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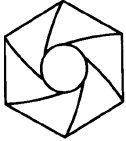


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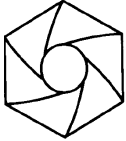
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TQM in Higher Education: A
Preliminary Look at Ten Boston Area
Institutions

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Spring 1992

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New England Resource Center *for* Higher Education

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The New England Resource Center for Higher Education (NERCHE), founded in 1988, is dedicated to improving colleges and universities as workplaces, communities, and organizations. NERCHE addresses this issue through think tanks, research, consulting, professional development, and publications.

Abstract

Total Quality Management (TQM) is an important movement that has gained increasing interest and application in higher education over the past two years. Most literature on the subject has focused on initial successful implementation in a few model institutions. This study examines ten varied colleges and universities in the greater Boston area.

The key TQM advocates at the schools are primarily senior business affairs administrators and faculty leaders in the business administration/management departments. Consequently these are the primary units implementing total quality management. Primary skepticism and opposition is typically found on the academic side of the enterprise. Interest and training throughout the institution is found only when there is leadership and support by the institution's president. The article cites twenty-four examples of TQM application on these campuses.

The study found only one college where TQM is well institutionalized; its hold at the other nine institutions is more tenuous. The TQM advocates on each campus are strongly committed to the concept, though the definition of TQM varies considerably. The institutions that survive the current crises facing higher education may be those that successfully apply TQM.

I. Introduction

There has been rapidly growing interest in the introduction and application of Total Quality Management (TQM) principles to higher education in the past two years. Evidence of this interest is the appearance of TQM on the agenda of major national educational organizations and in national publications. A number of varied institutions, such as Oregon State University, Fox Valley Technical College (Wisconsin), the North Dakota state university system, Samford University (Alabama), have gained considerable attention nationally for their adoption of TQM and reported successful implementation so far.

The attraction to Total Quality Management comes at a time when both public and private higher education are experiencing the worst crises and difficulties since the Great Depression. Buffeted by unprecedented deficits, national attacks and scandal, a predicted demographic decline in the number of college-age youth, increasingly cut-throat competition, national recession, and major questions of accountability and performance, colleges and universities desperately want some solutions. Total Quality is seen by some as at least a partial answer to their troubles and by others as a distraction from a larger and more critical agenda. I am struck by the parallels between higher education in the early 1990's and the position of private industry in the 1980's facing the harsh reality of the high quality product competition from Asia and Europe.

The growing number of published articles and books on TQM in higher education the past two years have primarily been glowing accounts of its adoption and very early success in model institutions and stories of "how-to" adopt TQM techniques in colleges and universities. These reports are relatively uncritical and do not focus on a broad cross section of institutions. The "champions" of TQM have drafted most of the available literature to date. There appear to be few accounts of failures or the range of difficulties being encountered in adopting and implementing TQM. My research attempts to be more objective and studies a range of more typical examples in a single geographical area.

A number of major institutions in the Boston area, where higher education is one of the largest and most significant industries/employers, have turned to Total Quality Management (TQM). In fact, there are few institutions not exploring or experimenting with TQM to some degree. Nine such private institutions, including several nationally known schools, have affiliated with the Center for Quality Management (CQM) in Cambridge. The Center was formed two years ago by major private sector firms to help them adapt TQM to their businesses in order to increase their competitiveness and success. The Center created "University affiliate" status in the past year to involve and assist institutions of higher learning. This author has conducted an initial visit to these

nine educational institutions as well as one major public university in the area. The purpose of these visits was to interview one or more of the key TQM players on each campus and ascertain the extent to which TQM has taken hold in higher education.

A number of important questions have emerged from these initial interviews and helped guide the research, including:

1. Where, when, and how did interest in TQM begin?
2. Who have been the chief advocates for TQM and why?
3. What has been the role of the institution's CEO?
4. How thorough or widespread is the application of TQM at this point in time?
5. How much training and introduction has occurred?
6. Which units are using TQM tools and what have their successes been to date?
7. What organizational structure is being employed for adoption and implementation of TQM?
8. What factors appear associated with TQM on campuses?
9. What are the primary points of resistance to TQM?
10. Just what is meant by TQM?

