holmes, R. R. (1993) The University of Michigan's M - Quality. *Competitive Times*, pp. 7-8.

Hull, W. E. (1990, February). *Leadership for quality improvement.* Unpublished manuscript, Samford University.

Hull, W. E. (1992). The quality quest in academia. In J. W. Harris & J. M. Baggett (Eds.), *Quality quest in the academic process.* (pp. 225-237). Birmingham, AL: Samford University Press.

Hunt, V. D. (1992). *Quality in America.* New York: Irwin.

Jackson, J. H. & Morgan, C. P. (1979). *Organization theory.* Englewood Cliffs, N. J.: Prentice Hall.

Johnson, R. S. (April, 1993a). TQM: Leadership for the quality transformation. *Quality Progress.*, pp. 47-49.

Johnson, R. S. (May, 1993b). TQM: Leadership for the quality transformation. *Quality Progress*, pp. 83-86.

Joiner, B. L. (1990, May). Continuous Improvement: Putting the pieces together. *Quality Managment Forum*, pp. 1-7.

Joiner, B. L., & Gaudard, M. A. (1990, December). Variation, management, and W. Edwards Deming. *Quality Progess*, pp. 29-32.

Jorgenson, D. L. (1989). *Participant observation: A methodology for human studies*. Newbury Park, CA: Sage.

Juran, J. M. (1964). *Managerial breakthrough.* New York: McGraw-Hill.

Juran, J. M. (1988). *Juran on planning for quality.* New York: Macmillan.

Juran, J. M. & Gryna, F. M. (1980). *Quality planning and analysis.* New York: McGraw Hill.

Kaplan, R. (1991, August). Keynote address. *Proceedings of the Total Quality Forum: Forging strategic links with higher education* (pp. 4-10). Cincinnati, OH: Proctor and Gamble.

Katzenbach, J. R., & Smith, D. K. (1993, March - April). The discipline of teams. *Harvard Business Review*, pp. 111- 120.

Kaufman, R., & Thomas. M. (1980). *Evaluation without fear.* New York: New Viewpoints Press.

Leffel, L. G. , Robinson, J. F. , Harshberger, R. F. , Krallman, J. D. , Frary, R. B. (1991). *Assessing the leadership culture at Virginia Tech.* San Francisco: Jossey Bass.

Lewis, J. M. (1992). Deming way at a federal government contract agency. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality Improvement in higher education and service organizations* (pp. 125-143). Lampeter, U.K.: Mellen Press.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

MacIntyre, A. (1981). *After virtue.* Notre Dame, Ind, University of Notre Dame Press.

Mangan, K. (1992, August 12). TQM: Colleges embrace the concept of total quality management. *The Chronicle of Higher Education*, p. A25.

Marchese, T. (1992). AAHE and TQM. *AAHE Bulletin. 40*(3), 11.

Marchese, T. (1993, May/June). TQM a time for ideas. *Change*, p. 10.

Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research.* Newbury Park, CA: Sage.

Maslow, A. H., (1954). *Motivation and personality.* New York: Harper & Row.

Masters, R. J., & Leiker, L. (1992, Summer). Total quality management in higher education: Applying Deming's Fourteen Points. *CUPA Journal*,pp. 27-31.

Mayhem, L. B., Ford, P. J., & Hubbard, D. L. (1990). *The quest for quality.* San Francisco: Jossey Bass.

McGregor, D. (1960). *The human side of enterprise.* New York: McGraw-Hill.

McWilliams, G. (1991, October, 14). A new lesson plan for college. *Business Week*, p. 144.

Merriam, S. B. (1988). *Case study research in education.* San Francisco: Jossey Bass.

Miller, R. D. (September, 1992). More educators embrace quality management. *Fortune*, p. 16.

Nadler, D. (1989, April 23). Business forum: Making corporations smarter. *The New York Times*, p. 3.

Patton, M. Q. (1990). *Qualitative evaluation and research methods.* Newbury Park, CA: Sage.