Below is my interpretation of the preliminary answers to these questions based on the data gathered from these initial interviews. The schools interviewed are: Babson College, Bentley College, Boston College, Boston University, Lesley College, Massachusetts Institute of Technology, Tufts University, University of Massachusetts at Boston, Wentworth Institute of Technology, and Worcester Polytechnic Institute.

II. TQM Initiation

Seven of the ten schools say they first became interested in TQM eighteen to twenty-four months ago. The remaining three date TQM to approximately one year ago. In most instances it was the confluence of two forces that led to the promotion of TQM at a particular institution. The first was a strategically placed administrator and the second was interest or response by the college or university president. The administrator had been exposed to TQM either through professional associates elsewhere or experience with and knowledge of the use of TQM in private firms. In each case the administrator saw TQM as an important means to help the institution address particular problems or difficulties and a way to promote institutional change and improvement. Each administrator was a confident self-starter who saw him or herself as an agent for campus change. In most cases he or she had worked previously for other nonprofit institutions or in the private sector, i.e., had not spent most of their career at the current college. This person was attracted to TQM and did not hesitate to seize TQM to promote an agenda for institutional renewal. I consider these key persons who chose to play a crucial role on each

campus as the TQM "advocates." Often there were two or three such advocates on each campus.

Institutional administrators who were TQM advocates came from two common and not dissimilar backgrounds. The first and largest group were career senior college managers in the business affairs or administrative units of the institution. The second group of advocates were from the ranks of management or business administration faculty, including some academic department administrators. These advocates were comfortable with the private for-profit sector and generally had some exposure through experience or training with corporations and industry using TQM.

The role of the college or university president is a second major factor prevalent in the adoption of TQM on most, but certainly not all, campuses. CEOs interested in TQM usually gained familiarity with the subject from corporate leaders on their boards of trustees. They also learned about TQM from reading and colleagues at other institutions. At least two presidents had TQM experience in private industry before becoming a college CEO. On most campuses the president approached or was approached by the chief institutional advocate(s). This confluence of forces in all cases led to introduction of TQM on the agenda of the president's cabinet, or vice presidential advisors/administrators.

Interestingly, introduction of the subject of TQM was always followed by a training session for the president's cabinet or a somewhat wider group of senior institutional managers. The training was done by an outside consultant or professional trainer, usually lasting one or two days in some sort of retreat setting. The campus advocate and probably the president hoped this training would lead to consensus for rapid adoption of TQM on campus. However, this hope was generally not realized, for the training led to serious discussions, questioning, skepticism, and development of opposition to TQM by some senior campus leaders. This introduction and initial training normally resulted in several administrators enthusiastic to implement TQM, generally on the business side of the institutional operation, neutrality by others, and either direct opposition, or concern about perceived and potential opposition, from the academic side of the collegiate enterprise. This helps explain the most common experience of campus TQM implementation described in III below.

However, another and secondary pattern of TQM initiation and adoption is without the primary involvement of the college president. On a couple of campuses, senior non-academic administrators themselves decided on the value of TQM and proceeded to adopt it as a modus operandi for their particular operations. They arranged TQM training for their key managers and staffs and encouraged implementation. The primary value of presidential involvement was wider interest and implementation. Only the CEO was in a position to commit the institution as a whole to TQM. However, even where CEOs believed

in TQM and supported its adoption, few were willing to take a strong leadership role. Most presidents respected some degree of managerial autonomy and academic governance within the institutional hierarchy. These presidents supported the advocates and encouraged others to consider TQM, but they were not prepared to order participation in all institutional units, particularly the academic affairs division.

One major question concerns the impact of the President's role. In analyzing the ten institutions, the results in fact are quite mixed. In three colleges, all more specialized business and engineering schools, the President could be characterized as the key leader. In these institutions the President was critical to introducing and encouraging the introduction of TQM. In three other very varied institutions, the campus CEO's role was described as "very supportive." Here the president was not the key initiator, but the CEO clearly supported the efforts, participated in training, and made his or her support visible. In the remaining schools the president has not been involved in any way in TQM efforts to date. Clearly none of these institutions are approaching TQM on any sort of comprehensive basis, but particular internal units are committed to TQM and proceeding with their own implementation. The lesson from this experience might be: the head of a particular unit is necessary for adoption and implementation of TQM and the president of a college or university must be a key leader or supporter for TQM to be adopted throughout an entire institution.