Pollack, B. (1992). In this issue. *AAHE Bulletin. 40*(3), 2.

Prince, J. (1992). What can QI contribute to teacher education? In J. W. Harris& J. M. Baggett (Eds.), *Quality quest in the academic process.* (pp. 171-181). Birmingham, AL: Samford University Press.

Quorum Health Resources, Inc. (1991). *Leading process improvement teams.* Nashville: Author.

Rhodes, L. A. (1990, November). Why quality is within our grasp . . . If we reach. *The School Administrator*, pp. 31-34.

Rhodes, L. A. (1990, December). Beyond your beliefs: Quantum leaps toward quality schools. *The School Administrator*, pp. 23-25.

Robbins, S. P. (1992). *Management.* New York: Prentice-Hall.

Rost, J. C. (1991). *Leadership for the twenty-first century.* New York: Praeger.

Salancik, G. R., & Pfeffer, J. (1977, May). Who gets power and how they hold on to it: A strategic contingency model of power. *Organizational Dynamics*, pp. 3-6.

Sashkin, M., & Kiser, K. (1991). *Total quality management.* New York: Ducochon Press.

Schatzman, L. and Strauss, A. L. (1973). *Field research: Strategies for a natural sociology.* Englewood Cliffs, NJ: Prentice Hall.

Schoenfeld, C. (1992, March 23). TQM: Wave of the future or fad? *Administrator*, pp. 1-3.

Scholtes, P. R. (1988). *The team handbook: How to use teams to improve quality.* Madison, WI: Joiner Associates.

Senge, P. M. (1990a, Fall). The leader's new work: Building learning organizations. *Sloan Management Review*, pp. 7-21.

Senge, P. M. (1990b). *The fifth discipline.* New York: Bantam Doubleday Dell.

Senge, P. M. (1991). *Systems principles for leadership.* Framingham, MA: Innovation Associates.

Seymour, D. T. (1991, November). TQM on campus: What the pioneers are finding. *AAHE Bulletin.* (pp. 4-6).

Seymour, D. T. (1992). *On Q: Causing quality in higher education.* New York: Macmillan.

Seymour, D. T. (1993). *Total quality management in higher education: Clearning the hurdles.* Methuen, MA: GOAL/QPC.

Seymour, D. T., & Collett, C. (1991). *Total quality management in higher education: A critical assessment.* Methuen, MA: Goal/QPC.

Shafer, B. S., & Coate, L. E. (1992, November). Benchmarking in higher education: A tool for improving quality and reducing cost. *NACUBO Business Officer*. pp. 28-35.

Shaffir, W. B., & Stebbins, R. A. (Eds.). (1991). *Experiencing Fieldwork: An inside view of qualitative research*. Newbury Park, CA: Sage Publications.

Shaw, K. E. (1978). Understanding the curriculum: The approach through case studies. *Journal of curriculum studies, 10*(1), 1-17.

Shewhart, W. A. (1931). *Economic control of quality of manufactured product*. New York: D. Van Nostrand Co.

Siu - Runyan, Y., & Heart, S. (1992, January). Management manifesto. *The Educator*, pp. 23-26.

Spanbauer, S. J. (1992). *A quality system for education*. Milwaukee, WI: ASQC Quality Press.

Stake, R. E. (1981). Case study methodology: An epistemological advocacy. In W. W. Welsh (Ed.) *Case study methodology in educational evaluation*. Proceedings of the 1981 Minnesota Evaluation Conference. Minneapolis: Minnesota Research and Evaluation Center.

Stata, R. (1993, Spring). Organizational learning: The key to management innovation. *Sloan Management Review*, pp. 61-66.

Stout, H. (1992, February 14). Teams vie to redesign U. S. education. *The Wall Street Journal*, p. B1.

Stratton, B. (1991, October). Quality progress special report: Quality in education. *Quality Progress*, pp. 62-66.

Strauss, A., & Corbin J. (1990). *Basics of qualitative research*. Newbury Park, CA: Sage.

Taking the TQM challenge. (1992, Winter). *The Fuqua School of Business Exchange*, p. 32.

Taylor, S. J. & Bogdan, T. (1984). *Introduction to qualitative research methods: The search for meanings.* New York: Wiley and Sons.

Teal, J. R. (1992). Fear in the classroom: Implications for quality improvement. In J. W. Harris & J. M. Baggett (Eds.), *Quality quest in the academic process.* (pp. 145-159). Birmingham, AL.: Samford University Press.

Tetzeli, R. (1992, May). Making quality more than a fad. *FORTUNE,* pp. 12-13.

Tollett, C. (1992). Upgrading quality in a public school system. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality improvement in higher education and service organizations* (pp. 125-143). Lampeter, U.K.: Mellen Press.

Tucker, S. (1993). *Total quality management in education: The educators companion to memory jogger plus.* Methuen MA.: GOAL/QPC.

Uzelac, S. (1993). *Zen leadership.* Loudonville, OH: Mohican.

Vavrek, G. M. (1992). An American leads the Japanese and the U. S. A. follows. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality Improvement in higher education and service organizations* (pp. 1-21). Lampeter, U.K.: Mellen Press.

Wagner, J. A., & Hollenbeck (1992). *Management of organizational behavior.* Englewood Cliffs, NJ: Prentice Hall.

Walton, M. (1990). *Deming management at work.* New York: Putnam.

Williamson, R. P. (1992). Community colleges and quality enhancement. In P. F. Fendt & G. M. Vavrek (Eds.), *Quality Improvement in higher education and service organizations* (pp. 67 - 89). Lampeter, U.K.: Mellen Press.

Wilson, R. B., & Schmoker, M. (1992, January). Quest for quality. *The Executive Educator*, pp. 18-22.

Wilson, S. (1979). Explorations of the usefulness of case study evaluations. *Evaluation Quarterly, 3*, 446-459.

Yalom, I. D. (1975). *The theory and practice of group psychotherapy.* New York: Basic Books.

Yin, R. K. (1984). *Case study research design: Design and methods.* Beverly Hills, CA: Sage.

Yin, R. K. (1993). *Applications of case study research.* Newbury Park, CA: Sage.

APPENDIX B
INFORMED CONSENT FORM

I would like to request your cooperation in a case study which is exploring the implementation of total quality management (TQM) at the West Coast University College of Business. I hope to learn what factors were significant as the College of Business embarked on its TQM program. This information will contribute to research on the implementation of TQM in higher education, and may be beneficial to others involved in this process.

If you should decide to participate, you will allow me to observe you during each of the team meetings, review all public documents associated with the TQM implementation, and be willing to be interviewed about your thoughts and experiences associated with the TQM implementation. Should the researcher desire to audio tape any of the team meetings or interviews, the participant will be asked for verbal authorization prior to beginning. The participant may ask that audio taping stop at any time. There will be no video taping. This study will last approximately one year or until the teams disband.

Any information obtained in connection with this study that can be directly identified with you will remain confidential and will only be disclosed with your permission. Prior to final publication of the research document, you will be allowed to read all sections relating to you and you will be given the opportunity to censor any information which you may feel could jeopardize your position at the University.

Your decision as to whether or not to participate will not prejudice your relations with the College of Business or the University. If you decide to participate, you are completely free to withdraw consent and discontinue participation at any time. Prior to signing this consent form you are encouraged to ask any questions you may have about the research and you will be provided with answers.

There is no agreement, written or verbal, beyond that expressed on the consent form.