III. Unit Adoption and Implementation

In eight of the ten institutions studied, one or more administrative units are involved in implementing TQM. Most commonly this is the business and finance division. Other units often involved in TQM are the computer center/computer information systems division and the human resources unit. These are components serving internal customers and most akin to the private section. These units are comfortable with corporate jargon and analogies. They are excited about TQM and feel they can sink their teeth into particular administrative problems where TQM techniques can be applied.

At every institution I inquired about TQM on the academic side. In most instances there were examples to cite. Practically all of these examples involved just two academic fields, business administration/management and engineering. In several instances the campus TQM champions were a senior administrator and a business administration professor. The school of management was the primary unit adopting TQM in the two universities not implementing Quality on the administrative side. I came across no examples of liberal arts faculty involved in adopting and implementing TQM. Here too business and engineering departments are closest to industries where TQM has been applied and faculty were familiar with private sector corporate interest in the quality movement.

Inquiries about opposition or resistance to TQM usually centered on faculty and academic administrators. Skepticism and questioning was the more common response from the academic community. I also inquired about the application of Quality principles to one of the core functions of post-secondary education, classroom instruction. Inevitably the business champions could cite specific examples of their application of TQM in the classroom.

IV. Examples of TQM Applications in Higher Education

I compiled a reasonably impressive list of twenty-four concrete examples where TQM has been applied in these ten institutions. Below is a list of these examples, representing nine of the ten schools, categorized by area of endeavor:

College Business Unit:

1. The physical facilities department has formed teams to tackle a range of identified problems;
2. The business division created five teams around five problem areas (travel procedures, communication, mail, custodial, and scheduling special events);
3. The business division is developing a business procedures handbook to enlighten and assist its customers;
4. The business division has established an automated centralized fiscal telephone line to refer callers/customers to the appropriate office/person for handling a variety of concerns to callers;
5. The physical plant department has established a telephone "hot line" number to handle all types of complaints and emergencies calling for expeditious resolution;
6. The campus copy center surveyed users and established a system to prioritize copy order requests;
7. The purchasing office has conducted a survey of customers and established a single line to call for inquiries on the status of all requisitions;

Computer Service Unit:

8. The Computer Center has employed an outside facilitator to help form and conduct focus groups of six major target audiences in order to develop a more extensive customer survey;
9. The campus computer office has adopted key measures of productivity and logs to record usage;

Human Resources Unit:

10. The Training Director has developed and continues to offer at least twice annually six different workshops on Quality to interested staff, managers, and faculty;

Academic Administration:

11. To respond to the needs of foreign students to make airline reservations and travel plans far in advance, issuance of the final exam schedule has moved from near the end of the semester to the beginning of the semester;
12. The academic department office has re-arranged furniture in order to better greet and assist students who enter seeking help;
13. The elected Faculty Council on a unionized campus met all day on a Saturday without extra compensation to participate in TQM training;

Academic Curriculum

14. A professor formed an advisory council of twenty-two Quality professionals in industry to advise on development of a graduate level TQM course and to review and comment on a draft curriculum for the course;
15. The school administers written surveys of all students at the end of each year and conducts exit interviews annually of one-third of their graduating students;
16. The school conducts focus groups of alumni for feedback on curriculum and the academic experience;
17. The school surveys all graduate students half way through their program to compare original expectations with current views of the academic program;
18. Interviews with employers of graduates to establish exit competencies;
19. Faculty have visited area firms that have hired recent graduates to ask about strengths and weaknesses of the students' education;

Classroom Instruction

20. Eight faculty in a pilot project are using specially developed software to survey students after every class period;
21. Faculty are developing a new instrument for student feedback that will be used mid-semester as well as at the end of each term;
22. Graduate students in statistics developed an instrument for student feedback and are administering it in undergraduate statistics courses;
23. A professor found through feedback that he came across as stern and this perceived attitude/demeanor inhibited student feedback; as a result he has worked to change his expression and make clearer his desire for genuine student feedback;
24. Each academic department has established small groups of professors charged with ways to improve undergraduate classroom instruction.

V. Observations and Conclusion

Though seven of the ten institutions began to study and employ TQM one and a half to two years ago, all advocates felt their schools were "just beginning." Those supporting and implementing TQM consider it a long process, taking perhaps five to ten years to fully impact the culture of the organization and its ways of doing things. I was frankly struck with how tenuous a hold TQM really has on the average institution studied.