Sincerely,

Jeffrey Glazer

I have decided to participate in the case study on the implementation of total quality management at the WCU College of Business. My signature indicates that I have read the information above and have decided to participate. I realize that I may withdraw without prejudice at any time after signing this form should I decide to do so.

| | |
|---|---|
| Participant | Date |
| Researcher | Date |
| Witness | Date |

# Class Scheduling Survey

The Dean of the College of Business Administration, together with several faculty members, are in the process of reviewing the class scheduling process used by the College. Since you, as students, are our primary customers we need your input. Please be specific and honest.
Major ___________ Number of Units ___ What year did you declare upper-division ____

1.Please check the day(s) you prefer to come to school.
Mon. ___ Tues. ___ Wed. ___ Thurs.___ Fri. ___ Sat. a.m. ___

2. Please check which you prefer: classes that meet once a week ___ or twice a week ___

3. What time of day do you prefer to come to school?
Mornings ___ Afternoons ____ Evenings ____ No preference ____

4. What would be the ideal lead time between when you must register for classes and when classes start?
2 weeks___ 3 weeks___ 1 month___ 6 weeks___ 2 months___ Other (specify)___

5. In designing your schedule, how do you place your priorities?
Work over school___ School over work___ School equal w/ work___ I do not work___

6. Please rate the following aspects of the class schedule for <u>each</u> specific type of class using the following scale: 1. Excellent 2. Good 3. Adequate 4. Fair 5. Poor

| | **Common Busin. Core Classes** | **Courses in Your Major** | **GE Classes** |
|---|---|---|---|
| A. Availability of classes | ___ | ___ | ___ |
| B. Times of classes | ___ | ___ | ___ |
| C. Days of classes | ___ | ___ | ___ |
| D. Information about future schedules for planning your program | ___ | ___ | ___ |
| E. Number of electives offered | ___ | ___ | ___ |
| F. Avoidance of course scheduling conflicts | ___ | ___ | ___ |
| G. Class size | ___ | ___ | ___ |

7. Please rank these seven dimensions of the class schedule based upon their importance to you (1 through 7 with 1 the most important).
A. Availability of classes ___
B. Times of classes ___
C. Days of classes ___
D. Information about future schedules for planning your program ___
E. Number of electives ___
F. Avoidance of course scheduling conflicts ___
G. Class size ___

**Please turn the questionnaire over.**

8. What is the single most important thing that could be done to improve the class schedule. ______

9. On the following 5 point scale, please circle the number which indicates your general satisfaction with the Business College's class schedule:

1 ________ 2 ________ 3 ________ 4 ________ 5
Very satisfied — It's OK — Very dissatisfied

10a. Has the scheduling of classes in the Business College slowed down your ability to make reasonable progress towards getting your degree?
Absolutely ____ Maybe ____ No ____

If you answered "absolutely" or "maybe" please describe the specific reasons it hindered your progress. ______

10b. Has the scheduling of classes in the rest of the University slowed down your ability to make reasonable progress towards your degree? Absolutely ___ Maybe ___ No ___

If you answered "absolutely" or "maybe" please describe the specific reasons it hindered your progress. ______

11. Which classes have presented the greatest scheduling problem for you? Only check the classes which you feel have been a problem, but limit your answer to a maximum of 5 classes.

**Core Courses**

___Fin.140 Legal Envir. of Business
___IDS 180 Prin. of Info. Systems
___IDS 290 Business Communication
___IDS 302 Intro. to Prod. & Oper Mgmt.
___Acct. 201 Financial Accounting
___Acct. 202 Managerial Accounting
___Fin 323 Fundamentals of Finance
___Mgmt. 350 Mgmt. & Organization
___Mgmt. 405 Internatl. Business Strategy
___Mktg. 370 Marketing

**Other Classes**

___ English 200 Intermediate Composition
___ Math 119 Elem. Statistics for Business
___ Math 120 Calculus for Busin. Analysis
___ Econ. 101 Macro-Economics
___ Econ. 102 Micro-Economics
___ Acct. 300 Intermediate. Accounting
___ Fin. 321 Managerial Economics
___ Elective in major (specify) ______
___ Elective in major (specify) ______
___ Other class (specify) ______

COLLEGE OF BUSINESS ADMINISTRATION (CBA) QUESTIONNAIRE

Select One:

___Accounting ___Finance ___IDS ___Management ___Marketing

___Open University ___Graduate Student in Business Other (please state)____________

When did you first start classes

_____ Spring 93 _____Fall 92 _____Spring 92 _____Fall 91 _____ Before Fall 91

Which semester did you enter Upper Division Business?