Only one college has an Office of Quality with staffing and a budget. In this institution the President is the firmest advocate and has appointed two co-directors (one full-time and one part-time) to advance TQM throughout the campus and report regularly to him. In three schools, including this one college with a full-time staffed office, there is a high level Quality Steering Committee. One of these is only on the administrative side of the campus. Six of the ten institutions studied have conducted some systematic training on TQM for most higher level administrators. This training has primarily been to introduce the concepts of TQM. In four institutions only one or two units are pursuing TQM and there is no claim to wider campus participation or commitment.

Despite this specific progress, it is my judgement that TQM has a firm hold on only one institution. In others, one or two units are strongly committed to pursuing Quality and employing its techniques, but this phenomenon is not campus-wide by any stretch of the imagination. In most of the six colleges and universities that have had high level training for all senior administrators, the initial enthusiasm has not been followed up. A common refrain was that the President, though very supportive, was now enmeshed in one or more crises that were taking away leadership and top-down direction from the movement toward TQM. This of course raises the question of the efficacy and value of TQM if it is not helpful in responding to current major crises facing the institution.

Though the list compiled above of particular TQM projects or accomplishments is impressive at some level, the actual results of employing TQM are rather few so far. Many of the projects are primarily gathering data, which is the first of Quality guru Deming's "Plan, do, check, act" cycle. In addition, most campuses begin with problems that appear solvable so that TQM can show early successes. A few minor systems have been analyzed and definitely improved, but major problems have not yet been solved. One interpretation might be that TQM is off to a successful start and will succeed in impacting major collegiate systems and ways of thinking if given sufficient time. Another interpretation would be that the results so far do not match up to the hype, hopes, and initial investment in time and money. It is my conclusion that it is too early to make a serious assessment.

As an interviewer I was clearly struck by the enthusiasm and overall confidence of the TQM advocates. There is an aura of "true believer" about these "champions" (to use Quality jargon). When asked about TQM elsewhere on campus one committed dean actually said, "there are pockets of believers" in other divisions. This level of faith is leading to a growing number of converts, to pursue the believer analogy, and may make a difference in the end for the success of the Quality movement on campuses.

A particularly interesting question is just what is TQM. People who have studied the concepts and methods know there are various brands and approaches, not a single unified or agreed upon system of ideas and specific techniques. Deming, Juran, and Crosby all stress a different number of points and techniques. There seems to be agreement upon the basic ideas of customer satisfaction, data-based analysis for decision-making, continuous improvement, empowerment of employees, and planning to change systems. There was less agreement on specific techniques. Most TQM advocates even stated, or admitted when asked, that TQM had much in common with good sense management techniques. They were not invested in a rigid menu of specific techniques, but quite practical in approaching implementation. Though this openness is to be admired, it also makes definition and application not as easy to explain or identify and allows most institutional advances to be credited to TQM.

I would therefore conclude with the following observations from this preliminary study of greater Boston ten institutions that have professed to be starting down the Quality path:

1. TQM is really institutionalized on only one campus;
2. On most campuses one or more administrative units and/or the business administration/management department are pursuing TQM;
3. In only a few instances has TQM reached the core of the academic institution: faculty and classroom instruction, where skepticism is most apparent;
4. Most colleges are still grappling with the concepts of TQM and have done little to apply Quality techniques to the major problems facing higher education;
5. TQM's hold on most campuses is tenuous and it remains to be seen whether TQM will have a lasting impact or be soon forgotten;
6. A few advocates are strongly committed to TQM and implementing its principles and techniques in their particular units.

The degree of skepticism and opposition from the core academic units is a primary reason to question the future of TQM in higher education. The pronounced reluctance of academic divisions, except business schools, to adopt TQM is alarming. This may represent a serious disjunction between

market forces and the academic enterprise and may indicate that faculty are not currently interested in satisfying their student and other customers.

At this point in time, based on the study of these ten institutions, the success of TQM is related to the level of commitment by the college president and senior administrators. If TQM is to move beyond the fad stage and take firm hold, I believe two conditions are necessary: college presidents must perceive TQM as a means to solve major problems facing their institutions; and senior academic affairs administrators and faculty must believe TQM is related to their concerns and interests. It may be that the schools that adopt TQM will be the survivors that prosper in the future. TQM is clearly about change, as are the forces currently buffeting American higher education.

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