_____ Spring 93 _____Fall 92 _____Spring 92 _____Fall 91 _____ Before Fall 91

---

FOR THE FOLLOWING FIVE ITEMS USE THE LIST AT THE BOTTOM AND CIRCLE ALL THAT APPLY:

1. Who have you seen for advice about GE requirements?

   a b c d e f g h i j______________ (No one)

2. Who have you seen for course requirements advising in your major?

   a b c d e f g h i j______________ (No one)

3. Who did you see for advice on choosing a major?

   a b c d e f g h i j______________ (No one)

---

4. Who would you go to if you had personal problems affecting your performance at school?

   a b c d e f g h i j______________ (No one)

5. Who would you go to if you had trouble understanding the rules/requirements at SDSU?

   a b c d e f g h i j______________ (No one)

a) CBA Undergraduate Advising Office Counter Personnel (BAM 448)
b) CBA Undergraduate Advising Office Staff Advisors (BAM 448)
c) University Advising Center (Student Services Building)
d) Career Services (Student Services Building)

e) Office Staff in the Department Office of your Major
f) Official Faculty Advisor in your Major Department
g) Faculty Members

h) Fraternity, Sorority, or Club Members
i) Classmates, Friends, or Relatives
j) Other (please state who on the lines provided below)

**PLEASE COMPLETE THE REVERSE SIDE OF THIS FORM**

Enter the appropriate rating for each of the following:

*QUALITY OF ADVISING OR CONSULTING SERVICES:*

| A | B | C | D | F | 0 |
|---|---|---|---|---|---|
| Outstanding Advice | | | | Poor Advice | Never Seen or Visited |

___ CBA Undergraduate Advising Office Counter (BAM 448)

___ CBA Undergraduate Advising Office Staff Advisors (BAM 448)

___ University Advising Center (Student Services Building)

___ Career Services (Student Services Building)

___ Office Staff in the Department Office of your Major

___ Official Faculty Advisor in your Major Department

___ Faculty Members

___ Classmates, Friends or Relatives

___ Fraternity, Sorority, or Club Members

*FRIENDLINESS, COURTESY, PATIENCE, AND INTEREST:*

| A | B | C | D | F | 0 |
|---|---|---|---|---|---|
| Outstanding | | | | Poor | Never Visited |

___ CBA Undergraduate Advising Office Counter (BAM 448)

___ CBA Undergraduate Advising Office Staff Advisors (BAM 448)

___ University Advising Center (Student Services Building)

___ Career Services (Student Services Building)

___ Office Staff in the Department Office of your Major

___ Official Faculty Advisor in your Major Department

___ Faculty Members

___ Classmates, Friends or Relatives

___ Fraternity, Sorority, or Club Members

*IN THE COLLEGE OF BUSINESS:*

1. Have you ever been given the wrong information about course or university requirements?

   Never____ Occasionally____ Often____ All the Time____

2. When you ask for help, how often are you referred to another office?

   Never____ Occasionally____ Often____ All the Time____

3. What is the biggest source of frustration in obtaining information or assistance in the College?

Other Comments:

# DRAFT REPORT - NOT FOR CIRCULATION (April 12, 1993)

# COLLEGE OF BUSINESS ADMINISTRATION (CBA) QUESTIONNAIRE

Student Services Task Force
Contact: Carol [illegible], 4-2662

Administered: March 28 - April 1, 1993
Number of Respondents: 397

Demographics:

| Accounting | Finance | IDS | Management | Marketing | Open University | CBA Graduate Program | Other[1] |
|---|---|---|---|---|---|---|---|
| 25% | 16% | 4% | 17% | 11% | 6% | 5% | 16% |

[1] Includes International Business Majors, Business Minors, and some Graduate Program Respondents

| | Spring 93 | Fall 92 | Spring 92 | Fall 91 | Before Fall 91 | No Response |
|---|---|---|---|---|---|---|
| When did you first start classes at [illegible]? | 4% | 14% | 10% | 20% | 51% | 1% |
| Which semester did you enter Upper Division Business? | 29% | 28% | 19% | 12% | 10% | 2% |

## PERCENTAGE OF STUDENTS SEEKING INFORMATION FROM THE LISTED SOURCES[1]

| Sources of Information | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 |
|---|---|---|---|---|---|
| CBA Undergraduate Advising Counter Personnel (BAM 448) | 19 | 26 | 2 | 4 | 16 |
| CBA Undergraduate Advising Staff Advisors (BAM 448) | 12 | 14 | 2 | 7 | 23 |
| University Advising Center (Student Services Building) | 47 | 15 | 1 | 9 | 38 |
| Career Services (Student Services Building) | 2 | 1 | 1 | 1 | 3 |
| Office Staff in the Department of your Major | 6 | 14 | 2 | 3 | 15 |
| Official Faculty Advisor in your Major | 8 | 16 | 4 | 11 | 24 |
| Faculty Members | 4 | 7 | 6 | 21 | 15 |
| Fraternity, Sorority, or Club Members | 5 | 4 | 3 | 6 | 4 |
| Classmates, Friends, or Relatives | 25 | 18 | 23 | 47 | 19 |
| Other | 9 | 6 | 10 | 10 | 7 |

[1] Students circled all sources that applied to them. Percentages will not add to 100.

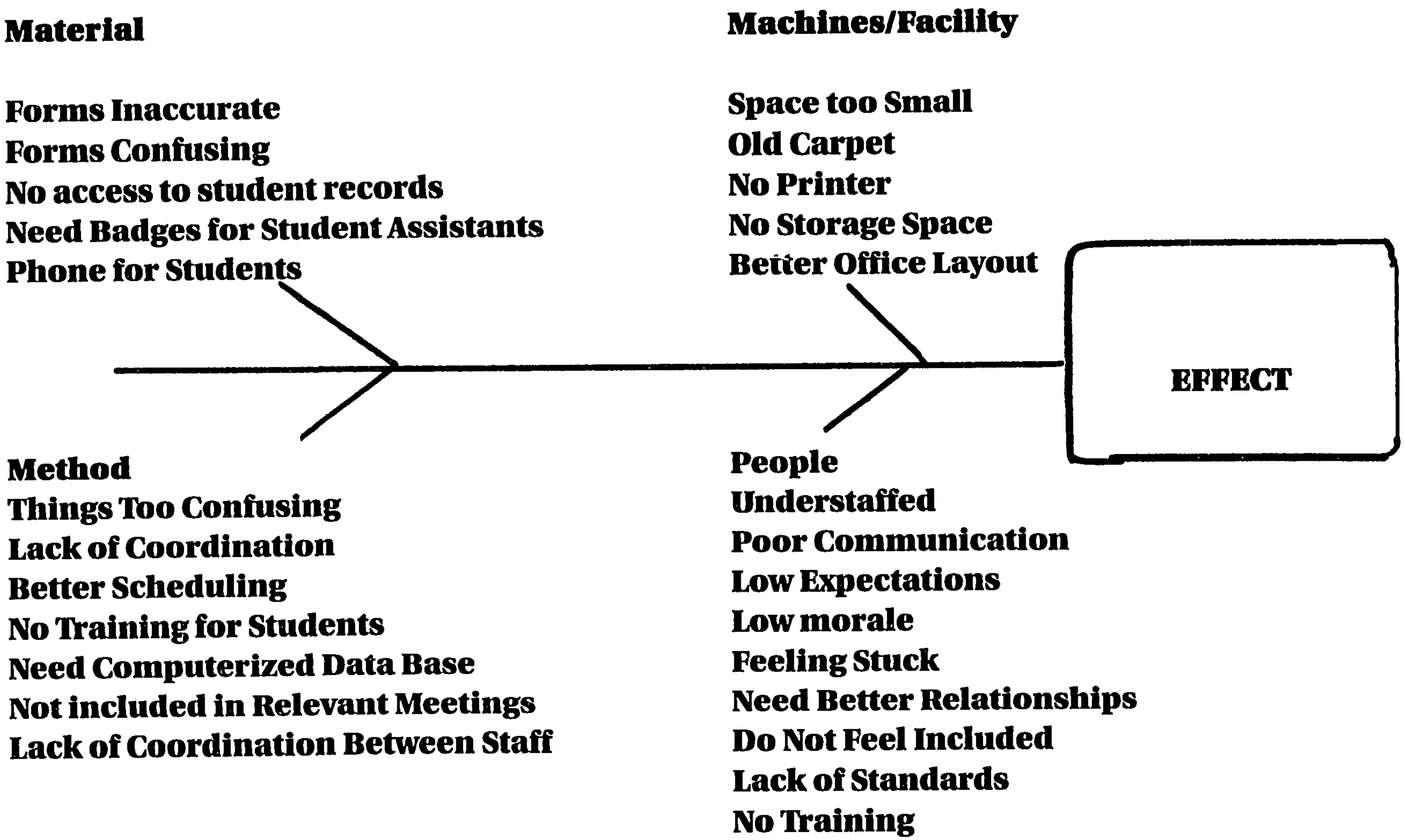
Item 1: Who have you seen for advice about GE requirements?
Item 2: Who have you seen for course requirements advising in your major?
Item 3: Who did you see for advice on choosing a major?
Item 4: Who would you go to if you had personal problems affecting your performance at school?
Item 5: Who would you go to if you had trouble understanding the rule/requirements of SDSU?

## ASSESSMENT OF THE VARIOUS SOURCES OF INFORMATION

| Sources of Information | Quality of Advising or Consulting Services | | | Friendliness, Courtesy, Patience, and Interest | | |
|---|---|---|---|---|---|---|
| | % of Students[1] Rating This Item | Grade[2] | Rank | % of Students[1] Rating This Item | Grade[2] | Rank |
| CBA Undergraduate Advising Counter Personnel (BAM 448) | 58% | 2.27 | 9 | 59% | 2.31 | 9 |
| CBA Undergraduate Advising Staff Advisors (BAM 448) | 38% | 2.38 | 7 | 39% | 2.44 | 8 |
| University Advising Center (Student Services Building) | 64% | 2.31 | 8 | 64% | 2.51 | 6 |
| Career Services (Student Services Building) | 32% | 2.50 | 6 | 34% | 2.49 | 7 |
| Office Staff in the Department of your Major | 52% | 2.67 | 4/5 | 54% | 2.63 | 5 |
| Official Faculty Advisor in your Major | 37% | 2.83 | 2 | 38% | 2.67 | 4 |
| Faculty Members | 59% | 2.71 | 3 | 62% | 2.79 | 3 |
| Fraternity, Sorority, or Club Members | 30% | 2.67 | 4/5 | 29% | 3.03 | 2 |
| Classmates, Friends, or Relatives | 84% | 2.84 | 1 | 81% | 3.30 | 1 |

[1] Respondents could indicate that they had never seen or visited these areas.

[2] A Likert Scale with Grades from A to F was used with anchors as Outstanding and Poor. Grades were then computed using a standard 4 point grading scale.


Material
Forms Inaccurate
Forms Confusing
No access to student records
Need Badges for Student Assistants
Phone for Students
Machines/Facility
Space too Small
Old Carpet
No Printer
No Storage Space
Better Office Layout
EFFECT
Method
Things Too Confusing
Lack of Coordination
Better Scheduling
No Training for Students
Need Computerized Data Base
Not included in Relevant Meetings
Lack of Coordination Between Staff
People
Understaffed
Poor Communication
Low Expectations
Low morale
Feeling Stuck
Need Better Relationships
Do Not Feel Included
Lack of Standards
No Training